

**AMERICAN
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A M E R I C A N

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RAILROAD JOURNAL.

**STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.**

HENRY V. POOR, EDITOR.

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HENRY V. POOR, *Editor.*

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New York, Saturday, January 1, 1859.

Bank Dividends.

The Bank of the Commonwealth has declared a semi-annual dividend of $3\frac{1}{2}$ per cent., payable on the 3d inst.

The Bank of Commerce, a semi-annual dividend of $3\frac{1}{2}$ per cent., payable on the 3d inst.

The Metropolitan Bank, a semi-annual dividend of 4 per cent., payable on the 3d inst.

The Broadway Bank, a semi-annual dividend of 5 per cent., payable on the 3d inst.

The Bank of North America, a dividend of $3\frac{1}{2}$ per cent., payable on the 10th inst.

The Grocers' Bank, a dividend of $8\frac{1}{2}$ per cent., payable on the 5th inst.

The People's Bank, a semi-annual dividend of $8\frac{1}{2}$ per cent., payable on the 5th inst.

The Atlantic Bank, (Brooklyn,) a semi-annual dividend of 6 per cent., payable on the 3d inst.

The Bank of New York, a semi-annual dividend of $8\frac{1}{2}$ per cent., payable on the 3d inst.

The Continental Bank, a semi-annual dividend of $8\frac{1}{2}$ per cent., payable on the 3d inst.

The Seventh Ward Bank, a semi-annual dividend of 5 per cent., payable on the 3d inst.

The Bank of America, a dividend of $3\frac{1}{2}$ per cent., payable on the 3d inst.

The Mechanic's Bank, a dividend of 4 per cent.

The Tradesman's Bank, a dividend of 4 per cent., payable on the 3d inst.

The Merchant's and Trader's Bank, (Jersey City) a dividend of 5 per cent., payable on the 3d inst.

The Chemical Bank, a quarterly dividend of 6 per cent., payable on the 4th inst.

The State Bank of Tennessee will pay its interest coupons, due on the 1st inst., at the Merchant's Bank in this city.

The Market Bank, a semi-annual dividend of $3\frac{1}{2}$ per cent., payable on the 10th inst.

The Park Bank, a semi-annual dividend of 4 per cent., payable on the 10th inst.

The New York County Bank, a semi-annual dividend of $3\frac{1}{2}$ per cent., payable on the 3d inst.

The Phoenix Bank, a dividend of $3\frac{1}{2}$ per cent., payable on the 3d inst.

The Atlantic Bank, a dividend of $3\frac{1}{2}$ per cent., payable on the 10th inst.

Railroads in the United States Jan. 1, 1859.

We give below a statement showing the mileage and cost of railroads in the United States, on the first day of January, 1859. The total number of miles in operation is 27,857, costing \$961,047,364. The increase of mileage in 1858 is 1,647. The ratio of increase for 11 years past has been as follows:

1848	5,265	.....
1849	6,197	932
1850	7,360	1,264
1851	8,856	1,606
1852	10,878	2,022
1853	13,315	2,427
1854	15,511	2,196
1855	19,438	3,927
1856	21,440	2,011
1857	24,290	2,841
1858	26,210	1,920
1859	27,857	1,647

The total mileage constructed in 11 years is 22,592. The annual amount of expenditure cannot be stated with accuracy, but may be approximately estimated by the annual amount of mileage opened.

There are at the present probably 6,000 miles of road in progress in the United States. Notwithstanding the commercial revulsions, the construction of railroads is steadily progressing, and will continue till the total mileage of the country shall

reach 40 or 50,000 miles, and till every portion of the country is supplied with railway accommodations.

Tabular Statement showing the number of miles of Railroad in operation in the United States, with the cost of each, January 1st, 1859.

MILES IN OPERATION.		COST.
MAINE.		
Androscoggin	37	\$678,287
Androscoggin and Kennebec ..	55	2,218,317
Atlantic and St. Lawrence	149	6,594,829
Buckfield Branch	21 $\frac{1}{2}$	400,000
Bangor and Piscataquis	18	623,263
Calais and Baring	11 $\frac{1}{2}$	224,000
Great Falls and South Berwick ..	6	163,937
Kennebec and Portland	63 $\frac{1}{2}$	2,871,264
Bath Branch	9	
Lewy's Island	17	226,500
Machiasport	8	100,000
Penobscot and Kennebec	54 $\frac{1}{2}$	1,839,182
Portland, Saco and Portsmouth ..	51 $\frac{1}{2}$	1,500,000
Somerset and Kennebec	39	784,389
York and Cumberland	18 $\frac{1}{2}$	370,000
Total	544 $\frac{1}{2}$	\$18,767,833
NEW HAMPSHIRE.		
Ashuelot	21	\$395,618
Boston, Concord and Montreal ..	93	2,787,082
Cheshire	53	3,082,757
Cocheco	28	845,922
Concord	35	1,500,000
Contoocook Valley	14	230,400
Eastern, N. H.	16 $\frac{3}{4}$	525,205
Great Falls and Conway	20	432,995
Manchester and Lawrence	26	1,000,000
Merrimac & Connecticut Rivers ..	55	1,281,604
Northern	82	8,474,686
Portsmouth and Concord	47	1,100,000
Peterboro' and Shirley	9	211,156
Sullivan	24	1,250,000
White Mountains	21	371,038
Wilton	14 $\frac{1}{2}$	226,980
Total	562 $\frac{1}{4}$	\$18,685,233
VERMONT.		
Connect't & Passumpsic Rivers ..	90	\$2,531,147
Rutland and Burlington	119 $\frac{1}{2}$	4,584,008
Rutland and Washington	62	1,771,683
Vermont Central and Vt. & Can. 169		9,782,750
Vermont Valley	24	1,301,886
Western Vermont	54	1,083,552
Bennington Branch	6	
Whitehall and Rutland	7	255,700
Total	531 $\frac{1}{4}$	\$21,310,727

MASSACHUSETTS.			RHODE ISLAND.			PENNSYLVANIA.		
Amherst and Belchertown.	19½	\$295,337	New York, Providence & Boston	50	2,479,532	Alleghany Valley	41	\$1,988,317
Berkshire	21	600,000	Total	50	\$2,479,532	Barclay Coal	16½	300,000
Boston and Lowell	26¾	2,412,251	NEW YORK			Beaver Meadow and Branches. 40		1,500,000
Woburn Branch	2		Albany and West Stockbridge..	38	\$2,007,207	Catawissa, Williamsport & Erie 63½		3,640,000
Boston and Maine	74¾	4,229,231	Albany Northern	32	2,010,635	Chester Valley	21	1,370,000
Medford Branch	8¾		Troy Branch	1		Chestnut Hill Branch	3½	80,000
Boston and New York Central. 74½		3,692,144	Black River and Utica	35	1,221,030	Cleveland and Erie		See Ohio
Medway Branch	3¾	32,554	Brooklyn City Roads	21	1,026,709	Cleveland and Pittsburg		See Ohio
Boston and Providence	48½	8,634,468	Buffalo and New York City	92½	3,401,868	Cumberland Valley	52	1,226,675
Dedham Branch	3½		Buffalo and State Line	68	2,739,936	Danville and Pottsville	31	600,000
Stoughton & Easton Br'ch. 8		150,207	Buffalo, Corning and New York 100		2,819,096	Dauphin and Susquehanna	54	2,500,000
Taunton Branch	11	313,156	Canandaigua and Elmhurst	47	1,275,796	Delaware and Hudson	17	
Boston and Worcester	45		Canandaigua and Niagara Falls. 100		3,495,832	Branches	6	854,823
Brookline Branch	1½		Chemung	17	450,000	Delaware, Lackawanna & Western. 110½		8,018,761
Charles River Branch	8¾	1,843,779	Cayuga and Susquehanna	35	4,187,662	East Pennsylvania	38	1,000,000
Newtowntower Falls Branch 1½			Corning and Bloisburg	15	496,861	Erie and North-East	19	750,000
Saxonville Branch	3¾		Flushing	8	810,962	Franklin	22	210,000
Milford Branch	12		Hicksville and Cold Spring	4	52,009	Gettysburg	17	350,000
Agricultural Branch	28½	312,828	Hudson and Boston	17	175,000	Hanover Branch	13	169,445
Milbury Branch	3		Hudson River	144	14,000,000	Harrisburg and Lancaster	36	
Cambridge (Horse)	5	316,777	Long Island	98	2,565,792	Columbia Branch	19	1,881,967
Cape Cod	46	1,081,625	Syosset Branch	2½		Hazleton and Lehigh	14½	285,000
Fairhaven Branch	15	396,085	New York and Erie	446	34,528,108	Hempfield	35	1,388,168
Connecticut River	50	1,801,944	Newburg Branch	19		Huntingdon and Broad Top	30½	
Danvers	9½	203,150	New York and Harlem	133	6,112,409	Branches	10½	1,184,997
Dorchester Avenue (Horse) 4		96,224	New York Central	555	30,516,815	Lackawanna	9	300,000
Eastern	44		New York City Roads	24	2,763,241	" and Bloomsburg	57	1,425,000
Saugus Branch	6½		N. York and N. Haven		See Conn.	Lebanon Valley	54	2,500,000
Marblehead Branch	4	4,590,219	Niagara Falls and Lake Ontario. 13		393,729	Lehigh Valley	48	3,286,628
Gloucester Branch	15		Northern (Ogdensburg)	118	4,741,487	Little Schuylkill	28	
Amesbury & Salisbury Br. 5			Champlain Branch	4		Branches	10	1,837,936
Essex	21	747,009	Oswego and Syracuse	36	752,030	Littlestown	11	250,000
Fitchburg	51	3,540,000	Plattsburg and Montreal	20	347,775	McCarty's Mountain	6	300,000
Watertown Branch	2		Potsdam and Watertown	75	1,555,529	Mauch Chunk and Summit Hill 8		1,000,000
Marlboro' Branch	15	156,185	Rensselaer and Saratoga	25	900,287	Branches	21	
Fitchburg and Worcester	14	300,000	Rochester and Genesee Valley. 18½		648,088	Mine Hill & Schuylkill Haven. 25		2,400,000
Grand Junction	9	1,889,402	Rutland and Washington		See Vermont	Extension and Branches	82	
Hampshire and Hampden	25	580,128	Sackett's Harbor and Ellisburg. 18		389,310	Mount Carbon and Branches	8	198,480
Hartford and New Haven	67½	See Conn't.	Saratoga and Schenectady	21	480,689	Mount Carbon and Port Carbon 4		100,000
Lexington and West Cambridge 63½		250,357	Saratoga and Whitehall	47	895,421	Northern Central		See Md.
Horn Pond Branch	3½		Syracuse and Binghamton	80	2,683,168	Northern Pennsylvania	55½	
Lowell and Lawrence	12½	363,158	Troy and Buntington	6	234,931	Doylstown Branch	10½	6,771,078
Metropolitan (Horse)	2½	259,889	Troy and Boston	27	1,422,188	Pennsylvania	219	20,298,167
Middleboro' and Taunton	8½	149,496	Troy and Greenbush	6	294,731	Branches	27½	
Middlesex (Horse)	2	250,000	Troy and Rutland	17	380,818	Alleghany Portage	37	2,100,027
Nashua and Lowell	14½	654,603	Troy Union	2	731,432	Philadelphia Division	80	5,277,278
New Bedford and Taunton	20	515,094	Watertown and Rome	97	2,169,693	Pennsylvania Coal Company's	45	1,998,819
Newburyport	27	626,632	Total	2,684½	\$139,450,104	Philadelpia and Balt. Central. 13		500,000
New London, Willim. & Palmer 9		See Connect't.	NEW JERSEY.			" City Railroads	10	1,000,000
New York and Boston, in Mass. 32			Belvidere Delaware	64	\$2,937,614	Phila., Germantown & Norris'd 17		1,175,812
Norwich and Worcester	16	See Connect't.	Burlington and Mount Holly	6	120,000	Germantown Branch	4	
Old Colony and Fall River	79½	3,362,949	Camden and Amboy	98	5,663,580	Philadelpia and Reading	93	19,263,720
Dorchester & Milton Br'ch 3½		186,789	Camden and Atlantic	60	1,781,158	City Branch	5	
Abington & Bridgewater Br.			Flemington	12	288,518	Philadelpia and Sunbury	33	1,348,812
Peterboro' and Shirley	14	265,327	Freehold and Jamesburg	11	220,666	" and Trenton	28	1,000,000
Pittsfield and North Adams	18½	443,678	Millstone and New Brunswick	6½	111,114	" Wilm'gton & Balt.		See Md.
Providence, Warren and Bristol 13½		439,133	Morris and Essex	51	1,600,809	Pittsburg and Connellsville	68	2,285,606
Providence and Worcester	48½	1,785,246	Newark and Bloomfield	6	101,382	" and Erie	11	250,000
Salem and Lowell	17½	449,530	New Jersey	34	3,665,918	" Ft. Wayne & Chicago	465	14,279,704
South Reading	8	298,920	New Jersey Central	61	5,193,797	" and Steubenville	42	2,500,000
South Shore	11½	501,304	Paterson and Hudson River	14	630,000	Quakake Valley	14	300,000
Stockbridge and Pittsfield	22	448,700	Paterson and Ramapo	15½	850,000	Schuylkill Valley	25	500,000
Stony Brook	13	267,364	Sussex	12	857,079	Sunbury and Erie	40½	4,625,156
Vermont and Massachusetts	69	3,268,314	Warren	18	1,519,400	Tioga	29½	859,894
Waltham and Watertown [Horse] 2		18,978	Total	471¾	\$24,441,035	Trevorton and Susquehanna	14	675,000
Western	166	10,778,232	DELAWARE.			Westchester	9	765,000
West Roxbury [Horse]	2		Delaware	71	\$1,200,003	Westchester, Media and Phila. 26		1,000,000
West Stockbridge	2½	39,600	Newcastle and Wilmington	16	741,351	Williamsport and Elmhurst	78	3,461,454
Worcester and Nashua	45½	1,328,898	Newcastle and Frenchtown	6	93,000	Wrightsville, York & Gettysburg 12½		433,541
Total	1,519½	\$97,157,859	Total	93	\$2,034,354	Various coal roads not named in the above list	400	8,000,000
CONNECTICUT.			MARYLAND.			Total	3,129½	\$142,590,960
Boston and New York Central. 8		See Mass.	Annapolis and Elkridge	20½	420,000	KENTUCKY.		
Danbury and Norwalk	24	383,010	Baltimore and Ohio	879½	24,802,645	Breckenridge	84	\$312,000
Hartford, Prov. and Fishkill	122½	4,205,966	Branches	7½		Covington and Lexington	80	4,135,971
Housatonic	74	2,438,847	Northern Central	138	7,238,341	Lexington and Big Sandy	17	694,024
Naugatuck	57	1,578,301	Western Maryland	14	280,000	" and Danville	13	824,483
New Haven and Hartford	72	3,329,602	Washington Branch	80	1,650,000	" and Frankfort	29	658,256
" and Northampton	55	1,400,000	Phila., Wilmington & Balt. 102		8,568,869	Louisville and Frankfort	65	1,589,566
" N. London & Sto'g't'n	62	1,800,000	Various Coal Railroad	100	3,000,000	" and Nashville	99½	8,834,980
N. London, Willimantic & Palmer 57		1,603,231	Total	791½	\$45,959,355	Maysville and Lexington	19	
New York and New Haven	62½	5,258,232	Total	791½	\$45,959,355	Paducah and Mobile	26½	1,000,000
Norwich and Worcester	50	2,616,812	Total	791½	\$45,959,355	Portland and Louisville	5	100,000
Total	644½	\$24,260,141	Total	791½	\$45,959,355	Total	400	\$18,149,280

VIRGINIA.			OHIO.			INDIANA.		
Alexandria, Loudoun & Hamp'e	41	\$989,020	Bellefontaine and Indiana	118	\$3,177,896	Cincinnati and Chicago	108	\$2,080,438
Clover Hill	15	300,000	Carrollton Branch	11 1/2	225,000	Cincinnati, Peru and Chicago	29	1,000,000
Manassas Gap	76	2,843,403	Central Ohio	138	6,496,822	Cincinnati & Indianapolis Junc.	29	800,000
Norfolk and Petersburg	80	1,453,723	Cincinnati, Hamilton & Dayton	60	3,123,315	Evansville and Crawfordsville	109	2,158,713
North Western	104	5,828,754	Cin., Wilmington and Zanesville	131	4,143,945	Indiana Central	72 1/2	1,909,911
Orange and Alexandria	89	8,010,097	Cleveland, Columbus and Cin.	135	4,752,319	Indianapolis and Cincinnati	89	3,029,989
Warrenton Branch	9		Delaware Junction	6		Extension	20	
Extension	25	1,204,115	Cleveland and Mahoning	67	1,920,953	Indianapolis, Pitts'g & Cleve'd	84	1,912,455
Petersburg	64		Cleveland and Erie	95 1/2	4,040,978	Jeffersonville	77	1,839,576
Gaston Branch	19	8,487,684	Cleveland and Pittsburg	101	9,442,099	Joliet and Northern Indiana	..	See Ill.
Richmond and Danville	140 1/2		Extensions and branches	102 1/2		Knightstown and Shelbyville	27	188,000
Rich'm'd, Frederick & Potomac	76	1,817,179	Cleveland and Toledo	109	7,198,010	Lafayette and Indianapolis	64	1,856,277
Richmond and Petersburg	22	1,205,411	Southern Line	79 1/2		Madison and Indianapolis	86	2,984,516
Port Walthall Branch	8		Cleveland, Zanesville and Cin.	61 1/2	1,820,000	Martinsville Line	27	
Seaboard and Roanoke	80	1,402,987	Columbus, Piqua and Indiana	72	3,000,000	Shelby Line	23	See Mich.
South Side	123	3,786,387	Columbus and Xenia	54 1/2	1,582,475	Michigan Central	..	
City Point Branch	10		Dayton and Michigan	72	2,185,826	Mich., Southern & North'n Ind.	..	See Mich.
Virginia Central	206	7,515,768	Dayton and Western	84 1/2	1,035,178	New Albany and Salem	288	7,029,494
Virginia and Tennessee	204	6,582,370	Dayton, Xenia and Belfre	17	860,496	Ohio and Mississippi	192	18,148,000
Salt Works Branch	9 1/2		Eaton and Hamilton	45	1,861,434	Peru and Indianapolis	74	2,000,000
Winchester and Potomac	32	575,483	Findlay Branch	16	320,000	Pittsburg, Ft. Wayne and Chic.	..	See Penn.
Washington and Alexandria	6	200,000	Fremont and Indiana	36	1,000,000	Rushville and Shelbyville	20	120,000
Various Coal Roads	40	400,000	Greenville and Miami	32	1,250,000	Shelbyville Lateral	16	230,000
Total	1,474	\$47,402,381	Indianapolis and Cincinnati	20	See Ind.	Terre Haute and Richmond	73	1,811,450
NORTH CAROLINA.			Iron	13	185,000	Toledo, Wabash and Western	..	See Ohio.
Atlantic and North Carolina	95	\$1,922,703	Little Miami	83	3,925,157	Union Track	3 1/2	265,038
North Carolina Central	223	4,235,000	Marietta and Cincinnati	173 1/2	10,755,610	Total	1,508	\$49,163,847
Raleigh and Gaston	97	1,260,241	Hillsboro Line	22		ILLINOIS.		
Roanoke Valley	22	450,070	Ohio and Mississippi	..	See Ind.	Chicago, Alton and St. Louis	220	\$9,535,000
Wilmington and Manchester	171	2,379,168	Pittsburg, Columbus and Cin.	116	4,600,000	Chicago, Burlington & Quincy	138	7,468,928
Wilmington and Weldon	162	2,854,610	Cadiz Branch	8		Chicago and Milwaukee	46	1,700,000
Total	770	\$13,101,792	Pittsburg, Ft. Wayne & Chicago	..	See Penn.	Chicago and Rock Island	182	6,776,119
SOUTH CAROLINA.			Sandusky, Dayton & Cincinnati	153	6,065,090	Chicago, St. Paul & F'd du Lac	138	3,625,000
Blue Ridge	13	\$1,720,028	Branches	52		Fox River Valley	33	1,200,000
Charleston and Savannah	29	1,787,674	Sandusky, Mansfield & Newark	116	3,562,357	Galena and Chicago Union	122 1/2	9,395,455
Charlotte and South Carolina	110	1,719,045	Huron Branch	10		Fulton and Iowa Air Line	106 1/2	
Cheraw and Darlington	40	600,000	Scioto and Hocking Valley	56	1,680,000	Beloit Branch	20	34
Greenville and Columbia	143	2,487,461	Springfield and Columbus	20	520,000	Elgin Branch	..	
Abbeville Branch	12		Spring'd, Mt. Vernon & Pitts'g	49	2,194,060	St. Charles Branch	10	5,022,926
Anderson Branch	9	196,230	Toledo, Wabash and Western	242 1/2	10,542,600	Great Western	175	
King's Mountain	23		Total	2,728	\$102,756,614	Illinois Central and Branches	706	23,487,669
Laurens	32	213,476	TENNESSEE.			Joliet and Chicago	35	1,250,000
North-Eastern	102	1,907,278	Cleveland and Chattanooga	30	\$867,210	Joliet and Northern Indiana	45	1,125,000
South Carolina	136	7,588,037	Edgefield and Kentucky	30	600,000	Michigan Central	..	See Michigan.
Camden Branch	37		East Tennessee and Georgia	110	2,703,428	Michigan Southern & N. Ind'a.	..	Do.
Columbia Branch	69	802,598	" and Virginia	130	3,208,138	Mount City Branch	3	75,000
Spartanburg and Union	26		Louisville and Nashville	26 1/2	550,000	Ohio and Mississippi	147	4,870,586
Total	781	\$18,021,841	McMinnville and Manchester	34	565,469	Peoria and Bureau Valley	47	2,106,000
GEORGIA.			Memphis and Charleston	271	6,024,642	Peoria and Oquawka	94	5,400,000
Atlanta and La Grange	86 1/2	\$1,171,716	Somerville Branch	13 1/2		Eastern Extension	87	
Augusta and Savannah	53	1,030,100	Tnscumbia Branch	21	2,600,000	Pittsb., Ft. Wayne and Chicago	See Pennsylvania.	2,600,000
Barnesville and Thomaston	16	320,000	Memphis and Ohio	57		Quincy and Chicago	100	
Brunswick and Florida	31	800,000	Mississippi Central & Tennessee	55	1,294,576	Racine and Mississippi	..	See Wisconsin.
Central	192	3,750,000	Nashville and Chattanooga	151	4,468,907	Rock Island Bridge	1	260,000
Etowah	8	120,000	Shelby Branch	8		Terre Haute, Alton & St. Louis	168 1/2	8,726,764
Georgia	171	4,174,492	Tennessee and Alabama	28 1/2	718,328	St. Louis Branch	25	
Warrenton Branch	4		Winchester and Alabama	15	300,000	Belleville Branch	14 3/4	600,000
Athens Branch	89	1,500,000	Total	962	\$23,890,688	Various Coal Railroads	20	
Washington Branch	17		TEXAS.			Total	2,682	\$96,284,445
Macon and Western	101	63,766	Buffalo Bayou, Brazos & Col'ado	32	Estimated at \$25,000 per mile.	MISSISSIPPI.		
Main Trunk	3 1/2		Galveston, Houston & Henders'n	38		Grand Gulf and Port Gibson	8	\$200,000
Milledgeville and Gordon	17	200,000	Houston Tap	7	Estimated at \$20,000 per mile.	Mississippi Central	125	2,503,098
" and Eatonton	22	300,000	Houston and Texas Central	78		" and Tennessee	69	1,845,802
Muscogee	50	1,215,518	San Antonio and Mexican Gulf	5	187 1/2	Raymond	7	180,000
Rome	20	300,000	Southern Pacific	27 1/2		Southern	81	3,400,000
Savannah, Albany and Gulf	68	1,151,751	Total	187 1/2	\$4,678,300	West Feliciana	26	747,000
South-Western	106	2,269,323	FLORIDA.			Total	306	\$8,325,960
Butler Branch	22		Florida	100	Estimated at \$20,000 per mile.	LOUISIANA.		
Cuthbert Branch	9	5,901,497	Florida, Atlantic & Gulf Central	10		Baton Rouge, Gros Tete & Opel's	17	\$225,000
Western and Atlantic	138		Pensacola and Georgia	26	157	Clinton and Port Hudson	22	750,000
Total	1,174	\$24,268,163	Tallahassee	21		Mexican Gulf	27	540,000
ALABAMA.			Total	157	\$3,140,000	Milburg & Lake Pontchartr'n	6	120,000
Alabama and Florida	48	1,000,000	MISSOURI.			New Orleans and Carrollton	10 1/2	220,000
" and Mississippi	30	600,000	Cairo and Fulton	11	\$400,000	N. Orl'ns, Jacks'n & G't North'n	206	7,142,568
" and Tennessee	99	2,000,000	Hannibal and St. Joseph	162	8,533,229	N. Orl'ns, Opel's & G't Western	80	3,877,525
Marion	14	210,000	North Missouri	107	5,473,910	Vicksburg, Shreveport & Texas	21	929,418
Mobile and Girard	57 1/2	1,200,000	Pacific	163	10,486,394	Total	389 1/2	\$13,804,506
" and Ohio	307	10,701,426	South-West Branch	19	967,564	ARKANSAS.		
Montgomery and West Point	87 1/2	2,235,335	St. Louis and Iron Mountain	85	5,042,662	Memphis and Little Rock	38	\$1,000,000
Opelika Branch	28		Total	547	\$80,901,159	CALIFORNIA.		
Total	671	\$19,916,761				Sacramento Valley	22 1/2	\$1,120,000

MICHIGAN.		
Detroit and Milwaukee	187	\$6,650,000
Detroit, Monroe and Toledo....	51	1,202,823
Iron Mountain	20	350,000
Michigan Central	284	12,847,238
Mich. South'n & North'n Ind.	189	
Goshen Air Line [O. & Ind.] ..	120	
Goshen Branch [Ind.]	10	
Erie & K'mazoo [O. & Mich.] ..	30	
Toledo Section [O.]	3	
Detroit & Tol. Section [O.] ..	7	
Jackson Branch [Mich.]	42	14,742,753
Constatine Branch [Mich.] ..	4	
St. Joseph Valley Br. [Mich.] ..	8	
Mich. City Branch [Ind.]	14	
Total	969	\$35,709,214

WISCONSIN.		
Beloit and Madison	15	\$300,000
Chicago, St. Paul & F'd du Lac.	See Illinois.	
Green Bay, Milw. & Chicago ..	40	1,826,611
Kenosha and Rockford	20	1,000,000
La Crosse and Milwaukee	200	15,980,708
Manitowoc and Mississippi	7	250,000
Milwaukee and Horicon	42	1,600,209
Milwaukee and Mississippi	192	
Southern Line	42 1/2	8,235,512
Milwaukee and Superior	18	500,000
Milw., Watertown and Baraboo ..	50	1,200,000
Mineral Point	32	1,000,000
Racine and Mississippi	90	2,081,088
Sheboygan and Mississippi	17	500,000
Wisconsin Central	10	500,000
Total	775 1/2	\$35,547,117

IOWA.		
Burlington and Missouri	55	\$1,514,257
Chicago, Iowa and Nebraska ..	81 1/2	1,830,251
Dubuque and Pacific	50	2,107,144
Keokuk, Ft. Des Moines & Minn. ..	38 1/2	1,082,375
Keo'k, Mt. Pleasant & Muscatine ..	11 1/2	226,616
Mississippi and Missouri	55	
Muscatine Branch	12 1/2	
Oskaloosa Line	40	4,198,000
Total	343 1/2	\$10,988,673

RECAPITULATION.		
Maine	544 1/2	\$18,767,833
New Hampshire	562 1/2	18,685,233
Vermont	531 1/2	21,310,727
Massachusetts	1,519 1/2	67,157,359
Rhode Island	50	2,479,532
Connecticut	644 1/2	21,260,141

Total New England	3,823	\$152,960,825
New York	2,684 1/2	\$139,450,104
New Jersey	471 1/2	24,441,025
Pennsylvania	3,020 1/2	142,590,950
Delaware	93	2,034,354
Maryland	791	45,959,355

Total Mid. Atlantic St.	7,107	\$354,475,798
Virginia	1,474	\$17,402,381
North Carolina	770	13,101,792
South Carolina	781	18,021,841
Georgia	1,174	24,268,168
Florida	157	3,140,000

Total S. Atlantic States.	4,356	\$107,934,177
Arkansas	38	\$1,000,000
Missouri	547	30,904,159
Tennessee	962	23,890,688
Kentucky	400	13,149,280

Total S. Interior States.	1,947	\$68,944,127
Ohio	2,728	\$102,756,614
Indiana	1,508	49,163,847
Michigan	969	35,709,214
Illinois	2,682	96,284,445
Wisconsin	775 1/2	35,574,117
Iowa	343 1/2	10,988,673

Total N. Interior States. 8,986 \$230,476,910

Alabama	671	\$19,946,761
Mississippi	306	8,325,966
Louisiana	389 1/2	13,804,500
Texas	187 1/2	4,678,300

Total Gulf States	1,554	\$44,755,527
California	22 1/2	\$1,500,000

TOTAL UNITED STATES .. 27,857 \$961,047,364

Navigable Rivers of the United States.
PROBABLE EXTENT OF STEAM NAVIGATION ON THE INTERIOR WATERS OF THE UNITED STATES; including the rivers, bayous, etc., connected with the Mississippi by channels navigable for steamers,—compiled from the Report of Col. ABERT.

<i>Mississippi and its Branches, Bayous, etc.</i>		
	Miles.	Miles;
Mississippi proper, 2,000		Big Black..... 60
St. Croix..... 80		Spring..... 50
Minnesota or St. Peter's..... 120		Arkansas..... 600
Chippeway..... 70		Canadian..... 60
Black..... 60		Neosho..... 60
Wisconsin..... 180		Yazoo..... 300
Rock..... 250		Tallahatchie..... 300
Iowa..... 110		Yalabusha..... 130
Cedar..... 60		Big Sunflower..... 80
Des Moines..... 250		Little Sunflower..... 70
Illinois..... 245		Big Black..... 150
Maramec..... 60		Bayou de Glaze..... 90
Kaskaskia..... 150		Bayou Care..... 140
Big Muddy..... 5		Bayou Rouge..... 40
Olion..... 60		Bayou La Fourche..... 60
Forked Deer..... 195		Bayou Plaquemire..... 12
Big Hatchie..... 75		Bayou Teche..... 96
St. Francis..... 300		Grand River..... 12
White..... 500		Bayou Sorrelle..... 12
		Bayou Chien..... 5

<i>Missouri and its Branches.</i>			
Missouri proper ..	1,800	Kansas	150
Yellowstone	300	Osage	275
Platte or Nebraska. 40		Gronde	90

Ohio and its Branches.			
Ohio proper	1,000	Kentucky	62
Alleghany	200	Salt	35
Monongahela	60	Green	150
Muskingum	70	Barren	30
Kanawha	65	Wabash	400
Big Sandy	50	Cumberland	400
Scioto	50	Tennessee	720

<i>Red River and its Branches, Bayous, etc.</i>		
Red River proper, 1,500	Tensas	150
Washita 375	Lake Bistenaw.....	60
Saline 100	Sulphur Fork.....	100
Little Missouri.... 50	Little River.....	65
Bayou d'Arboune... 60	Kiamichi.....	40
Bayou Bartholomew 150	Boggy.....	40
Bayou Boeuf 150	Bayou Pierre.....	150
Bayou Macon..... 175	Atchafalaya.....	360
Bayou Louis 30	Lake Caddo.....	75

Recapitulation.	
Mississippi and its Branches, Bayous, etc.	7,097 miles.
Missouri and its Branches	2,655 "
Ohio and its Branches	3,192 "
Red River and its Branches, Bayous, etc.	3,030 "
Grand Total of Interior Waters navigable for steamers.	16,674 "

Debt of Mexico.	
The following is a statement of the foreign debts of Mexico:	
British Bondholders Debt	\$60,621,848 00
Spanish Convention	7,270,600 75
English-Spanish Convention	5,000,000 00
French Convention	263,490 00
American Claims (at least)	10,000,000 00

Total of Foreign Debt. \$83,156,138 75

Foreign Commerce of the United States.
We compile the following interesting tables of the foreign commercial intercourse of the United States, for the fiscal year 1858, from the tables which accompany the Annual Report of the Secretary of the Treasury. Of the gross import list, \$19,274,496 is in foreign coin and bullion, and \$24,266,228 in merchandise, by indirect importation—that is, the products of one European State, but through, or via another State. The whole of our trade with Switzerland is conducted in this way, and a large portion of the trade with Germany, or the States and Free Cities comprising the German Zollverein. In order, therefore, to arrive of the exact condition of the relative trade to and from the several foreign States with whom we deal, we have separated the specie and bullion from both sides of the account; also the foreign goods re-exported from the United States, and also the indirect importations, placing the last named to the States to which they rightly belong, leaving the main columns to represent, as near as may be, the actual exchange of commodities between this country and the other States of the world, and their colonial dependencies.

Imports for the fiscal year 1858.	
Dutiable goods	\$202,293,875
Free goods	61,044,779
Specie and bullion	19,274,496

Total imports for the year \$282,613,150

Exports for the fiscal year 1858.	
Domestic produce	\$251,351,033
Foreign produce and merchandise ..	20,660,241
Domestic specie and bullion	\$42,407,246
Foreign specie and bullion	10,225,001

Total exports for the year \$324,644,421

The Foreign States we trade with—1858.		
	Goods bought of.	Products sold to.
Britain and her Colonies	\$111,404,126	\$152,798,562
France and her Colonies	35,826,810	28,492,136
Spain and her Colonies	33,276,691	20,561,806
Germany	17,085,079	9,940,848
Switzerland	4,645,173	Indirect.
Holland and her Colonies	8,613,997	3,915,858
Belgium	2,489,841	2,192,808
Russia	2,137,483	4,336,681
Sweden and Norway	659,092	578,654
Denmark	334,923	784,542
Portugal	222,720	460,345
Sardinia	291,458	2,779,868
Tuscany	1,396,081	682,394
Two Sicilies	1,737,828	525,374
Austria	402,012	1,969,468
Turkey	1,269,680	783,405
Africa	1,597,249	1,767,966
Haiti and St. Domingo	2,384,932	2,091,292
Mexico	1,108,601	2,785,662
Central America	132,427	115,611
New Granada	1,817,081	1,137,349
Venezuela	3,445,144	951,207
Brazil	10,952,386	4,661,457
Uruguay	621,888	522,067
Buenos Ayres	2,725,218	765,048
Chili	2,655,263	1,680,187
Sandwich Islands	345,845	606,104
Peru	1,000,541	603,827
China	10,570,536	2,883,764
Miscellaneous	711,812	293,534

Total	\$203,488,654	\$251,861,093
Specie and bullion	19,274,496	52,638,147
Foreign goods		20,660,211

Grand total \$282,613,150 \$324,644,421

The Specie Exchanges of the year 1858.

	Remitted to.	Rec'd from.
England	\$38,869,312	\$6,753,631
France	4,632,967	1,839,968
Cuba	3,777,637	4,452,830
China	2,591,639	.....
New Granada	352,234	704,703
Venezuela	243,087	156,533
North of Europe	1,010,523	315,228
Mexico .....	.....	4,368,964
Other places	1,155,748	682,639
Total.....	\$52,633,147	\$19,274,496

The exchanges in the foregoing table with Great Britain and her dependencies, and through London in settlement with other foreign States, will illustrate the vast preponderance of the city of London as the money centre of the commercial world. At the same time they show that in point of the actual exchange of the commodities of the two countries, other than specie, England proved, in the trade year recently closed, a much more valuable customer to the United States than the United States to England.

Genesee Valley Railroad.

We learn that the work of extending the Genesee Valley railroad between Avon and Mt. Morris, has so far progressed that Mr. Phelps, the contractor, expects to run a train from Avon to Genesee on the first of January. Trains will probably begin to run regularly some time in the month of February. The completion of this road will be of immense convenience to the people of Livingston county, and an advantage to Rochester in many important respects.

United States Mint.

The annual report of the Directors of the Mint of the United States furnishes the following statement of the coinage of the United States, including bars stamped for the fiscal year ending June 30, 1858:

<i>Gold.</i>		
	Pieces.	Value.
Double eagles	1,401,944	\$28,038,880 00
Eagles	62,990	629,900 00
Half-eagles	154,555	772,775 00
Three dollars	22,059	66,177 00
Quarter-eagles	206,253	515,632 50
Dollars	230,361	230,361 00
Fine bars	7,105	21,819,779 14
Unparted bars	488	816,295 65
Total gold.....	2,085,755	\$52,889,800 29
<i>Silver.</i>		
Half-dollars	8,860,000	\$4,430,000 00
Quarter-dollars	12,079,000	3,019,750 00
Dimes	2,260,000	226,000 00
Half-dimes	6,540,000	327,000 00
Three cent pieces	1,266,000	37,980 00
Fine bars	900	192,557 77
Total silver.....	31,005,900	\$8,233,287 77
<i>Copper.</i>		
Cents	23,400,000	\$234,000 00
<i>Recapitulation.</i>		
Total gold	2,085,755	\$52,889,800 29
Total silver	31,005,900	8,233,287 77
Total copper	23,400,000	234,000 00
Total coinage.....	56,491,655	\$61,357,088 06

Divided among the principal mints and its branches as follows:

	Pieces.	Amount.
Mint, Philadelphia	44,833,766	\$15,427,699 97
Branch Mint, New Orleans	10,226,000	4,257,000 00
Branch Mint, S. Francisco	1,362,028	19,423,598 26
Branch M., Dahlonega	31,793	100,167 00
Branch M., Charlotte	40,122	177,970 00
Assay Office, N. York	7,946	21,970,652 83
Total.....	56,491,655	\$61,357,088 06

The deposits of gold and silver for the year were as follows:

	Gold.	Silver.
Mint, Philadelphia	\$9,870,842 30	\$3,337,541 58
Branch, N. Orleans	1,148,793 83	8,306,667 21
Branch, S. Francisco	19,128,111 28	193,388 24
Branch, Dahlonega	95,614 68	.....
Branch, Charlotte	176,067 49	.....
Assay Office, N. Y. k.	21,073,882 31	2,362,357 64

Total	\$51,494,311 29	\$9,199,954 67
Less redeposits	8,672,401 83	2,300,362 21
	\$42,921,909 44	\$6,899,592 46

	Total.
Mint, Philadelphia	\$13,214,383 88
Branch, New Orleans	4,455,460 54
Branch, San Francisco	19,316,499 52
Branch, Dahlonega	95,614 58
Branch, Charlotte	176,067 49
Assay Office, New York	23,436,239 95

Total	\$60,694,265 96
Less redeposits	10,872,764 09
	\$49,821,501 87

The deposits included the following items:

Foreign coin	\$1,636,999 23
Foreign bullion	290,135 01
United States coin (O. S.)	5,219 27
Bullion	49,549,570 43
Parted from silver	12,477 35

Total gold	\$51,494,311 29
Deposited, including purchases	\$8,883,482 31
United States bullion, parted	300,849 36
United States bullion, Lake Superior	15,623 00

Total silver	\$9,199,954 67
Total gold and silver	\$60,694,265 96

The amount of gold of domestic production deposited during the year was \$40,977,168 55, derived as follows: from California, \$40,591,140 88; from Oregon, \$9,181; and from the Atlantic States, \$376,846 67.

The operations of the Assay Office in New York for the year were:

Gold bars stamped	7,052 value	\$21,798,691 04
Silver do.	894 do.	171,961 79

Total	7,946 do.	\$21,970,652 83
Foreign gold coin deposited		\$906,842 00
Foreign bullion		137,583 85
United States coin		127 00
Bullion		20,029,329 46
		\$21,073,882 31

Silver deposits and purchases	\$2,176,142 39
United States bullion parted	170,592 25
United States, Lake Superior	15,623 00

Total	\$23,436,239 95
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The amount paid into the Treasury from the Mint and its branches on account of the charge on gold coinage of the half of one per cent. and of the profits on the coinage of silver were as follows:

Gold coinage charge	\$148,674 59
Profit on silver purchases	120,791 32

Total	\$269,465 91
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In addition to this there is a profit standing to the credit of the cent coinage, amounting to \$50,000.

The gold bars paid out to depositors during the year amounted to \$14,070,330 72. Had they been subject to the same charge of one-half of one per

cent, that is paid on coin, \$70,351 65 more would have accrued to the Treasury. The Director deems this distinction in favor of bars inexpedient, and recommends its repeal.

The deposits of Spanish and Mexican fractions of the dollar at the principal Mint, the Branch Mint at New Orleans, and the Assay Office at New York, from the passage of the act of February 21, 1857, entitled, "An act relating to foreign coins and to the coinage of cents at the Mint of the United States," to the 30th of June, 1858, have amounted to \$1,072,434; of this amount the sum of \$293,246 was deposited at the principal Mint for exchange for cents coined under the act above cited.

The amount transferred to the Treasury of the United States from the Mint and its branches on account of the charges on gold coinage of the half of 1 per cent. and of the profits of the coinage of silver are as follows: Gold coinage charge \$148,674 59; profits on silver purchases, \$120,791 32. If we add the balance which stands to the credit of the cent coinage account, which may be stated at \$50,000, it will be seen that the amount paid, or transferable, into the Treasury of the United States from the Mint and its branches for the period embraced in this report is \$319,465 91. The act of Congress, approved February 21, 1853, which authorized a deduction of the one-half of one per cent. from depositors of gold, as a coinage charge applied "in all cases, whether the gold deposited or coined or cast into bars or ingots;" but a subsequent law, section 7, act of March 3, 1853, relieved deposits paid in bars from this charge, and made it applicable to the coin only. The amount in value of fine gold bars paid out to depositors during the year was \$14,070,330 72. If the charge above stated had been imposed upon the depositors of this bullion, it would have yielded \$70,351 65 to the Treasury of the United States. I think it is inexpedient to make this distinction in favor of bars; and I, therefore, beg to repeat the suggestion contained in my last report, namely, that the law in question be so altered as to restore the former act, and thus authorize the charge to be made to depositors of bullion, whether they are paid in fine bars or in coin.

Detroit and Milwaukee Railroad.

The true position of this company will be best illustrated by the following brief statement made in the recent report of the President, of the amount required to meet the interest on its indebtedness:

Interest on 1st mortgage of \$3,206,000	\$227,870
Do. 2d do. 1,000,000	80,000
Do. 3d do. 750,000	75,000
Do. 4th do. 500,000	50,000
Do. share interest bonds	22,000

The working expenses will be about 50 per cent. of the receipts, and therefore to pay the amount of interest above set forth will require a gross yearly traffic of about \$910,000, or \$17,500 per week.

The traffic has already for several weeks, notwithstanding the utter stagnation of business and the entire absence of development of the resources of the country through which the line passes, reached an average of upwards of \$11,000 a week, and this may be taken as conclusive evidence that the local traffic alone, without any addition from through business, will hereafter be ample to meet the interest upon the present debt of the company.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,023,911	616,762	160,224	6	---	Brunswick and Florida, Ga.	80	161,887	403,648	538,649	In progr.	---	---	---	---
Androscog. & Kennebec	55	467,000	1,836,305	2,210,947	169,518	83,308	---	---	South. Western	143	1,892,100	441,292	2,269,323	865,214	208,771	9	---	---
Kennebec & Portland	72	1,107,620	1,763,738	2,871,264	215,253	---	---	---	Tennessee and Alabama	30	309,761	628,880	679,006	63,776	29,406	---	---	---
Portland, Baco. & Portland	51	1,396,400	---	1,869,873	263,717	120,809	6	91	Tennessee and Alaska	61	737,40	811,812	1,161,132	161,001	99,738	---	---	---
Boston, Concord & Montreal	93	1,000,000	1,104,686	2,848,977	827,767	174,026	10	---	Memphis and Charleston	247	2,228,177	3,496,288	5,672,470	612,022	331,604	---	---	---
Oshesire	84	1,000,000	899,813	3,170,687	355,829	113,077	6	---	Mobile and Ohio	306	6,784,879	2,004,459	10,701,428	861,382	278,428	---	---	---
Concord	36	1,000,000	8,242	1,412,678	817,058	126,604	4	49 1/2	Miss. Central	59	1,676,474	923,700	2,603,098	115,679	150,769	---	---	---
Northern, N. H.	82	3,068,400	400,285	3,068,400	365,800	166,000	4	41 1/2	Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	264,258	150,769	---	---	---
Concord & Passumpsic Riv.	90	1,000,000	800,000	1,784,146	177,688	78,401	none	---	N. O. Opelousas & G. W.	80	2,800,000	760,000	3,577,824	284,178	127,460	---	---	---
Rutland & Burlington	117	2,232,378	4,168,765	4,684,008	352,718	41,688	none	---	N. O. Jackson & G. W.	206	4,036,000	1,816,610	7,142,663	199,003	---	---	---	---
Vermont and Canada	47	1,350,000	---	1,380,000	---	---	---	---	Vicksburg, Shreveport & Tex.	31	883,746	108,288	992,031	In progr.	---	---	---	---
Vermont Central	122	5,000,000	5,278,299	8,402,088	703,834	127,389	---	---	East Tennessee and Ga.	111	1,192,974	1,735,669	2,703,428	227,863	104,992	---	---	---
Boston and Lowell	28	1,800,000	438,920	2,412,251	438,863	171,882	0	87 1/2	East Tennessee and Va.	130	626,075	1,728,664	3,208,136	61,814	59,002	---	---	---
Boston and Maine	74	4,078,974	---	4,229,381	770,802	305,507	0	87	Nash. and Chatanooga	169	2,263,906	1,632,793	3,896,703	641,662	219,267	---	---	---
Boston and Providence	43	3,100,000	239,740	3,634,468	594,178	245,194	0	81 1/2	Ovington & Lexington	99	1,334,850	3,045,917	4,091,604	420,408	220,008	---	---	---
Boston and Worcester	44	4,600,000	699,974	4,844,770	1,019,149	388,613	0	92 1/2	Lexington and Frankfort	29	430,055	168,809	688,285	95,807	66,711	---	---	---
Cape Cod	47	681,690	201,007	1,031,625	122,960	39,599	---	49 1/2	Lexington and Danville	13	694,441	71,000	765,500	In progr.	---	---	---	---
Connecticut River	50	1,601,110	276,772	1,801,244	207,710	66,096	3	55	Louisville and Frankfort	66	741,039	625,216	1,602,098	246,760	109,069	---	---	---
Eastern, Mass.	60	2,583,400	2,441,373	6,082,070	610,136	272,479	---	48	Atlantic & Gt. Western	---	868,939	77,294	613,231	In progr.	---	---	---	---
Fitchburg	67	3,640,000	100,000	3,872,821	608,074	260,838	0	90 1/2	Bellefontaine and Ind.	116	1,874,392	3,318,237	2,998,392	348,452	120,886	---	---	---
N. Bedford and Taunton	21	800,000	---	841,688	186,925	27,827	---	---	Clev., Col. and Cin.	141	4,748,31	90,400	4,782,307	1,149,741	611,740	---	---	---
Old Colony and Fall River	77	3,015,100	200,100	3,302,949	683,357	306,140	---	95	Cleveland and Toledo	200	3,383,712	4,225,565	7,142,663	930,282	433,790	---	---	---
Vermont and Mass.	90	2,232,341	1,010,145	3,241,976	240,135	62,267	none	12 1/2	Clev. and Mahoning	60	---	---	1,920,956	In progr.	---	---	---	---
Western, Mass.	186	1,160,000	6,839,000	10,406,905	117,982	899,765	0	103	Clev. and Pittsburg	133	2,780,744	3,043,992	6,437,486	681,877	309,618	---	---	---
Worcester and Nashua	46	1,141,000	206,896	1,361,271	216,888	82,720	4	47	Clev. P. & Ashland	95	3,000,000	1,498,648	4,040,976	1,251,539	681,644	---	---	---
Providence and Worcester	43	1,610,000	300,000	1,781,049	744,778	186,044	7	81 1/2	Cin. Hamilton & Dayton	60	2,165,800	1,632,906	3,190,316	487,421	260,763	---	---	---
Hartford and N. Haven	72	2,860,000	444,000	3,329,600	899,066	340,835	10	1-2	Cin. Wilm. & Zanesville	131	2,421,176	3,783,400	5,008,210	223,600	30,288	---	---	---
Hartford, Prov. and Fishkill	122	1,930,246	1,132,692	4,206,408	273,428	112,325	none	---	Columbus and Xenia	55	1,490,450	149,000	1,582,476	403,212	161,688	10	---	---
Houstonian	74	2,000,000	423,885	2,438,447	818,478	106,844	none	---	Dayton, Xen. & Belpre	63	437,838	422,668	860,496	In progr.	---	---	---	---
Naugatuck	57	1,031,900	524,244	1,580,723	237,416	114,237	---	---	Dayton and Michigan	140	1,076,026	893,011	1,185,826	In progr.	---	---	---	---
N. York and N. Haven	62	2,980,835	2,372,240	5,258,232	1,167,035	254,659	---	40	Dayton and Western	35	310,000	700,481	1,036,173	128,940	63,258	---	---	---
N. Haven and N. London	50	734,258	781,402	1,450,818	88,007	30,318	none	---	Katon and Hamilton	42	499,762	832,669	1,176,161	140,936	60,003	---	---	---
N. London, W. & Palmer	66	610,700	1,064,000	1,608,230	120,571	61,844	none	---	Little Miami	66	2,981,282	1,264,000	3,926,167	775,442	290,124	10	---	---
Norwich and Worcester	32	2,122,300	724,183	2,598,671	268,417	44,447	---	---	Sandusky, Dayton & Cin.	171	2,997,000	3,368,000	6,065,000	882,614	---	---	---	---
Albany Northern	82	439,005	1,025,098	1,840,696	117,716	9,904	---	---	Central Ohio	138	1,427,907	6,224,065	4,684,822	670,092	164,697	none	---	---
Black River and Utica	66	643,330	517,663	974,323	In progr.	---	---	---	Pittsb. Ft. Wayne & Chicago	423	9,247,040	9,822,650	14,278,704	1,646,369	677,787	20	---	---
Buffalo, Conn. and N. Y.	100	1,487,871	1,501,183	2,919,098	172,478	68,333	none	---	Pittsb. Mayv. & Cin.	60	371,360	31,000	390,333	In progr.	---	---	---	---
Buffalo and N. Y. City	92	798,438	2,537,849	3,401,898	288,392	31,896	none	---	Sand'y, Manaf. & Newk	127	1,850,000	2,204,367	3,652,367	828,958	104,479	none	---	---
Buffalo and St. Line	69	1,300,000	1,040,000	2,494,300	679,750	356,763	10	---	Soito & Hocking Valley	58	403,976	508,050	888,858	In progr.	---	---	---	---
Onondaga and Elmira	47	494,111	227,933	1,276,790	174,085	69,506	---	---	Spring Mt. Vernon & P.	113	1,000,000	950,000	2,184,000	In progr.	---	---	---	---
Onondaga & Niagara F's	98	1,316,000	929,854	3,495,832	---	---	---	---	Tol. Wabash & St. Louis	242	2,068,100	7,677,000	10,647,600	Recently opened.	---	---	---	---
Oayuga & Susquehanna	36	897,000	506,889	1,187,652	135,433	48,619	none	---	Cin. Log. and Chicago	255	1,066,079	1,002,126	2,080,433	In progr.	---	---	---	---
Hudson River	144	8,768,000	6,250,362	12,737,896	1,902,828	693,880	33	---	Evansville & Crawford	109	986,061	1,270,872	2,158,713	249,808	124,140	---	---	---
Long Island	506	24,302,000	14,407,036	30,737,616	6,523,413	3,041,120	11 1/2	---	Ind. and Vincennes	88	1,686,809	1,664,584	3,029,989	491,743	245,622	7	---	---
New York Central	143	11,000,000	28,081,406	34,499,324	7,422,607	1,454,032	none	17 1/2	Indiana Central	66	612,560	1,261,179	1,909,911	368,189	204,685	---	---	---
New York and Erie	143	5,717,100	4,822,495	8,758,203	1,040,393	324,891	none	12 1/2	Ind. Olev. & Pittsburg	88	836,791	1,077,894	1,824,426	263,19	85,348	none	---	---
New York and Harlem	118	1,638,022	4,404,874	6,470,714	520,165	135,764	none	1	Jeffersonville	74	1,014,252	694,000	1,839,678	222,737	94,318	---	---	---
Northern, N. Y.	118	800,130	1,213,026	752,033	149,373	78,784	---	---	Madison and Indianapolis	87	1,647,700	1,336,816	2,934,616	260,214	118,628	none	---	---
Oswego and Syracuse	29	467,200	294,189	749,883	In progr.	---	---	---	New Albany and Salem	288	2,585,121	5,281,848	7,029,491	645,827	371,402	none	---	---
Potomac and Watertown	25	810,000	140,000	800,423	241,149	82,600	---	---	Penn. and Indianapolis	73	868,314	2,000,000	150,000	90,000	90,000	---	---	---
Rome and Saratoga	48	500,000	395,600	71,909	21,089	---	---	---	Torre Haute and Ind.	73	1,361,450	250,136	1,588,890	481,272	206,079	10	---	---
Saratoga and Whitehall	48	768,369	1,178,804	2,272,777	159,484	22,503	none	---	Chicago and Rock Isd	182	6,248,000	1,734,318	6,028,272	1,886,196	860,039	---	---	---
Syracuse & Binghamton	27	487,830	737,079	1,109,822	186,363	65,184	---	---	Chicago, Burl. and Quincy	216	4,631,540	8,852,970	8,042,428	1,506,167	811,767	---	---	---
Troy and Boston	97	1,500,000	700,079	2,200,600	440,290	102,037	3 1/2	63	Ohio, St. Paul & P'd du Lac	178	2,300,000	1,326,000	3,626,000	In progr.	---	---	---	---
Bedford Delaware	64	1,000,000	1,619,000	2,844,000	213,393	114,633	---	---	Galena and Chicago	259	6,023,800	8,899,016	9,994,465	2,316,768	1,192,042	8	7 1/2	---
Osaden and Amboy	94	8,000,000	11,407,300	8,791,090	1,610,787	504,114	12	117	Illinois Central	704	4,656,436	20,314,402	25,637,669	3,293,866	605,972	---	---	---
Samden and Atlantic	80	8,486,000	1,680,884	1,738,171	117,859	46,542	10	---	Peoria and Ogawqua	181	1,569,889	2,200,000	6,400,000	In progr.	---	---	---	---
Saw Jersey	63	2,000,000	3,692,828	6,821,329	682,940	367,103	---	---	Ohio & Miss. (Wat. Dr.)	147	1,780,226	3,292,403	4,070,586	Recently opened.	---	---	---	---
New Jersey Central	63	1,167,806	340,000	1,084,127	237,765	101,542	3 1/2	---	Terre Haute, Alt. & St. Louis	208	8,011,180	9,925,927	17,726,784	828,787	247,767	---	---	---
Morris and Essex	34	1,587,806	340,000	1,084,127	237,765	101,542	3 1/2	---	Detroit and Milwaukee	185	838,000	1,128,064	1,968,968	Recently opened.	---	---	---	---
Albany Valley	44	1,587,806	340,000	1,084,127	237,765	101,542	3 1/2	---	Mich. Central	282	6,067,840	10,469,839	12,847,238	2,248,768	764,936	8	---	---
Oatav., Wil. & Erie	62	1,700,000	1,940,000	3,640,000	219,253	62,400	---	---	Mich. South. & N. Ind.	478	8,874,400	8,000,000	19,334,084	2,808,487	544,311	20 1/2	---	---
Cumberland Valley	170	8,282,772	619,461	8,013,781	186,786													

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$888,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	600,000	Do. inconvertible	7	April, October	"	1866	91 1/2	94
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	86	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1866		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1866	0	55
Cincinnati, Hamilton, and Dayton	800,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	82	88
Do. do.	468,000	2d do. do.	7	May, Novemb.	"	1860	72 1/2	76
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1862		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Fairview, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	94	96
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	85	74
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	12	52 1/2
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	17	82 1/2
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72	60	
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	60	
Covington and Lexington	400,000	Do. do.	7	March, Sept.	"	1863	40	47 1/2
Do. do.	1,000,000	2d mortgage, convertible	7	April, October	"	1863	88 1/2	91
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	88 1/2	91
Florida Free Land	1,500,000	Do. not convertible	7	March, Sept.	"	1861	17	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1875	72 1/2	
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1868	98 1/2	99
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876	90 1/2	94 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	87 1/2	93
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	7	10 April, 10 Oct.	"	1863		
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	66	82 1/2
Indianap. & Cin'tl (for Lawb. & U. M.)	500,000	Do. conv. till 1867	7	March, Sept.	"	1866	76	82 1/2
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	7	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	2,400,000	1st mortgage, conv. till 1869	7	Feb'y, August	"	1866	73	76
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	81 1/2	82 1/2
Michigan Central	1,000,000	No mortgage, convertible	6	April, October	Bost.	1860	96 1/2	94
Do. do.	600,000	Do. do.	6	March, Sept.	"	1869	92	94
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1867	7	Jan'y, July	N.Y.	1862	70	80
Do. do.	650,000	Do. 2d do. 1868	7	April, October	"	1863	70	77 1/2
Do. do.	1,250,000	Do. 3d do. 1860	7	June, Decemb.	"	1877	75	78
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1865-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1868	10	May, Novemb.	"	1864-76		
Northern Cross	1,200,000	1st mortgage, convertible	6	Jan'y, July	"	1873	76	78
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	86	
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	75	
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	60	
Pennsylvania (Central)	4,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	101 1/2	102
Racine and Mississippi	650,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875		
Sacramento and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
St. Louis and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	66	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,123,500	Mortgage	6	Jan'y, July	Balt.	1876	84 1/2	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	96	97 1/2
Erie Railroad	2,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	88	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1868	76 1/2	78 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1860	62	73
Do. do.	4,000,000	Not conv. Sunk Fund, \$420,000	7	Feb'y, August	"	1876	41 1/2	42
Do. do.	4,361,000	Convertible Inscription	7	Feb'y, August	"	1871	41	41 1/2
Do. do.	2,500,000	Convertible	7	Jan'y, July	"	1862	41	41 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1860-70	102 1/2	103
Do. do.	2,000,000	2d do. do.	7	15 June, 15 Dec.	"	1860	94 1/2	96 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	76	76
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	90 1/2	93 1/2
Do. (Free Land)	3,000,000	Mfgs 345,000 acres-priv. T. shares	7	March, Sept.	"	1860	91 1/2	91 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	85 1/2	87
New York and Harlem	1,000,000	Do. do.	7	May, Novemb.	"	1861-72	86 1/2	89
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	93	95
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	85 1/2	87
Do. Goeben Branch	1,500,000	Do. do.	7	Feb'y, August	"	1864	74 1/2	76
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	91	91 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-69	7	15 June, 15 Dec.	"	1864	101	102
Panama, 1st Issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	116	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	1,300,000	Do. convertible	6	Jan'y, July	"	1870	82 1/2	83 1/2
Do. do.	2,460,000	Do. inconvertible	6	April, October	"	1866	73 1/2	73 1/2

CITY SECURITIES.	Int't payable.	Off'd.	Asked.	CITY SECURITIES	Int't payable.	Off'd.	Asked.
New York, 5 per ct. 1868-'60	{ May, August, and November, ...	97	99	Milwaukee, 7 per ct coup. X	Divers	50	70
Do. 5 do. 1870-'75		93	95	Do. Do.	Do.	72	77 1/2
Do. 6 do.		103 1/2	103 1/2	New Orleans, 6 per ct. cp. R.R. X	Jan'y, July	85	90
Do. 6 do. 1890-'93		90	94	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	102 1/2	102 1/2
Albany, 6 per ct. coup. 1871-'81 X	Feb'y, August, ...	106	107 1/2	Philadelphia, 6 per ct. 1874-'96	X	62	65
Albany, 6 per ct. coup.	Jan'y, July	55	70	Pittsburgh, 6 per ct. coup.	X	82 1/2	86
Baltimore, 6 per ct. 1878-'90	Quarterly	97	99 1/2	Quincy, 5 per ct. coup. 1868 X	10 Feb'y, Aug.	80	80
Boston, 5 per ct. coup.	April October	94	94	Racine, 7 per ct. coup. 1873 X	Divers	90	97 1/2
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	101 1/2	102	St. Louis, 6 per ct. coup. Long X	Do.	85 1/2	87 1/2
Clev'nd, 7 per ct. cp. W. W. 1879 X	Do. do.	100	101	Do. do. Municipal X	Do.	87 1/2	90
Cincinnati, 6 per ct. coup.	Divers	80	82 1/2	Sacramento, 10 per ct. cp. 1862-74 X	Do.	37	45
Chicago, 6 per ct. coup. 1873-'77 X	Jan'y, July	80 1/2	82 1/2	S. Francisco, 10 per ct. cp. 1863, pay. N.Y. X	May, Novemb.	60	70
Do. 7 per ct. coup. 1880 X	Jan'y, July	93	99 1/2	Do. 10 per ct. cp. 1871 X	Do. do.	97	90
Detroit, 7 per ct. cp. W. W. 1873-'78 X	Feb'y, August, ...	100	102	Do. 10 per ct. pay. N. Y. X	Jan'y, July	56	60
Dubuque, 6 per ct. cp. W.W. 1877 X	March, Sept.	99	100	Do. 6 per ct. pay. N. Y. 1875 X	Do. do.	56	60
Jersey City, 6 per ct. cp. W. W. 1877 X	Jan'y, July	90	90	Wheeling, 6 per ct. coup. X	Divers	50	50
Little Miami, 6 per ct. cp. 1880-'83 X	Divers	70	72 1/2	Do. 6 per ct. cp. Mun. 1874 X	March, Sept.	81 1/2	
Maryland, 6 per ct. coup. 1882 X	Jan'y July	64	66	Zererville, 7 do. X	April, October		

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending December 27, 1858.

BONDS.	Per cent. and Interest
Little Miami, 1st Mort.	60 1/2
Covington and Lexington, 1st Mortgage	60 1/2
Do. do. 2d do.	70 1/2
Do. do. 3d do.	60 1/2
Ohio & Miss., R. D., Construction	70 1/2
Cinc. Ham. and Dayton, 1st Mortgage	70 1/2
Do. do. 2d do.	70 1/2
Indianap. & Cincinnati, do. do.	70 1/2
STOCKS.	
Cincinnati, Hamilton & Dayton	82 1/2
Columbus and Xenia	76
Indianapolis & Cincinnati	60
Little Miami	60
Ohio and Mississippi (R. D.)	5 1/2

Railroad Earnings.

The following are the earnings of the Ohio and Mississippi Railroad for the month of November, 1858, compared with earnings of same month 1857:

	1858.	1857.
Passengers	\$72,388 08	\$65,486 81
Freight	47,582 83	24,652 73
Express	3,056 00	3,187 50
Mail	6,585 41	5,164 59

\$129,561 32 \$98,441 63
Increase over 1857.....\$31,119 69

The receipts of the Grand Trunk Railway of Canada for the week ending December 11th, were.....\$45,687 58
Week ending December 12, 1857.....58,424 80

Decrease.....\$12,737 21
Total traffic from July 1st.....\$1,067,168 11
Same period last year.....1,149,229 56

Decrease.....\$82,071 45
The earnings of the Pittsburg, Fort Wayne and Chicago Railroad Company during the month of November were as follows, viz:

From Freight	\$59,611 99
Passengers	60,018 41
Mail	4,482 29
Rent of Road	5,600 00
Miscellaneous	150 00

Total.....\$129,762 69
Earnings in same month last year....128,559 70

Increase.....\$1,202 99
The expenses in November were as follows, viz:
Station expenses.....\$8,522 82
Cost of running.....23,373 81
Repairs of machinery.....16,447 79
Maintenance of way.....25,214 66
General expenses.....9,113 13

Total.....\$82,671 71
Expenses in same month last year....72,221 65

Increase.....\$10,450 06
Net earnings in November, 1858.....\$47,090 98
Do. 1857.....56,338 05

Decrease.....\$9,247 07

Vermont Central Railroad.

In September last there was a hearing before Bennett, Chancellor, of a suit in equity pending, to foreclose the mortgage by the Vermont Central Railroad to secure the bonds which were first issued. On Monday last, the Chancellor gave a very full and elaborate opinion in favor of the validity of the mortgage, and entered a decree for foreclosure. The effect of this will be to concentrate the entire property in the hands of the holders of the first mortgage bonds, subject to the prior claims of the Vermont and Canada Railroad Company, in whose favor a decision was made by Chancellor Poland last September.

The foreclosure of the first mortgage will be of great importance to the real owners of the property, as much embarrassment has been occasioned

by the pertinacity with which certain persons claiming to represent the second mortgage bondholders of the Vermont Central Railroad, have resisted the prior claims of the Vermont and Canada Railroad, and the first mortgage bondholders of Vermont Central. Each interest has claimed to be represented by separate counsel in all legal proceedings, occasioning great delay and expense.

A law was passed by the Legislature of Vermont in 1857, providing that upon the foreclosure of a mortgage of a railroad, the bondholders may form themselves into a corporation, which will terminate the office of the trustees, who, under the power to elect successors, have kept themselves in office.—*Boston Courier.*

American Railroad Journal.

Saturday, January 1, 1859.

The Pacific Railroad.

Were the matter of a railroad to the Pacific in the hands of individuals, the proper course to be pursued would be a very obvious and simple one—to ascertain the best route, and the cost of a railroad over it. The question of means is the necessary sequence of these. But Congress, as is the case usually with legislative bodies, will be likely to invert the ordinary and business-like mode of proceeding, and make a vote of money and, perhaps, designate a route, before anything is known of its practicability, cost, or its adaptation to the commercial wants of the country. With such a beginning it is easy to see that the enterprise cannot end otherwise than in disaster, even with abundant means furnished by the General Government.

From the action of Congress so far, it is evident that this body still labors under several delusions, each of which if acted upon, is sufficient to defeat the road. In the first place a large donation of land is proposed. It unfortunately happens that the greater part of the land on any of the routes proposed is nearly worthless, and is insufficient in value to form the basis even of a credit upon which any considerable sums could be raised. That individual capital would be seduced into a railroad, unless based upon governmental aid, is preposterous. No person supposes that, for a long time to come, a railroad to the Pacific would be remunerative. There is no disposition on the part of those of our people who have money, to invest it, even in productive roads. With such a feeling prevailing, it is too much to suppose that the public are going to add to their losses by investing in a new enterprise, the unproductiveness of which is assumed in the outset.

All this talk in Congress, therefore, about contractors building the road, receiving a large donation of land and a pittance in the shape of payment for the carriage of the mails capitalized, is really little better than so much tomfoolery. It proves that the subject is either not understood, or that there is a willingness on the part of the members to deceive, or to be deceived,—in other words, that they are thus far talking for *Buncombe*. If a railroad be necessary, there is no mode so equitable for raising means for its construction than upon the credit, and with the money, of the people of the United States. They are collectively to reap its advantages; and they should in the same manner bear the burden of its construction. No road can be built by any other means. To base its construction upon any other, is to start

on a false hypothesis which must lead to a speedy break-down, souring the public mind, and destroying public confidence, and postponing for years the progress of this great work.

The making grants of lands and money at the present session of Congress would not facilitate, but would really retard the project, as it would undoubtedly lead to precipitate action, and to mistakes which could not be retrieved without serious losses. The first step to be taken in the present exigency is to ascertain the route to be adopted. To do this would occupy a corps of railroad engineers at least two, and perhaps three years. If Congress would appoint such a commission, and place it immediately in the field, it might properly await the result of their surveys and examinations. In the mean time a more emphatic expression of the popular will would be gained, and any action that might then be taken would have the benefit of far better light and information than we now possess.

But we can hardly expect to see such a course pursued. A large proportion of members of Congress are opposed to any and all roads undertaken by Government. Those in favor of a road are divided up into several parties or sections on the question of route. They may have personal aims and interests that would be quite hostile to the best interest of such a work, and that would come in collision with its progress. In other words, a railroad will be advocated from the supposed influence it is likely to exert upon a particular section or interest of the country, or in hopes that something may be made out of it by some official or other connection with it. With a myriad of such influences pressing upon it, it is hardly credible that it should not be smothered in a very short time. A scheme of such magnitude would stimulate an universal capidity, and it would be vastly more difficult to keep its administration pure, than the affairs of the city of New York, or the General Government, corruptions in both of which and the impossibility of correcting them, are now too well proved.

But should any scheme receive attention, we hope it is one that will embrace three routes. Suppose Congress to give absolutely \$25,000 per mile for three roads, such a sum, with grants of lands, would very likely be instrumental in carrying the southern route to the valley of the Rio Grande, and on the central and northern routes, to the eastern base of the Rocky Mountains, or, say, a distance of about 500 miles each, commencing at the western boundary of the organized States. Such an undertaking involves an outlay of only \$37,500,000. The advantages resulting from these roads, even partially built, would be vastly greater than their cost. On the southern route, it would bring us in connection with the mines of New Mexico, Arizona, Sonora, and the whole of the northern part of Mexico. On the central route, 500 miles of road would carry us to the gold mines at the head of the Platte river, and on the north, they would at least open an immense area of fertile land in the valley of the Red River of the North. But the discoveries now daily making tend to show that the Rocky Mountain range for its entire extent is rich in the precious metals, and as they possess much greater agricultural resources than the plains by which they are bounded, are, probably, destined to become the future seat of

large and flourishing communities. A sufficient reason for undertaking several railroads exists, and should they for any cause fall short of their respective terminations, the good they would have accomplished, will justify the expenditure of the amount estimated. It is certainly the duty of our people to explore and render accessible the interior of the continent. It can be done by no other power or means. It is a work which public opinion will, in the end, force Government to undertake, and the sooner it is commenced in the right way, and in a proper spirit, the better.

Railroad Dividends.

The Boston and Providence Railroad Company have declared a dividend of \$3.00 per share, payable on the 3d inst.

The Boston and Worcester Railroad Company, a dividend of 2 per cent. payable on the 1st inst.

The Boston and Maine Railroad Company, a dividend of 3½ per cent., payable on the 3d inst.

The Providence R. R. Co., a dividend of 3 per cent. payable on the 3d inst.

The Boston and Lowell R. R. Co., a dividend of 3 per cent., payable on the 3d inst.

The Fitchburg R. R. Co., a dividend of 3 per cent. payable on the 3d inst.

The Old Colony R. R. Co., a dividend of 3 per cent., payable on the 3d inst.

The Worcester and Nashua R. R. Co., a dividend of 4 per cent., payable on the 3d inst.

The Western R. R. Co., a dividend of 4 per cent., payable on the 3d inst.

The Watertown and Rome R. R. Co., a dividend of 3 per cent., payable on the 3d inst.

The Cleveland, Columbus and Cincinnati R. R. Co., a dividend of 5 per cent., payable on the 1st inst.

The Cleveland, Painesville and Ashtabula R. R. Co., a cash dividend of 5 per cent., and another of 10 per cent. in bonds.

Insurance Dividends.

The Park Fire Insurance Co. have declared a semi-annual dividend of 10 per cent., payable on the 3d inst.

The Brooklyn Fire Insurance Co., a semi-annual dividend of 10 per cent., payable on the 3d inst.

The Great Western Marine Insurance Co., a semi-annual dividend of 3½ per cent., payable on the 3d inst.

The Newark Banking and Insurance Co., a semi-annual dividend of 5 per cent., payable on the 3d inst.

The Goodhue Fire Insurance Co., a semi-annual dividend of 6 per cent., payable on the 3d inst.

The Commonwealth Insurance Co., a semi-annual dividend of 6 per cent., payable on the 1st inst.

The Mercantile Mutual Insurance Co., a semi-annual interest dividend of 3½ per cent., payable on the 3d inst.

The Washington Insurance Co., a dividend of 10 per cent., payable on the 3d inst.

The Long Island Insurance Co., a dividend of 10 per cent., payable on the 3d inst.

The American Fire Insurance Co., a dividend of 8 per cent., payable on the 3d inst.

The Mercantile Fire Insurance Co., a semi-annual dividend of 8 per cent., payable on the 3d inst.

The Mechanic's Insurance Co., (Brooklyn) a dividend of 7 per cent., payable on the 3d inst.

Interest on State, City, County, Railroad and Other Bonds.

The interest coupons, due on the 1st inst., on the bonds of the city of Hartford, issued to the Hartford, Providence and Fishkill Railroad Co., will be paid at the Phoenix Bank, Hartford, Ct.

The interest coupons of the Marietta, Ohio, bonds issued to the Marietta and Cincinnati R. R. Co., due on the 1st inst., will be paid at the office of A. G. Allen, 21 South St.

The coupons of the 8 per cent. first Mortgage Bonds of the Joliet and Chicago R. R. Co., due on the 1st inst., will be paid at the office of M. K. Jesup & Co., 44 Exchange Place.

The interest falling due in this city on the 1st inst. upon the bonds of Scioto Co., Ohio, will be paid at the office of A. S. Chase & Co., 96 Broadway.

The interest due on the 3d inst. on the debt of the State of Illinois, will be paid at the office of Ketchum, Howe & Co., 40 Exchange Place.

The coupons and bonds of the Heusatonie R. R. Co., due on the 1st inst., will be paid at the office of the Company, or at the office of Ketchum, Howe & Co.

The bonds of Franklin Co., Ohio, issued to the Cleveland, Columbus and Cincinnati R. R. Co., due on the 1st inst., amounting to \$50,000, will be paid, with the remaining interest warrant attached, at the Ocean Bank.

The interest coupons and bonds of the State of Michigan, maturing on the 1st inst., will be paid at the Artizan's Bank.

The interest coupons on the bonds issued by the Commissioners of Licking County, Ohio, to the Central Ohio Railroad Company, also, the bonds issued by the corporation of Newark, Ohio, to the Central Ohio Railroad Company and the Newark Plank Road Company; and also, on the bonds issued by the Trustees of Newark Township to the Steubenville and Indiana Railroad Company, due on the 1st inst., will be paid at the office of Stanton, Sheldon & Co., 81 Front St.

The interest coupons of the bonds of the Mississippi and Missouri R. R. Co., due on the 1st inst., will be paid at the Corn Exchange Bank.

The coupons due on the 1st inst., on \$400,000 first Mortgage Bonds of the Sacramento Valley R. R. Co., will be paid at the office of Schuchardt & Gebhard.

The interest coupons due on the 1st inst., on the first Mortgage Bonds of the Central Military Tract R. R. Co., Chicago and Aurora R. R. Co., and Chicago, Burlington and Quincy R. R. Co. will be paid at the Bank of Commerce.

Interest coupons of the Third Mortgage Bonds of 1872, of the New York and Harlem R. R. Co., will be paid at the office of the Treasurer, corner of 26th St. and 4th Ave., on the 3d inst.

The interest coupons due on the 1st inst., on the Minnesota State Bonds, will be paid at the Atlantic Bank.

The interest due 1st inst. on the coupon bonds of the State of Virginia, will be paid at the Bank of the State of New York.

The coupons on the Freeland Bonds for the Florida, Atlantic and Gulf R. R. Co., due on the 1st inst., will be paid by Joseph Gwynn, 96 Wall Street.

The coupons for interest on bonds of Yuba Co., and city of Marysville, Cal., due 1st inst., will be paid at the American Exchange Bank.

The interest coupons, due 1st inst. on the bonds of Muskingum Co., Belmont Co., and City of Zanesville, Ohio, issued to the Central Ohio R. R. Co., will be paid at the Nassau Bank.

The coupons on the first Mortgage of the Long Island R. R. Co. will be paid at the City Bank, Brooklyn.

The principal of the bonds of the city of Brooklyn of the loan of 1845, due 1st inst., and all coupons of the city of Brooklyn due on that day, will be paid at the Long Island Bank.

The coupons on the 7 per cent. construction bonds of the Pittsburg, Fort Wayne and Chicago R. R., due on the 1st inst., will be paid at the office of the Company, 37 William St.

The interest on the State debt of Ohio will be paid at the American Exchange Bank.

The coupons for interest on the fire and civil bonds of the city of San Francisco, due on the 1st inst., will be paid by Wm. T. Coleman & Co., 88 Wall St.

The coupons of the bonds of the city of Toledo, O., due on the 1st inst., will be paid at the American Exchange Bank.

The interest on the bonds of the Cumberland Coal and Iron Co., due 1st inst., will be paid on that day at the office of the Company.

The coupons of the Jersey City Water Bonds, due on 1st inst., will be paid at the Continental Bank, N. Y., or at the Mechanics' and Traders' Bank, Jersey City.

The coupons of the bonds of the New York and Richmond Coal Co., will be paid at the office of the Company, 11 Tontine Buildings, on the 3d inst.

The coupons of the Hoboken City Water Scrip due on the 1st inst., will be paid at the Union Bank.

The bonds of the State of Indiana for banking purposes, issued in 1834, being the \$1,390,000 Loan 5 per cents; the bonds of Ross County, Ohio, issued to the Marietta and Cincinnati Railroad Company, 7 per cents; the bonds of the town of Harmer, Ohio, issued to the Marietta and Cincinnati Railroad Company, 7 per cents; the bonds of Washington County, Ohio, issued to the Marietta and Cincinnati Railroad Company, 7 per cents; the bonds of Champaign County, Ohio, issued to the Columbus, Piqua and Indiana Railroad Company, 7 per cents; the bonds of the city of Portsmouth, Ohio, issued to the Scioto and Hocking Valley Railroad Company, 7 per cents, will be paid on 3d inst., at the office of Winslow, Lanier & Co., No. 52 Wall St.

Bank Statements.

The following is a comparative statement of the New York Banks for the weeks ending Dec. 18th, and 25th:

	Dec. 18th.	Dec. 25th.
Loans	\$127,055,010	\$126,716,365
Specie	26,608,877	26,368,271
Circulation	7,110,629	7,704,348
Deposits	89,990,087	88,679,095

The following is a comparative statement of the Philadelphia Banks for the weeks ending Dec. 20th, and 27th:

	Dec. 20th.	Dec. 27th.
Loans	\$26,116,640	\$26,232,551
Specie	6,323,454	6,274,515
Deposits	16,683,671	16,723,397
Circulation	2,663,260	2,701,127

The following is a comparative statement of the

Boston Banks for the weeks ending Dec. 20th, and 27th:

	Dec. 20th.	Dec. 27th.
Loans	\$59,305,612	\$59,701,041
Specie	9,292,145	8,775,328
Deposits	22,339,747	21,756,302
Circulation	6,742,580	6,678,970

The following is a comparative statement of the New Orleans Banks for the weeks ending Dec. 11th, and 18th:

	Dec. 11th.	Dec. 15th.
Loans	\$18,478,702	\$18,877,468
Specie	15,452,344	15,742,694
Circulation	8,049,939	8,353,009
Deposits	23,677,245	23,863,983

The Bank movement in the four principal cities of the Union, as compiled from the above, is as follows:

	LOANS.	SPECIE.	CIRCULATION.	DEPOSITS.
N. Yk, Dec. 25.	\$16,710,365	\$26,368,271	\$7,704,348	\$88,679,095
N. Or., " 18.	18,877,468	15,742,694	8,353,009	23,863,983
Philad., " 27.	26,232,515	6,274,515	2,701,127	16,723,397
Boston, " 28.	59,701,000	8,775,000	6,670,000	21,756,000
Total	\$231,527,838	\$57,160,480	\$25,437,484	\$151,227,476
Last week	230,932,224	57,673,756	26,204,268	152,168,566
Increase	\$595,614		\$231,231	
Decrease		\$512,976		\$1,138,691

The 'France' with a cargo of rails at Alexandria for the Manassas Gap Railroad, the 'Rufus Choate' at Norfolk for the Western North Carolina Railroad Company, and the first cargo on the way for the Western Maryland Railroad Company are parts of contracts negotiated by NORRIS & BROTHER in London.

London Correspondence.

26, THROGMORTON STREET,
LONDON, December 10th, 1858.

To the Editor of the AM. RAILROAD JOURNAL.

The monied interests in this city were taken by surprise yesterday, by the bank broker announcing upon the Stock Exchange that the Bank of England had reduced the rate of discount from 3 per cent. to 2½ per cent.

This is now the third time since the passing of the Bank Act of 1844, that the rate of discount at the Bank of England has been below 3 per cent. On the 5th of Sept., 1844, the first week of the operation of that act, it was 2½ per cent., and it was succeeded by the year of great railroad enterprise and joint stock speculation. The next occasion was on the 22d Nov., 1849, the year succeeding that of the revolution in Paris, when Louis Philippe fled to England—the year of the great continental revolutions, succeeded as it was by the great depression in commerce generally. On the 26th December, 1850, the rate was advanced to 3 per cent., and continued at that rate until 1st of Jan., 1852, when it returned to 2½ per cent. In 1852 was the great gold movement; the amount of bullion in the bank on the 10th July, amounted to £22,232,138 sterling, and the rate of discount receded to 2 per cent. But in the following year there was a very deficient harvest throughout Europe, the bank ceased to hold silver, and the rate of interest advanced rapidly to 5 per cent. In March of the succeeding year war was declared against Russia; loans had to be resorted to; an unhealthy excitement followed over all quarters of the globe, and the crisis of last year succeeded. The period of great depression which necessarily follows excitement, is now present, and confidence, for a while, is suspended. Money is not seeking employment. Wheat is selling at the lowest of the average rates, and colonial produce is neglect-

ed. By the last bank return the stock of bullion is £18,158,180 sterling; the unemployed notes £12,324,040, and now the current rate of discount is again 2½ per cent.

What the permanent effect of the change may be it is impossible to say. Former reductions have been succeeded by wild speculation, but the remembrances of the past may not soon be forgotten. In 1849, it was some time then before trade revived. So this time, caution may even have a longer reign. The present effect is to improve the value of all good securities, and as there has been an increasing enquiry for American State Stocks—their value will be advanced during the coming week. For the best class of American Railway bonds, the market is decidedly better, and particularly for Panama first and second mortgage bonds. Speculative Securities are not in demand. United States 5 per cent. bonds have sold at 105½ to 105¾. Maryland bonds at 97. Massachusetts sterling, 5 per cent., 103. Ohio 6 per cent. stock, 97½. Pennsylvania 5 per cent. stock, 83½ to 84; do. 5 per cent. bonds, at 87. To-day the prices of all American Securities, quoted in the official lists, have greatly improved. The reduction of the Bank interest has given a favorable impetus to the prices of English Railway Shares, and in all the leading lines this day's prices compare favorably with the closing quotations of last night, when the market closed firm after an active day.

I am yours, &c.,

WILLIAM LANCE.

Virginia Central Railroad.

The Report and statements of the condition of this company for the fiscal year ending 30th Sept., 1858, were presented and read at the 23d annual meeting assembled at Richmond on the 25th November.

The Report of the Directory is a very satisfactory document, and both this and the statements of the several departments are drawn up with eminent ability, indicating that the interests of the company are in able and careful hands.

The gross revenue and expenditures for the years 1857 and 1858 compare as follows:

	Gross Revenue.	Expenditures.
1858.....	\$585,832	\$290,056
1857.....	540,031	319,792

Incr. \$15,801 Decr. \$29,736

—leaving a net revenue for current year of \$295,776 against \$220,239 for the year 1857, or an increase of \$75,537 for the year. The working expenses in 1858 were 49.5 per cent. against the same in 1857 of 59.2 per cent. or nearly 10 per cent. less.

The liabilities of the company as appears by the Treasurer's Report are as follows:—

Mortgage debts, the last falling due July 1, 1884.....	\$1,269,500
Dividend Bonds due in 1865, '66 & '75.....	246,866
Other evidences of debt.....	128,253

Total liabilities.....\$1,644,619

For the payment of this indebtedness the company have a sinking fund, to which is annually contributed \$20,000. After 1864 it is proposed to increase the annual contribution by an additional \$25,000 per annum. Should this policy be pursued, the whole debt will be provided for as it becomes due, and the company be in possession of the works at the stock capital cost.

The balance sheet presents the company's financial condition thus:

Capital Stock (paid in)—

State's subscription.....	\$1,869,595
Individual do.....	1,253,373
	\$3,122,968
Funded Debt secured by mortgage.....	1,269,500
Dividend Bonds.....	246,866
Contractors' Bonds, etc.....	202,692
Dividends due in cash.....	543
Due State interest on dividend bonds.....	29,095
Receipts from transportation from commencement to 30th Sept., 1858.....	3,308,837
Receipts for rent of real estate.....	3,989
Debts due for materials, etc., charged in disbursements, but not yet paid ..	87,011

Total.....\$8,271,502

Construction of road, etc., between Richmond & Staunton.....	\$2,299,019
Do. between Staunton and Covington.....	2,522,259

Equipment.....	542,982
On account of Blue Ridge Railroad, rent, etc.....	56,028
Real estate not included in road and buildings.....	23,796
Sundries.....	17,315
Interest paid since Oct. 1, 1850.....	462,723
Survey of short line between Richmond and Charlottesville.....	1,922
Dividends since commencement.....	365,382
Transportation since commencement.....	1,808,987
Debts due to the company other than for unsettled balances on subscription to capital stock.....	171,691
Cash on hand, 30th September, 1858 ..	19,396

Total.....\$8,271,502

The receipts and expenditures during the year on account of working the road have been as follows:—

RECEIPTS.	
Passenger.....	\$266,110
Freight.....	291,144
Express Freight.....	5,627
United States Mail.....	22,951
	\$585,832

EXPENSES.	
Transportation.....	\$260,840
Salaries.....	13,564
Taxes, etc.....	12,527
Insurance.....	3,125
	\$290,056

Included in the Transportation expenses are, \$56,548 for repairs of engines and cars, etc., \$14,524 for repairs of workshops, tools and machinery, and \$71,082 for maintenance of way.

The rolling stock of the Company consists of 29 locomotives and tenders, all in superior order, 201 eight-wheel cars, viz.: 17 passenger, 8 mail and baggage, 3 conductors', 143 box freight and stock, and 30 platform and gondola; and 32 four-wheel cars, viz.: 22 gravel and sand, and 10 box and stock. The hand, crank and dirt cars, trucks at depots, and several old passenger and freight cars, (used for the hands working upon the line to live in,) 50 or 60 in number, are not included in this enumeration.

The total freight transported in the year amounted to 64,044, viz.: westwardly 28,271 tons, and eastwardly 35,773 tons; freight carried one mile, 4,821,218 tons. The total number of passengers carried was 108,314, viz.: westwardly, 53,840, (through 2,010, and way 51,830,) and eastwardly, 54,474, (through 1,562, and way 52,912,) or an

equivalent to 32,792 through passengers; or estimating 12 to the ton, equal to 532,964 tons carried one mile.

The classification of the freight carried west and east during the year 1858, is exhibited in the annexed table:

	Carried West.	Car'd East.
Products of forest.....	3,655.58	1,999.50
“ mines.....	1,728.11	296.67
“ animals.....	674.63	1,453.99
Vegetable food.....	1,004.67	22,794.64
Other agric. products.....	449.92	6,794.42
Manufactures.....	2,801.68	548.88
Merchandise.....	5,604.67	634.62
Miscellaneous.....	12,851.45	1,251.06

Total tons.....28,270.71 35,773.78

Tons carried one mile.....2,305,263 2,515,945

During the year the casualties were—1 killed, and 2 injured.

The road is now open to Jackson's River, 195 miles, and within 10 miles of Covington—being an increase of 14 miles since the last report. It is not the purpose of the Company, however, to prosecute the construction of the remaining portion at present, nor until considerable progress has been made towards the completion of the Covington and Ohio Railroad, although the expenditures would not exceed \$600,000.

The officers of the Company are: EDMUND FONTAINE, President; Wm. Overton, Jacob Baylor, and Samuel Carpenter, Directors appointed by the Board of Public Works; and Nath. B. Hill, and W. J. Robertson, Directors elected by stockholders. H. D. Whitcomb, Chief Engineer; Thomas Dodamead, General Superintendent; John Garrett, Treasurer.

Grand Trunk Railway.

The fifth annual meeting of the Grand Trunk Railway Company of Canada, was held on the 19th inst., at Toronto, and the reports of the Directors and the several departments presented and read.

The Report of the Direction is short, and refers to the statement of the Vice-President recently presented to the London stockholders for a more succinct account of the progress and condition of the works. This document has already appeared in the JOURNAL, (13 Nov.,) and has undoubtedly been read with interest by all who are concerned in this vast enterprise. During the year satisfactory progress has been made at the Victoria Bridge, which it is anticipated will be opened for traffic in time for the fall business of 1859, and by that period the Directors trust to have a continuous line of railway from the upper lakes and the vast producing regions of the West to the Atlantic sea-board. Connection has already been effected with the western lines by a short branch from St. Mary's to London, and great progress has been made on the Sarnia extension line. From Sarnia the line will be continued across Michigan by the Port Huron and Michigan Railway, (now in progress,) and in the direction of Chicago, St. Louis, etc., by the Chicago, Detroit and Canada Grand Trunk Railway Junction Company, recently formed for the construction of a line (57 miles) from Port Huron to Detroit. It thus appears that all the works in Canada west of Quebec will have been constructed before the expiration of the coming year. East of that point the road is also progressing towards Riviere du Loup, where it will meet the line from Halifax. It is open to St.

Thomas, 49 miles. The Report is wound up in a few sentences of exultant ecstasy over the increasing interest, both in England and the Provinces, in the question of an inter-colonial railway from Halifax, and anticipates its completion at no distant day.

The Report of W. Shanly, Esq., (who succeeded Mr. Bidder as General Manager and Engineer, and who, we regret to learn, is himself about to retire from that position,) gives a full statement of the business and working of the road. The number of miles open for traffic is the same the current year as last year—549 miles; but the receipts have fallen off during the term 84 per cent., chiefly in the local passenger business. In local freight and live stock traffic, there has been an actual increase. The emigrant business shows a considerable decrease in consequence of the falling off of the number of immigrants arriving at Quebec, which in 1857 was 26,498, and in 1858 only 10,007. The decrease of receipts, however, has been met by a decreased rate of expenditure; the disbursements having been in 1857, \$55 68, and in 1858 only \$48 25 per mile per week. Mr. S. considers the results as being eminently satisfactory, considering the financial aspect of the year, and especially so when compared with the results of the working of many of the American lines. With respect to the prospects of the line, continues Mr. S., "it has passed through its worst days. The works that are to give vitality to the traffic are now in such a condition of rapid progress, as to warrant our looking forward with some degree of confidence to their completion next year, the consummation of which now depends on the proprietors alone to determine. The success of the Grand Trunk Railway, as a commercial enterprise, is chiefly dependent upon its continuity, as a connecting link between the Atlantic coast and the far West. Until, therefore, the Victoria Bridge shall have been completed and brought into use, and our extension to Detroit perfected it may be truly said that the ability of this great enterprise to produce the results that have been promised have never yet been put to the test. Notwithstanding the feeling which I confidently entertain of the success of the enterprise, the great results must not, however, be counted upon as the immediate fruits of the finishing of the line. All great undertakings require time for their development, and in our case it should be remembered that not only have we many competing and old established channels of trade to contend against, but that all of these, however rival to one another, are linked in one common cause against us, by having for their Atlantic terminus one of the greatest commercial cities in the world. The growth of our traffic may not at first be such as to satisfy the expectation of those at a distance, but it will, notwithstanding, be a certain and a healthy growth, sure to advance in rapid progression, when once the stream of commerce has found its way into the direct and uninterrupted channel that is preparing for it."

The locomotive stock is stated to be on a very efficient footing. The total number of engines is 197, and the cars of all kinds, 2,529; of which 130 are passenger, 52 baggage and post office, 1,063 covered freight, 1,068 open platform, and the remainder cattle cars, brake vans and ballast wagons. The company has also 34 snow plows.

In addition to the ordinary working expenses of the line, a large outlay of capital has had to be incurred during the past year. On the western and central divisions, covering the whole distance opened west of Montreal, the outlay has chiefly been called for by the necessity of increasing the station accommodation, sidings, engine-houses and workshops, and also by the frequency of injury to the road-bed by the action of frost on the crude and unsettled earthworks. The expenditures chargeable to capital account from these causes, during the year, has amounted on the western division, 88 miles, to £332 per mile, and on the central division, 333 miles, to £262 nearly per mile. Additional expenditures, amounting to £59 per mile, are also required in the western district, to prevent land-slips in the deep cuttings where casualties of that nature are imminent. East of the St. Lawrence, the whole line to Portland having been originally constructed without that view to permanency which characterizes the works between Toronto and Montreal, and between Richmond and Quebec, the outlay called for in the renewal of wooden bridges, the reconstruction of imperfect masonry, and the ballasting of the permanent way, etc., has necessarily been very large, and must continue to be large for some years to come. The wooden bridges are the main source of expense. There were originally upwards of 9,000 feet in length of this perishable description of structure between Longueuil and Portland. Renewals in iron have, to a certain extent, taken place already—the most important being that over the river Richelieu, where 900 feet in length of tubular girders have been substituted for the original wooden bridge, which was far advanced in decay. A good many other bridges also, which were no longer safe, have been renewed in wood, and the work of re-construction is still going forward and the road gradually assuming in other respects, as well as in the bridge-work, a stable and permanent character. The largest portion of the expenditure is due to the American section of the line, (149 miles,) from Island Pond to Portland, where the outlay chargeable to capital for the past year amounts to £438 10s. per mile. On the Canadian section (143 miles) it has been for the current year £411 per mile. The estimated money requirements over these two sections for the ensuing year, apart from the ordinary maintenance of the permanent way, buildings, etc., is £120 per mile. On the Quebec and Richmond, and the Quebec and St. Thomas sections, the outlay (except for the Point Levi wharves) has been trifling, and that portion of the line is now in good working order. Below St. Thomas 72 miles are under construction, and so far progressed as to certify their being in use in October, 1859.

As General Manager, Mr. Shanly will be succeeded by George Keith, Esq., at the present time Manager of the Scottish North-Eastern Railway, and an appointee of the English Directory.

The Report of Alex. M. Ross, Esq., gives the details of the progress and present condition of the works of the Victoria Bridge; but presents nothing of general interest beyond what is contained in Vice-President Blackwell's Report to the English stockholders, to which we have heretofore referred.

The financial statements furnished by the Accountant General are too extended for insertion in

the present number of the JOURNAL, and all we can now do is to give a general summary of their contents:

I.—CAPITAL ACCOUNT.		CR.
Share capital.....	\$15,603,128	
Debenture capital.....	9,951,866	
Provincial debentures.....	15,142,633	
Provincial Bond capital (released by the Provincial Government).....	6,257,134	
Total capital and debts.....	\$46,954,261	
DR.		
Eastern Division, 279 miles.....	\$13,205,642	
Central Division, 333 miles.....	18,088,339	
Western Division, 88 miles.....	5,973,987	
Portland Div'n, 149 miles.....	2,548,642	
Victoria Bridge, in progress.....	4,234,155	
Other works* in progress.....	2,580,319	
Subscription to St. Lawrence Warehouse, Dock and Wharfage Co.....	20,000	
	\$46,651,084	
Balance to credit of Capital acc't.....	\$303,177	

* These are the London and Grand Trunk Junction, (since completed,) the Stratford and St. Mary's Section, (since completed,) the St. Mary's and Sarnia Section, the St. Thomas and Rio du Loup Section, and the Kingston Branch.

2.—REVENUE ACCOUNT.	
Expenditures:	
Working of locomotives.....	\$328,046
Passenger traffic.....	110,142
Merchandise traffic.....	204,649
Maintenance of road, etc.....	299,954
General charges.....	61,494
Telegraph.....	9,578
Taxes.....	2,021
Ferry boats.....	9,362
Loss and damage to goods.....	8,539
Compensation and cattle claims.....	3,142
Conveyance of passengers and mails to and from stations.....	4,491
Cartage of goods, do.....	7,570
Ont., Simcoe and Huron Co.....	3,276
Agencies in United States.....	6,441
European agencies.....	6,513
Total.....	\$1,065,219
Receipts:	
Passengers (193,5494).....	\$413,965
Baggage.....	3,961
Mails.....	43,720
Merchandise (236,126 tons).....	590,699
Expresses.....	9,824
Car hire.....	203
Rents.....	3,396
Balance to credit for half year.....	451
Total.....	\$1,069,219

The officers for the ensuing year are:

HON. JOHN ROSS, *President*.
T. E. BLACKWELL, *Vice-President*.
GEORGE KEITH, *General Manager*.
W. H. A. DAVIES, *Chief Accountant*.
J. M. GRANT, *Secretary*.

Baltimore and Potomac Railroad.

A meeting of the stockholders of the Baltimore and Potomac Railroad was held at Upper Marlborough on the 19th ult. The counties of Anne Arundel, St. Mary's, Charles and Prince George's were well represented in the meeting, which was called to elect seven directors to inaugurate the work. The following gentlemen were elected Directors of the road, under the provisions of the charter: Edwin Robinson, of Virginia; J. S. Selman, of Anne Arundel county; Edmond J. Plowmann, of St. Mary's county; John W. Jenkins and Walter Mitchell, of Charles county; W. D. Bowie and W. W. W. Bowie, of Prince George's county.

Mr. Robert Bowie, the agent of the company,

presented his report together with the subscription books which showed that the sum of sixty-seven thousand dollars had been subscribed. A letter of the most encouraging character from Edwin Robinson, President of the Fredericksburg road was received and read.

Journal of Railroad Law.

FREE TICKET.—LIABILITY FOR INJURIES TO NON-PAYING PASSENGERS.

Welles vs. the New York Central Railroad Co.

This case was tried at the Monroe General Term of the Supreme Court of New York, last spring, on appeal from a judgment entered at special term after a trial at the circuit.

By a statement of facts agreed upon between the respective parties, it appears that in September, 1855, the plaintiff, while seated in the forward passenger car of an express train, was severely injured by a collision between that train, and some freight cars standing on the track. By stipulation, his damages were set at \$750. The ticket used by Mr. Welles at the time was a free ticket, of which the following is a copy:

"FREE. New York Central Railroad. Not transferable. Conductor will pass P. C. Welles, Dewey & Co., until January 1, 1856, unless otherwise notified. [Signed] C. VIBBARD, Sup't."

On the back of the ticket was printed as follows:

"The person accepting this free ticket assumes all risk of accidents, and expressly agrees that the company shall not be liable, under any circumstances, whether of negligence by their agents, or otherwise, for any injury to the person, or for any loss or injury to the property of the passenger using this ticket. If presented by any other person than the individual named therein, the conductor will take up this ticket. This pass is not to be presented or used by the holder to procure pass over any other road."

It was further conceded on the part of defendants, that the collision was occasioned by the carelessness and negligence of their agents.

The jury upon the first trial found a verdict for the plaintiff for the sum of \$750, agreed upon as his damages, and the defendants appealed. Upon the appeal the following decision was rendered, which has just been reported and will be read with interest.

E. DARWIN SMITH, J.—In the conclusion of the Judge at the circuit, that the plaintiff is entitled to recover in this action, I find myself unable to concur. The plaintiff received a free ticket from the defendants, entitling or permitting him to ride in their cars at his own pleasure, with an indorsement on his ticket by which "he expressly agreed that the company should not be liable under any circumstances, whether of negligence by their agents or otherwise, for any injury to his person, or for any loss or injury to his property." These were the terms and the conditions on which the defendants gave, and the plaintiff received his ticket. It implies, in effect, an agreement on the part of the plaintiff to take the risk of all the casualties attending railroad travel, so far as they arose or might arise or result from negligence on the part of the officers and agents of the defendants. The defendants are a corporation, engaged in carrying persons and property as common carriers. They are necessarily obliged to carry on their business through the instrumentality of numerous officers and other agents. From the character of the business, the great liability to accidents or injuries to person and property, resulting

more or less in most cases from some degree of neglect or want of care on the part of some of their numerous employees, and the serious character of such injuries, the company might well desire to restrict their liability to damages from such casualties to the narrowest possible limit. In respect to persons carried for hire, they could obviously do nothing to restrict their liability, or that should excuse them from the exercise of the utmost diligence and care. But they are not obliged to carry any person without compensation, at their own risk. They must have the clear right to contract with any such person that he must take his own risk. He would ride in the same cars with other passengers, and would be liable to the same and no greater accidents; but as he would pay nothing for his fare, he might well agree to take his own risk. He knew that the company was liable to suffer great loss and damage from the negligence of its agents, and that it would naturally seek to avoid, or had a great interest in preventing such loss by every reasonable precaution. But with the best of care, and the utmost caution, some accidents, he knew, would unavoidably occur from the unforeseen negligence, carelessness or want of skill of its employees. Against all such accidents, *under any circumstances, whether of negligence by the agents of the defendants or otherwise, the plaintiff expressly agreed to assume and take his own risk.* This is the bargain. It is not unlawful. It is distinctly and fairly made and clearly understood. I cannot see why it is not fully binding, to the extent of exempting the defendants from all loss or liability to loss or damage from injuries resulting from mere negligence. I do not see any ground to stop short of this exemption from loss or liability on the part of the defendants within the entire range or scope of negligence not arising from bad faith or fraud. I see no ground to measure the degrees of negligence. The contract makes no degrees. It is sweeping, and includes all negligence. It makes no exception of gross negligence. The plaintiff and defendant both knew that there was a liability to accidents from gross as well as from slight negligence. They use the word negligence in its general legal sense—to embrace all accidents or injuries resulting from carelessness or mere non-feasance of the defendants' agents. Nothing else, it seems to me, will satisfy the fair meaning—the plain import—of the contract. The plaintiff's injury resulted from a collision between the cars of the train in which he was riding as passenger, and some cars standing on the track. It was of course a case of negligence to have such a collision occur; but collisions do happen quite frequently, and that was well known to the plaintiff and to all the public. The cause of injury was most obviously within the contemplation of the parties, for it is the most fruitful cause of accidents and loss and injuries in railroad traveling. All collisions of trains must be the result of negligence in some degree, perhaps in the scale or degree of *gross negligence*. But with his ticket as his title and authority to ride in the defendants' cars, and as the contract on which the defendants agreed to carry him, I think the defendants are not liable for any injuries except such as were the result of fraudulent, willful or reckless misconduct on the part of the defendants' officers or agents. I put the exemption from liability from injuries resulting from negligence entirely upon the terms

of the express agreement between the parties. If the plaintiff had been riding at the time gratuitously upon simply a free ticket, or upon the invitation of the defendants as a matter of favor, courtesy or otherwise, the defendants would be liable. The cases of the Philadelphia and Reading Railroad Co. vs. Derby, (14 How., U. S. Rep.) and of steamboat New World vs. King, (16 id., 477), and 5 Indiana (Porter) 340, fully establish the rule that the common law liability of a carrier applies in such cases to all injuries resulting from negligence.

The Great Western Railway and its Sleeping Cars.

The great through route between New York and Boston, and Chicago and the far West, via the New York Central, Great Western and Michigan Central Railroads, has now become the most popular route with the traveling public, of all the leading lines between the West and the East. These roads are managed by men whose whole life has been devoted to the public in perfecting and systematizing railroad travel and in promoting the comfort and convenience of those who pass over their lines: Every new invention which is to add to the safety and comfort of the traveling public is eagerly sought after by the managers of these roads, regardless of expense, so long as it will add in any degree to the popularity of their line. The several lines composing this route are entitled to great credit and are deserving the thanks of the traveling community for their efforts in promoting the comfort of passengers, but we must award the palm to the Great Western Railway Company, who have recently placed upon the road at their own expense, a sleeping car, which, in point of ease, comfort, convenience and admirable arrangements surpass anything of the kind in the country.

Travelers can now leave New York or Boston for Chicago or beyond, without losing a single night's rest, by passing over the New York Central to the Suspension Bridge, and over the Great Western Railway and Michigan Central to Chicago. The car destined for the Suspension Bridge is the last one on the train coming up from Albany. On the arrival of the train here, the car is switched off and proceeds with the Suspension Bridge train, by which arrangement passengers going over the Great Western road, are not disturbed in their rest while here, nor are persons allowed to pass through the car from one part of the train to another.

The sleeping cars on the Great Western Railway are running regularly—one car leaving Suspension Bridge and one Windsor every evening. They were constructed at the Company's works, at Hamilton, under the direction of Mr. Sharpe, car superintendent of the company. These cars have been built with special reference to the ease and comfort of the passengers, and are therefore more commodious and convenient, though affording accommodations to but thirty-six passengers, while the sleeping cars on other roads are arranged into berths for from forty-six to fifty-six persons.

This is, as a matter of course, a pecuniary loss to the company, but it is everything to travelers, who are each furnished with a comfortable seat and bed, which he can occupy at pleasure without incommoding his neighbors, or being interfered with himself. In each car a double row of beds, three tiers high, and numbering in all thirty-six, runs along the centre. At one end of these is placed a double washstand, above which is arranged a tank filled with water. A handsome mirror and some beautiful cabinet work give this end of the car a very attractive appearance. On either side of the car is a row of seats—one to each bed. The bed consists of a hair mattress, covered with brussels carpet and supported by sofa springs. Each bed is provided with a pillow and comfortable quilt, also with beautiful silk damask curtains. All the fittings of the interior are made of black-walnut, which, while cheaper than mahogany, looks equally as well.

A space is set apart by curtains for the use of ladies traveling alone, or who desire to have sepa-

rate apartments. We have already stated that the berths or beds are three tiers high, and if necessary, can be divided by curtains so that a party or family of three or more persons may be entirely shut out from the rest of the passengers in the cars. Less motion is felt on these cars than on the common passenger car, in consequence of the greater weight in the centre. The conductors on these cars are intelligent and obliging, and have instructions to answer all questions as to connecting routes. Those who have passed over this route since the new cars have been running, speak in very high terms of them, and of this route to the west. Traveling at the present is rapidly being reduced to a science.—*Rochester Union*.

Cape Fear and Deep River Navigation Co.

The Wilmington, N. C., papers announce the opening of this improvement, which connects Wilmington with the great coal region of North Carolina, in Chatbam county. The work, however, is not entirely completed, but it is expected the Legislature of that State, at its present session, will vote the necessary means to put it into full and effective operation during the coming year.

Post Office Notices.

THE MAILS for EUROPE, via Liverpool, per Steamer *Kangaroo*, will close at this office on SATURDAY, the 1st day of January, at 10½ o'clock A. M.
ISAAC V. FOWLER, Postmaster.

ON CHRISTMAS and NEW YEAR'S days this Office will close at 12 M., at which hour all domestic mails will close.
ISAAC V. FOWLER, Postmaster.

POST OFFICE, New York, }
December 23, 1858. }

THERE being dispute as to the circulation of the papers claiming the advertisement by this office of uncalled for letters, notice is hereby given that I will receive evidence and decide upon the fact, pursuant to the regulations of the Post Office Department. A printed statement for the guidance of parties desiring to participate in the competition can be obtained at the Secretary's desk in this office.
ISAAC V. FOWLER, Postmaster.

NEW HAVEN ARMS CO.,
MANUFACTURERS OF THE CELEBRATED
VOLCANIC
REPEATING FIRE ARMS,
COMPRISING
RIFLES, CARBINES AND PISTOLS,
WITH AMMUNITION WARRANTED WATER PROOF,
NEW HAVEN, CONN.

Depot for Sales, 267 BROADWAY, NEW YORK.
JOSEPH MERWIN, Agent.

BROOKS'
OLD STAR CHOP HOUSE,
64 LISPENARD STREET, NEW YORK.
SPIRITS, WINES, ALES and CIGARS—first class.
GOOD BEDS, on reasonable terms.
JOSEPH BROOKS,
"All the way from Manchester," ENGLAND.

Notice to Contractors.

PROPOSALS will be received by the STATE ISLAND RAILROAD COMPANY until the 12th day of January, 1859, for the completion of the Grading, Bridging and Masonry with partial equipment of furniture for said Road. The Rails, Chairs and Spikes will be furnished by the Company. Previous to the letting all necessary information may be obtained as to the amount of work yet to be done, by addressing J. DEWITT MONTFORT, Secy, 62 Warren st.
New York, December 27, 1858. 211

WATER WORKS.

THE undersigned, many years Engineer of the Water Power Works at Fairmount, as well as of the several Steam Works supplying the City of Philadelphia with water, may be consulted upon the location, complete design, construction, and management of water-works of all kinds for the supply of cities, towns, etc., etc. Address
FREDERICK GRAFF,
Consulting Engineer, 1387 Arch street,
PHILADELPHIA.

DINGEE & HOLDEN,
AUCTIONEERS AND REAL ESTATE BROKERS,
No. 9 NASSAU STREET,
Under Messrs. DUNCAN, SHEPHERD & CO.
SOLOMON DINGEE,
CHARLES E. HOLDEN, } NEW YORK.
Stocks, Bonds, Mortgages, & Commercial Paper Bought & Sold.

REFERENCES.
Citizens' Bank, N.Y. Hon. E. D. Campbell, Lt. Gov., Wis.
Messrs. Thompson Bros., " Hon. Judge Lord, La Crosse, " Wis.
Bankers, " Jno. M. Levy, Banker, " Minn.
Messrs. Sewell, Ferris & Co. " Hon. Franklin Steele, Minn.
Geo. P. Rogers, Esq., " do.
A. Gridley, President McLean Co. Bank, Illinois. A. & W. A. Saunders, Bankers, Mt. Pleasant, Iowa.

PROSSER'S PATENT
ORIGINAL LAP-WELDED
IRON AND STEEL BOILER TUBES,
SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES & PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.
SOLE IMPORTERS.

PROSSER'S
PATENT SURFACE CONDENSERS
FOR high pressure steam, with sea or other bad boiler water, GAUGES, 3-CUTTER DRILLS, COUNTERSINKS, TUBE END CUTTING BARS EXPANDERS, TUBE SCALERS, STEEL WIRE AND WHALEBONE BRUSHES, FALL LEVER WRENCHES, TUBES—plain or enameled, screwed together for Artesian Wells, HOLLOW SLABS for various purposes, STEEL for Rollers.

THOS. PROSSER & SON,
28 PLATT ST., NEW YORK.

A. H. DYETT,
STOCK AND BOND BROKER,
No. 43 EXCHANGE PLACE,
NEW YORK.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other war kets.
CRAWELL & PERKINS,
Brokers, 69 Wall st.
New York, January 1, 1859.

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of
RAILROAD EQUIPMENTS
upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

NOTICE TO
Presidents, Directors and Gen. Superintendents
OF RAILROADS.

I WISH TO INTRODUCE MY NEW PATENT
CAR BRAKE
which I claim to be the cheapest, strongest and most efficient of any now in use. AND WILL AT MY OWN COST PUT THE BRAKE ON ANY CAR OF A COMPANY WHO WOULD DESIRE TO TEST ITS MERITS. All those interested are invited to call at 61 Chambers st., where the model and specifications are to be seen.
J. D'HOMERGUE.

MORSE & CO.,
BANKERS and DEALERS in Stocks, Bonds, Exchange and Commercial Paper, on commission, No. 49 Wall street, and 41 William street, NEW YORK.
Orders for the purchase and sale of Stocks and Bonds, at the Brokers' Board, by letter or otherwise, promptly executed.
Cash advanced on sound salable securities.

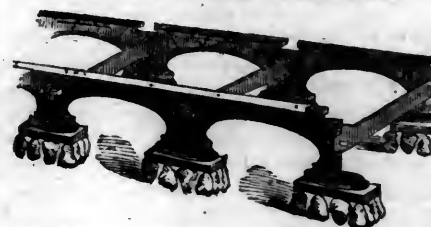
REFER TO
G. VAN BAUR & CO., N.Y. CONTINENTAL B.K. N.Y.

To Railroad Companies,
MACHINISTS & OTHERS.
BEST quality COP WASTE, constantly on hand and for sale by
M. K. JESUP & CO.,
No. 44 Exchange Place,
New York.

Railroad Iron.

500 TONS 56 lbs. and 1,500 tons 60 lbs. best Welsh make, Erie pattern, now in port, for sale.
T. A. HOWLAND & CO.,
64 William st., New York.

BEERS'
ELASTIC IRON RAILWAY,
EMBEDDED TO THE COPING RAIL.



Saving Life and Property from Accident.

HERE is an indestructible railroad resting upon foundations below the frost and entirely independent of its effects with a rolled iron coping rail maintained in perfect line by the continuous support of the foundation on rail, and between which last, and the coping rail is interposed a packing of vulcanized gutta percha; saving one-half on motive power, and the entire breakage of wheels and axles, which is only a simple result of the jumping and pounding motion communicated to the train, by the undulations in the T rail, which are always increasing, under the pressure of such train; also more than three-fourths of the current cost of relays, and repairs; while the rolling stock will last twice as long, with a large reduction on first cost; making a total yearly saving in current expense of from \$1,500 to \$2,000 per mile, which is equivalent to an additional value of some \$25,000 on every mile of road as compared with semi-wooden structures of nearly equal cost.

Cost from \$8,000 to \$10,000 per mile, out of which will be saved on cost of equipment and grading from \$2,000 to \$3,000.
Also,—

BEERS'
CAST-IRON ENDLESS RAIL,
FOR CITY RAILROAD.

This track is laid without tie, string piece, bolt, or spike; the joints are rendered perfect by an upright iron wedge splice, will wear twenty years without repairs, and then be worth half the first cost as OLD IRON.
Expense per mile, when laid, from \$5,000 to \$6,000.
To examine a section of either track, or for descriptive drawings with circular, address the undersigned at BROOKLYN, N. Y.

S. A. BEERS, Civil Engineer,
Inventor and Patentee for U. S. and Europe.
3m35

MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.
IRON AND STEEL

IN ALL THEIR VARIETIES.
BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
OUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mill Furnaces and Forges in this State, orders for any description of Iron can be executed.
August 16, 1854. 1y33

CAUTION.

As there are numerous imitations of our FRANGIPANNI, purchasers are requested to see that the names of PIESSE and LUBIN are impressed upon the Bottles.



Sold by all Fashionable PERFUMERS and DRUGGISTS in the World.
WHOLESALE AGENT FOR THE UNITED STATES:
MR. JONAS PHILLIPS, 87 Pearl st., New York.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

By the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnetic Ore from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per lineal yard, viz.:—26, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.

Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.

Address J. H. SCRANTON, President,
Scranton, Pa.,
or THEO. STURGES, Treasurer,
46 Exchange Place,
New York

40 f

T. A. HOWLAND & CO., BROKERS IN RAILROAD IRON

EQUIPMENTS,

54 WILLIAM ST., NEW YORK,

ARE prepared to furnish either Foreign or American Rails, and Equipments of every kind desired, on the most favorable terms.

THE ROUGH AND READY ROLLING MILLS OF DANVILLE, PA.,

ARE prepared to fill orders for RAILS of the best quality at the market price.

T. A. HOWLAND & CO., Agents,
54 William St., NEW YORK.

RAILROAD IRON. THE RENSSLAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:
BUSSING, CROCKER & DODGE,
32 CHURCH ST.

IRON BOILER FLUES.

Lap-Welded Boiler Flues,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.
Warehouse—209 South Third St.,
PHILADELPHIA.

STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR. STEPHEN P. M. TASKER.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
Agents for the United States,
12 SOUTH CHARLES STREET,
BALTIMORE.

6m35

Patents for Inventions.

T. D. STETSON, Agent for procuring patents, No. 5 Tryon St. Row, (near City Hall). A circular with full information sent free by mail.

American correspondent *Prac. Mechanics' Jour.* from 1864

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation.

February, 1865.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address

N. WILKINSON, Secy,
WHEELING, VA.

81f

RAILROAD IRON. CONTRACTS FOR RAILS, AT A FIXED PRICE OR ON COMMISSION,

DELIVERED AT AN ENGLISH PORT,

Or at a Port in United States,

WILL BE MADE BY THE UNDERSIGNED,
THEODORE DEHON,

10 Wall St., near Broadway, New York.

500 tons T rails on hand 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

The undersigned, Agents for leading Manufacturers in

STAFFORDSHIRE AND WALES,

ARE PREPARED TO CONTRACT FOR DELIVERY

On board ship at Liverpool, or Welsh port.

C. CONGREVE & SON,
13 CHURCH ST., N. Y.

RAILROAD IRON.

The Undersigned, Agents for the Manufacturers,

ARE PREPARED TO CONTRACT TO DELIVER

Free on Board at Shipping Ports in England, or

At Ports of Discharge in the United States,

RAILS OF SUPERIOR QUALITY,

And of Weight or Pattern as may be required.

VOSE, LIVINGSTON & CO.,

New York, Aug. 1, 1865. 9 South William Street.

RAILROAD IRON.

The Subscribers, Agents for the Manufacturers,

ARE PREPARED TO CONTRACT FOR THE

DELIVERY OF RAILROAD IRON AT ANY PORT

in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,

Boston, June, 1861.

29 Central Wharf.

RAILROAD IRON AND COMMON BARS.

THE UNDERSIGNED,

Sole Agents to Messrs. GUEST & CO.,

The Proprietors of the Down's Iron Works,

Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAXIN, 70 Broad St.

RAILROAD IRON AT ELMIRA, N. Y.

THE subscribers have American Railroad Iron for sale as above; also Welsh Iron in New York and other markets.

FABER, PERKINS & CO.,

Brokers, 69 Wall St.

New York, August 10th.

6m33

RAILROAD IRON. WOOD, MORRELL & CO.,

Having leased the extensive Works of the

Cambria Iron Company,

Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

Philadelphia Office, } North Penna. R. R. Building,
No. 407 Walnut St.

STEEL, FILES, &c.

R. GROVES & SONS,
SHEFFIELD, ENGLAND,

MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.

A stock of the above goods constantly on hand.

CORPORATE MARK
USE

CHAS. CONGREVE & SON, Agents,
13 CHURCH ST., N. Y.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER,
BALTIMORE.

6m35

REMOVAL.

W. D. STARLING, Metal Broker and Rail Inspector,
from Lawrence Pointney Lane, to the Vestry House,
Lawrence, Pointney Hill.
LONDON, 1857.

TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by BRASSER & JARVIS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 60 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater,
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing

E. W. STEPHENS,
Cincinnati, Ohio.

AMERICAN COAL CO. GEORGE'S CREEK SEMI-BITUMINOUS COAL.

THIS Company is prepared to contract for the sale of their coal, delivered on board vessels at the depots at Baltimore, Georgetown and Alexandria, on the most favorable terms. The coal is from the George's Creek basin, entirely free from slate, and for steamers, locomotives and foundries is unsurpassed and unequalled in quality by any coal brought to this market, except that coming from the same basin.

The Company will procure vessels at the lowest rates, when desired, without charge.

Orders for quantities less than a cargo, will be filled at the yard of RABALL & MORRELL, Jersey City, adjoining Quondam Wharf.

Office, 50 Exchange Place.

W. TITUS, Secy.

Railroad Iron.

2,000 TONS of Erie Pattern, Crawshays make, on sale. Apply to

3m40

JAMES TINKER,
54 Exchange Place.

VENTILATION.

THE undersigned has devised and patented the only system of ventilation for Buildings, Vessels, Railroad Cars, &c., by which spontaneous ventilation can be effectually carried out; and is willing to dispose of the same to parties desirous of purchasing at a reasonable price.

Address

HENRY RUTTAN,
Coburg, Canada.

F.W. Rhinelander, James A. Boorman, Edwin A. Post.
RHINELANDER, BOORMAN & CO.,
 RAILWAY AGENTS
 AND
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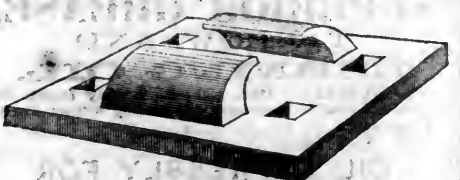
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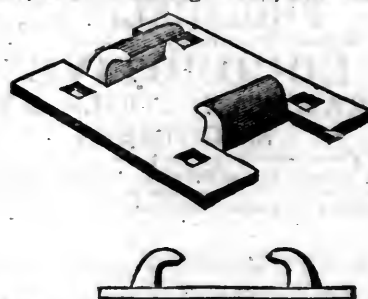
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The prejudice existing against Oils has very properly grown up, and we are fully aware of the deceptions which have been and still are practiced by unscrupulous persons; but we are prepared to substantiate all the foregoing statements relative to the superiority of our Oils, at

OUR OFFICE, 205 BROADWAY,

by large numbers of certificates of the best managed lines of Railroads, Steamships, Machine Shops, & Factories

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J. C. HULL & SONS'
REFINED BURNING OIL.

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(all things considered), in the market.

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 2.]

SATURDAY, JANUARY 8, 1859.

[WHOLE No. 1,186, VOL. XXXII.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, January 8, 1859.

Illinois Central Railroad.

LONDON, Dec. 18, 1858.

The Report of the late deputation appointed by the London committee of shareholders of the Illinois Central Railroad has been made public. It has had the effect to depress the share market to a greater degree than for some time past; for the reason that the conclusions of the deputation do not seem to be sustained by the facts of the case. This is the second deputation that has gone out and reported during the year. In the first place an auditor was sent out to examine the books and accounts of the Company. These and the bills receivable for lands he examined minutely, and, as might have been expected, and found them to be correct. The report specified certain improvements as desirable in the management. As to the railway, there was not considered any cause for uneasiness. The prospect of its future connections were subjects for congratulation. It was the opinion of the gentleman making the report, "that it requires no times of extraordinary prosperity to place this undertaking again in the highest position it has ever occupied in the estimation of those who have undertaken to sustain and carry it out, but it did not afford sufficient data for estimating its fu-

ture prospects. The report spoke of the duties of the several officers; gives a full description of the condition of the road; specified the arrangements with other companies; describes the general character of the traffic; testified to the actual defeasement of the bonds cancelled by purchase from proceeds of sales of lands, and added some interesting information of the sales; and also gave a statement of the liabilities and assets of the Company on the 1st May, 1858. But it did not show the amount of bills overdue, and the times at which those coming due would arrive at maturity; nor did it specify what lands remain unsold on the several sections of the road. The consequence was, the Report was not considered satisfactory, and the market gave way under the continuous pressure of sales; it was consequently determined to seek for more information, more particularly as the call of \$20 per share so closely followed the report.

The second report does not clear up the position of the land department, or explain the present financial position of the road; it is rather an estimate of future success; and in estimating the future, the maturing assets in the land department are not fully taken into account. "The probabilities of payment" are treated in a most indefinite manner, and the abundance of "croakers" are not favored with any special information. The report says: "Once free from debt, we suppose it will be kept so;" but it does not show how much is necessary for the purpose, and to put the road into thorough order.

As another year is fast closing, and the report for 1858 will soon be due, it may be interesting to take a cursory view of the position of the Company, so far as it has been made known to the public, and to show in as simple a form as possible, the receipts and expenditures of the Company, with its liabilities and assets.

The capital with which the Company's account stands debited on the 1st Jan., 1858, amounted to.....	\$27,532,435 59
The net receipts from traffic, &c., were.....	1,563,905 27
The receipts from Land Department were.....	1,275,216 06
The undischarged liabilities	3,806,180 58

To Dr. of account.....\$34,177,737 50

The expenditure upon Construction Account on the 1st Jan., 1858, amounted to.....	\$23,437,669 91
or \$33,435 per mile.	
The loss upon negotiating securities	2,578,850 08
Prepayment of optional right scrip.	88,500 00
Payment of interest upon bonds and stock	6,380,565 29
Expenses of Land Department	193,013 83
Assets of the Company.....	1,499,128 34

To Cr. of account.....\$34,177,737 45

The report of the deputation says it was assumed that if the optional right bonds created last autumn had been all taken, the proceeds thereof would have cleared the Company of debt up to the date of the report; but as the bonds were superseded by the call of \$20 per share, realizing in all \$3,500,000, this sum would be sufficient to discharge the debts and accrued interest, if the assets realized their estimated value—the statement of assets on the 1st May, 1858, as stated in Mr. Fisher's report, being the estimate referred to.

The share capital of the Company is 255,000 shares, of \$100 each, but on the 1st January, 1858, only 174,964½ shares had been issued, leaving 80,035½ unissued; and as in March last the Company's shares commanded par in the market, and the Company was in want of money, it is probable that the greater part of the unissued shares had been disposed of, particularly as on the 1st May only 1,046 shares are included as assets belonging to the Company. Independently, therefore, of any of the assets, the Company would realize \$60 per share upon 78,988½ shares, and \$20 on 174,964½ shares, less the \$20 call per share, unpaid. If this were the case, over \$8,000,000 would have been realized by the Company. Yet, unable to account for the non-issue of shares in hand, when the Company was in want of money, it seems more credible that the call in hand was upon the 174,964½ shares issued on the 1st January, 1858. Yet why 80,000 shares should remain unissued, when the Company would obtain over \$4,500,000 by their issue, supposing the market in March last could have taken them, neither the report of the auditor or that of the deputation explained.

The estimates for the future are unsatisfactory, and what is given does not bear the impress of any great research. From the report of former years we find, without personal inquiry, that the expen-

diture on account of construction is about \$2,000,000 per annum, and that the working charges of the road are increasing; that the net revenue of last year would not have been anything at all, but that the stock of wood, coal, and necessities for working the line were treated as a cash asset, yet the interest paid during the year amounted to \$1,897,517. In what way is this continuous drain to be met? Only from the sale of the lands, and the increase of traffic.

To enable persons interested in this Company to ascertain the value of their property, we require more information. We want to know what portion of the road intersects good lands, and where those lands which will not sell are situated. In this the Company's report give more information than either of the special reports, only it requires some trouble to obtain it, for the boundaries are somewhat indistinct. Taking them by your railroad map, we divide the road into 10 sections, Nos. 1 to 5, including that portion of the road between Dunkirk and Sandoval, a distance of 336 miles. Nos. 6 to 9 includes the sections on the Chicago branch, and No. 10, from Sandoval to Cairo, 118 miles.]

SECTION No. 1 is supposed to have 330,240 acres of land, and on the 1st January this year, there had been 264,821 acres sold, or about 80 per cent. This division of 103 miles forwarded 74,557,483 lbs. of freight in 1856, and increased its traffic in 1857, 19,712,685 lbs.

SEC. No. 2 is supposed to have 241,921 acres of land, and to have sold 175,191 acres on the 1st January, 1858, having sold about 72 per cent. It has 64 miles of railroad, and forwarded in 1856, the large amount of 108,164,378 lbs. of freight, increasing its traffic by 52,716,604 lbs. in 1857.

SEC. No. 3 is supposed to have 318,720 acres of land, and to have sold 1st January, 1858, 217,996 acres, or about 68 per cent. This section of 82 miles forwarded 77,078,957 lbs. of freight in 1856, but in 1857, only 73,540,680 lbs.

SEC. No. 4 is supposed to have 126,720 acres, and to have sold only 67,859 acres on the 1st Jan. last, or 53 per cent. This section of 33 miles has also greatly fallen off in its goods and traffic of 1857—traffic showing a decrease of more than one-third.

SEC. No. 5 is that uniting the main line with the Chicago branch, and how, although the sales of land are small, the traffic is not unnaturally increased, for the union with the branch main line would promote traffic. This section has 54 miles of railway, and the land appropriated is 207,360 acres; only 75,701 acres having been sold on the 1st January last. The freight forwarded was, in 1856, 20,049,566 lbs., and in 1857, 25,726,603 lbs.

Upon the Chicago branch, section No. 6 is supposed to have 161,280 acres of land, and to have sold 69,959 acres. This section of 46 miles has probably its lands reserved for some specific purpose, for only 43 per cent. is sold, and yet the increase of business is large, and the freights forwarded in 1856 amounted to 152,046,652, and in 1857 to 169,680,547 lbs.

SEC. No. 7 shows a decrease in freight forwarded in 1857, of 11,290,368 lbs. as compared with 1856, when 89,880,007 lbs. was forwarded. This section has 92 miles of railroad, and has sold only 28 per cent. of its lands.

SEC. No. 8 has very much improved since 1856,

having forwarded in 1857, 52,799,260 lbs. of freight against 10,104,801 lbs. in 1856, and it is the only section in the Chicago branch which had an increased export of wheat in 1857. It has 34 miles of railroad, and is supposed to have 126,720 acres of land, of which 46,845 had been sold on the 1st January last.

SEC. No. 9 unites with the main line, has 80 miles of railroad, and 311,040 acres of land, of which 45 per cent. had been sold. It had forwarded only 52,799,264 lbs. of freight in 1857, but that was 6,994,223 lbs. more freight than in 1856.

The last section, No. 10, having 118 miles of railroad, seems to be the great drawback to the Company, so far as the sale of lands is concerned, for notwithstanding that it embraces the coal and stone district, the sales of land have been only about 15 per cent. During the past year there was an increased movement in wheat, but a falling off in corn. Yet the general traffic improved; the freight forwarded in 1856 being 81,183,723 lbs. and in 1857, 99,369,354 lbs.

Time will not permit, at present, of entering into the prospects of the success of the land sales, but it is pretty evident that over \$2,500,000 of notes should be payable on or before the 1st January, 1859, and we know that up to the 31st October, the amount of bonds cancelled is only \$981,500. Surely we should have some little insight into the accounts, and not kept altogether in the dark. Estimate upon estimate is falsified by experience, and yet if the majority of the statements which from time to time have been published by authority are correct, the Company should have its shares at par, rather than at the present price; for it has only to get rid of its debts by realizing land sales, or anticipating them, and wait the development of the traffic, which is fast increasing, and might be improved upon many sections of the line.

I am yours, &c.,

WILLIAM LANCE.

The position of this Company may be stated in a very few words.

There are two elements upon which the success of this enterprise depends—the value of the Company's lands, and the income to be derived from the road.

The lands are of the most fertile description. Population is only required to give them value. There is always an uniform ratio between the market value of lands and the number of people living upon them. With a ratio of ten to the square mile, we may estimate the lands to be worth \$2 50 per acre. With twenty inhabitants to the mile, the value of lands increases in much greater than a direct ratio. With a population of 100 to the square mile in any state, good farming lands would be worth more than \$100 per acre.

The State of Illinois has an area of 57,000 square miles, and a population of 1,500,000, or 26 to the square mile. The increase in population from 1850 to 1855 was 91,000 annually, the whole number at the latter date being 1,306,000. Since 1856 the ratio of increase has been much less than for the six previous years; the check, however, is only temporary. There can be no doubt that the state will continue for an indefinite period to increase at the ratio of 57,000 annually, or at the rate of one person to each square mile of area.

Now there is no doubt that the increase in the

value of lands will be in much greater ratio than the increase in population. Could we get at the exact present value of the lands now owned by the Company, we could calculate with a good deal of precision their future value, assuming a given rate of increase in population.

The non-payment of the notes given for lands is no competent evidence against the value of the lands for which they were given. They have for the most part been purchased by parties having small means, who expect to pay for them out of the crops raised; these, for the past year, have been very deficient in quantity and quality. What has been raised, hardly pays the cost of transportation to market. All Western Railroads, consequently, are without their usual amount of traffic. This depression is, however, merely temporary. We think there can be little doubt that in the end the Company will realize the prices at which their lands have been sold.

The great drawback to success are the large demands upon the Company for interest on its funded debt, which is not met by the income from the road. What this is to be, is at present a matter of conjecture. It will, without doubt, rapidly increase, and in much greater ratio than the progress of population. A very large addition is anticipated from the opening of railroads now in progress of construction from Cairo to New Orleans and Mobile, and which will soon be completed. The opening of these will largely increase the earnings of the Illinois Central.

In the present exigency there is only one course that can properly be taken to reduce expenses to the lowest figure possible and wait for more prosperous times, and new connections to develop to the fullest extent the business of the road. In the meantime, further calls upon the stock will have to be made, but to what extent the future only can determine.

Albemarle and Chesapeake Canal.

The Albemarle and Chesapeake Canal Company have published their third annual report, exhibiting a prosperous progress so far, with a hopeful prospect in the immediate future. The object of this company, in connection with the Delaware and Chesapeake, and the Delaware and Raritan Canals, is to furnish an inland navigation for sailing and steam vessels between New York City and Newbern. In North Carolina, a distance of about six hundred miles, free from the impediments of sand bars and shallow inlets, and the dangers of Cape Hatteras, so justly the terror of all navigators, on the coast of North Carolina. Little remains to be done but the completion of a lock at the junction of the canal with Elizabeth river, which will be effected by the first of March next. It is of solid cut stone masonry, from the granite quarries of Maryland, constructed in the most substantial manner, with double sets of gates, and all the improvements known to modern engineering. Its foundation is placed sufficiently low to give a draught of eight feet water at the lowest tides. Its capacity is sufficient to pass propellers carrying five hundred tons, and being merely a tide lock, its lift is only half the rise or fall of the tide, usually not exceeding two feet. On the completion of the lock there will be a continuous channel through the entire line, and, if thought advisable, the line can be opened for the smaller class of vessels by the first of March next; and within the next twelve or fifteen months the canal can be fully completed and all the necessary improvement of the rivers and sounds accomplished; so that there shall be a complete navigation, with a depth of eight feet water, from the Albemarle to the Chesapeake.

Minnesota Homestead Exemption Law.

We give below a summary of the exemption law passed at the first State Legislature.

Section 1. That a homestead consisting of any quantity of land, not exceeding eighty acres, and the dwelling house thereon, and its appurtenances, to be selected by the owner thereof, and not included in any incorporated town, city or village; or, instead thereof, at the option of the owner, a quantity of land not exceeding in amount one lot being within an incorporated town, city, or village, and the dwelling house thereon, and its appurtenances, owned and occupied by any resident of this State, shall not be subject to attachment, levy or sale upon execution, or any other process, issuing out of any court within this State. This section shall be deemed and construed to exempt such homestead in the manner aforesaid, during the time it shall be occupied by the widow or minor children of any deceased person who was, when living, entitled to the benefit of this act.

Sec. 2. Such exemption shall not extend to any mortgage thereon lawfully obtained; but such mortgage or other alienation of such land by the owner thereof, if a married man, shall not be valid without the signature of the wife to the same, unless such mortgage shall be given to secure the payment of the purchase money or some portion thereof.

Sec. 3. Whenever a levy shall be made upon the lands or tenements of a householder, whose homestead has not been selected and set apart by metes and bounds, such householder may notify the officer at the time of making such levy of what he regards as his homestead, with a description thereof, within the limits above prescribed; and the remainder alone shall be subject to sale under such levy.

Sec. 4. If the plaintiff in execution shall be dissatisfied with the quantity of land selected and set apart as aforesaid, the officer making the levy shall cause the same to be surveyed, beginning at a point to be designated by the owner and set off in a compact form, including the dwelling house and its appurtenances, the amount specified in the first section of this act, and the expense of such survey shall be chargeable on the execution and collection thereupon.

Sec. 5. After the survey shall have been made, the officer making the levy may sell the property levied upon, and not included in the set off, in the same manner as provided in other cases for the sale of real estate on execution, and in giving a deed of the same he may describe it according to his original levy, excepting therefrom by metes and bounds, according to the certificate of the survey, the quantity set off as aforesaid.

Sec. 6. Any person owning and occupying any house or land not his own, and claiming said house as a homestead, shall be entitled to the exemption aforesaid.

Sec. 7. Nothing in this act shall be construed as exempting any real estate from taxation or sale for taxes.

Sec. 8. No property hereinafter mentioned or represented shall be liable to attachment, execution or sale, or any final process issued from any court in this State:

1st. The family bible.

2nd. Family pictures, school books or library, and musical instruments for use of family.

3rd. A seat or pew in any house or place of public worship.

4th. A lot in any burial ground.

5th. All wearing apparel of the debtor and his family, all beds, bedsteads and bedding, kept and used by the debtor and his family; all cooking utensils, and all other household furniture not herein enumerated, not exceeding five hundred dollars.

6th. Three cows, ten swine, one yoke of oxen and one horse, in lieu of one yoke of oxen and one horse, a span of horses or mules; twenty sheep and the wool from the same, either in the raw material or manufactured into yarn or cloth; the necessary food for all the stock mentioned in this section, for one year's support, either provid-

ed or growing or both, as the debtor may choose; also, one wagon, cart or dray, one sleigh, two plows, one drag, and other farming utensils, including tackle for teams, not exceeding three hundred dollars in value.

7th. The provisions for the debtor and his family necessary for one year's support, either provided or growing, or both, and fuel necessary for one year.

8th. The tools and instruments of any mechanic, minor or other person, used and kept for the purpose of carrying on his trade or business, and in addition thereto stock in trade not exceeding four hundred dollars in value; the library and implements of any professional man; all of which articles hereinbefore intended to be exempt, shall be chosen by the debtor, his agent, clerk or legal representative, as the case may be.

Sec. 9. Nothing in this act shall be so construed as to exempt any property in this State from execution or attachment for clerks, laborers or mechanics' wages.

Sec. 10. All laws inconsistent with the provisions of this act are hereby repealed.

The Financial Condition of Minnesota.

NEW YORK, Dec. 28, 1858.

It is my duty as the Governor of the State of Minnesota to correct publicly certain misrepresentations which have been made here relative to the bonds of that State, issued, or to be issued, by virtue of a constitutional provision, as a loan to expedite the construction of railroads within her limits. I propose to effect this by making a plain statement of facts, leaving your readers and the public generally to draw their conclusions therefrom.

The constitution of the State of Minnesota, as originally framed and adopted by her people, restricted the public debt—except in cases of invasion or insurrection—to \$250,000. Subsequently it became evident that, to insure the speedy construction of the railways, for which the State had received from Congress a munificent grant of land, the State must lend her aid to those companies chartered by the Territorial Legislature, to which the lands had been transferred by the same authority for railroad purposes. This aid was rendered especially necessary because of the financial embarrassments of 1857, which made it impossible for the companies to raise money upon their lands, as they had been authorized to do by their charters. The other North-western States were diligently prosecuting their railroad communications; and Minnesota must labor under manifest disadvantages unless she pursued a like policy, and thus opened the interior portions of the State to immigration.

The Legislature of the State, at its first session, in accordance with the mode prescribed by the constitution for its own amendment, passed an act loaning the credit of the State to the four land grant companies to the amount of \$1,250,000 each, or \$5,000,000 in the aggregate, upon certain conditions, and providing for its submission to a vote of the people. The subject was publicly discussed in all portions of the State, and after the expediency and policy of the proposed loan had been canvassed in all its bearings, the vote upon the adoption of the proposition as part of the fundamental law was taken on the 15th of April last, and resulted in a majority of nearly 20,000 in its favor, and the Governor duly proclaimed it to have been incorporated as a part of the constitution of the State.

The conditions upon which a loan of State credit was authorized, were these: When the companies shall have produced to the Governor satisfactory evidence, verified by the affidavits of their officers, that ten miles of their roads respectively are graded ready for the superstructure, the Governor is required to issue the bonds of the State to the amount of \$100,000 to the said companies, and so in a like ratio as the work progresses. And when the companies shall have furnished like evidence that ten miles of their respective roads are completed and the cars running thereon, the Governor shall issue bonds to the amount of \$100,000 to such

company until the limit fixed by the loan amendment is reached. The Governor has ruled that only one-half of the \$3,000,000 can be issued for the grading of the roads, and the other half when the roads are completed and the cars running thereon, and the companies have each and all acquiesced in the decision. In other words, two hundred and fifty miles of railroad through the richest and most settled portions of the State must be fully completed and in operation before the whole of the \$5,000,000 of her bonds is delivered to the companies.

The securities exacted by the State for the companies are as follows, to wit:

1. They are required to execute an instrument to the State pledging the net profits of the roads for the payment of interest.

2. A conveyance to the State, in trust, of the first two hundred and forty sections of land free from prior encumbrances, which such company is or may be authorized to sell in trust, for the better security of the treasury of the State from loss on said bonds, "which shall empower the Governor and Secretary of State to make conveyances of title of any or all of said lands to purchasers agreeing with the respective railroad companies therefor," the proceeds of such sales to "be applied to the payment of interest upon the bonds, in case of default of the payment of the same, and as a sinking fund to meet any future default on the payment of interest or principal when due." The aggregate amount thus transferred to the State is 614,400 acres.

3. "An amount of first mortgage bonds on the roads, lands and franchises of the respective companies corresponding to the State bonds issued shall be transferred to the Treasurer of the State at the time of the issue of State bonds." The construction to be given to the phraseology of this section constituted the issue made between the Governor and the companies which has excited so much comment, the former insisting that it required a priority of lien to the bonds of the companies to be delivered to the State over all others, and the companies affirming that the true interpretation would place the State upon the same footing with the holders of first mortgage bonds. It is well known that the Supreme Court decided that the position assumed by the companies was the correct one; but it should be borne in mind that this decision in no case affects the character of the securities previously described. The Governor, while he expressed his willingness to submit to the construction given to the law by the highest legal tribunal of the State, required of the companies such a change or modification of their trust deeds as to authorize him, as the agent of the State, to cause an absolute foreclosure and sale of all their roads, lands or franchises, within sixty days after the occurrence of any default in the payment of interest. The interest on the bonds of the companies delivered to the State in accordance with the requirements of the foregoing section, being due and payable sixty days in advance of the semi-annual interest due upon the State bonds, a foreclosure and sale can be made, in case of default on the part of the companies, in time to protect the credit of the State bonds when the interest thereon becomes due, and precludes the necessity of other legislation for that purpose.

The Governor is empowered, in case of default on the part of the companies in the payment of interest or principal when due, in his discretion, but in such manner as may be prescribed by law, either "to sell the bonds of the defaulting companies, or the lands held in trust as above, or may require a foreclosure of the mortgage executed to secure the same," as the greater or less gravity of the default might require.

I have thus set forth, in as brief terms as the nature of the case would admit, the circumstances under which the loan of State credit was authorized by the people, the conditions upon which it was made, and the securities exacted by the State. The early completion of the railroads being indispensable to the prosperity of the State, in developing her resources, the loan amendment was adopted, as has been stated with a singular unanimity.

Minnesota is much the largest State in the North-west, being more than twice the size of Iowa, and in her climate, soil and excellence of her cereal productions she is not surpassed. Her population is composed mainly of emigrants from New England, New York, Pennsylvania and the Western States. The rapidity with which she has advanced is without precedent, even in the history of the West. In 1850 her census tables showed less than 6,000 people, and a comparatively small amount of property. In 1858, although no regular census has been taken, it is estimated that her population amounts to nearly a quarter of a million, and the Auditor of the State reports the taxable property to be more than \$50,000,000.

In view of this statement of facts, the simple question for capitalists to determine is, whether the bonds of Minnesota, issued with the sanction of a vast majority of her people, without distinction of party, and backed by securities of unquestionable character and value, are not as desirable as a means of investment as those of any other State in the Union.

The work upon each of the four railroads has been prosecuted with great vigor, and no bonds are issued by the Governor until they are thoroughly examined and reported upon under oath, by competing engineers appointed by him for that purpose.

HENRY G. SIBLEY, Governor of Minnesota.

City Horse Car Railroads.

Perhaps there is not among our improvements one that contributes more to the convenience of the people of large cities than those iron roads on which cars, propelled by horse power, carry passengers from the centre to the circumference of a city and beyond it at a trifling cost. Horse railroad cars have been in use for some years past in New York, Brooklyn, and Boston, and have contributed greatly to the convenience of travel in those cities and their vicinity. They have become very popular, deservedly so; and as a stock investment, have paid large dividends—some of those in New York a dividend of from three to five per cent. a quarter.

Two years ago, a few capitalists, wishing to establish one of these roads through Philadelphia to the suburb of Frankfort, a distance of five miles from the centre of the city, applied to the Legislature for a charter, designating the streets (five to six streets) through which they designed to run. But the moment property holders on these streets learned that such was the design of the applicants, they raised a great clamor against such roads as a nuisance, operating materially to diminish the value of real estate on the streets designated. Thus feeling, they vehemently opposed the granting of the charter.

The applicants resisted this outcry, and contended that horse car railroads would increase rather than diminish the value of such property, both in and out of the city. The charter was granted; and one year ago last winter, the roads were completed through two streets to Frankfort, and the cars placed on them, transporting passengers five miles for 10 cents. The opposition property holders soon discovered the mistake they made in supposing that these roads, passing through the streets, would diminish the value of their property; and now those same men are among the warmest friends of these roads, being willing to see them in almost every street in Philadelphia. So popular have they become, that, as represented, the residents on nearly every street are desirous that these cars should pass by their doors.

The change in public opinion is very great. This is shown in the fact that no less than sixty miles of railroad were laid through the streets of Philadelphia in a single year, from the 1st of September, 1857, to 1st of September, 1858. Not less than a hundred more miles of this class of railroads are now in process of completion.

It is estimated that before two years have passed more than 300 miles of railroad will be constructed and in operation in Philadelphia.

The effect of these roads on the value of prop-

erty in the suburbs, where they terminate, has been to augment the price of it more than fifty per cent. Whole rows of houses are being built along those outside lines to accommodate the middle classes, at cheaper rents than can be afforded in the heart of the city. Persons, living at the extreme end of these lines of railroads, can reach their business locations in the city in from 10 to 30 minutes at a cost of from 5 to 10 cents.

These railroads are laid to the centre of the streets (single tracks,) the streets in Philadelphia averaging but about 38 feet wide, and the cars run up one street and down another.

It is astonishing with what rapidity these tracks are laid. The contractors will complete a square of 400 feet in length, in 48 hours, making it ready for the cars. The cars will hold, sitting and standing, from 60 to 65 passengers, and will, at a pinch, hold 74.

The revenue on one of the lines (about three miles long) averages \$20 to each car per day, and the dividends on this line are 4 to 5 per cent. a quarter, with a surplus held back to increase the rolling stock. We are informed of single trips of one of these cars yielding \$7 50; the number of passengers carried on this trip—getting in and out and their places being filled by others—being about 150 at 5 cents each. On some of the lines the receipts are \$400 a day.

The tracks are laid flush with the streets, and do not interfere a particle with the carriage way—on the contrary, may be seen whole lines of vehicles, running in the railroad track the moment the car has passed—the width of the track corresponding exactly with the width of carriage and buggy wheels. This mode of travel is the safest for its speed in the world; for, when the brakes are put down, it is impossible for the horses to run off, and the cars cannot be moved off the track. They are entirely safe in getting in or out, as they are constructed with but one or two steps from the ground; and when passengers get in or out the car comes to a dead halt.

The cars on the Philadelphia lines pass a given point every three minutes, so that there is little or no detention in using the cross tickets. Some lines have as many as thirty cars and two hundred horses. They run till 12 o'clock at night, and are on the track soon after daylight.

The cars are drawn up quite steep grades with ease, and the wear on horse flesh, as compared with omnibus horses is a saving—say the proprietors—of 30 per cent. The cars run without any jerking motion, and it is a pleasure to ride in them. In summer time, misses and young children are among their most numerous patrons, going for "a ride," as they say.

We presume that the proved excellence of these roads and the general perception of their advantages will cause them soon to be built in St. Louis. From what we can learn, the city will enjoy the benefit of one or more of these roads before the end of next year.—*St. Louis Republican*.

Fitchburg Railroad.

The earnings of this road for the year ending November 30th, were \$572,967 81
The expenses were 294,112 00

Net earnings \$278,855 81

The earnings show a diminution of \$52,863 57 in comparison with the preceding year, while the expenses show a decrease of \$75,038 63; the net earnings are \$22,175 06 greater than for the year 1857. After paying the January dividend there will remain on hand in cash or its equivalent \$96,437 78, which sum the Company have to commence another year with, and is that much in reserve to meet the only debt of the corporation, which is \$100,000, due in June, 1860. The Company has also property which it will never need for railroad purposes, worth \$42,722 04. It has also \$32,742 96 worth of fuel on hand, and \$14,134 28 in materials which are used for ordinary

repairs. The Company has never paid one cent of extra interest, nor has it paid interest in any way upon borrowed money for more than two years, except \$11, and the interest on the \$100,000 debt. All its dealings are for cash, and the Directors do not see that the Company will ever have occasion to borrow money again.

Journal of Railroad Law.

FREE TICKET.—LIABILITY FOR INJURIES TO NON-PAYING PASSENGERS.

Wells vs. the New York Central Railroad Co.

(Continued from p. 12.)

A common carrier like other bailees for hire, may clearly limit his risk by express contract. Although long doubted, this is now distinctly settled. (*Dow vs. New Jersey Steam Navigation Company*, 1 Kernan, 490. *Alexander vs. Green*, 7 Hill, 533. *Wells & Tucker vs. the Steam Navigation Co.*, 4 Selden, 381. *Parsons vs. Monteath*, 13 Barb., 360. *Alexander vs. Green*, 2 Hill, 20; 7 id. 533.) A carrier cannot contract for an exemption from losses arising from his own personal fraud or gross negligence. Such a contract would be *contra bonos mores* and void, (13 Barb., 360. *Wells vs. Steam Navigation Company*, 4 Selden, 381.) But in the last case Judge Gardiner says: "Although the law will not suffer a man to claim immunity by contract against his own fraud, I know of no reason why this may not be done in reference to *fraud or felony committed by those in his employment*." If this be so, certainly he may contract for exemption from loss arising from the negligence of his servants and agents. This is the precise distinction that I would make, and is the precise point upon which I cannot agree with the decision at the circuit.

But the judge at the circuit put the liability of the defendants on the ground that the collision which caused the injuries was *prima facie* gross neglect. And he held that the defendants could not stipulate for exemption from liability for such neglect. The distinction between the several degrees of negligence is too nice and artificial for any clear definition or practical application. As Judge Curtis remarks in 16 Howard, 477, "it may well be doubted if these terms can be usefully applied in practice." Judge Story also remarks (*Story on Bailm*, 11,) that a law furnishes no definition of the terms gross negligence, or ordinary negligence, which can be applied in practice; and these distinctions are utterly repudiated by the late civil law writers. But if, by gross neglect, the circuit judge means such neglect as *fraud or bad faith* on the part of the defendants, I can agree with him in his conclusions, that for such negligence the defendants, in the same manner, and upon the same principles with other bailees, would be liable; but I do not think the evidence warrants such finding, as a matter of fact. A bailee, who is only liable for gross neglect, is responsible only as a *naked depositary without reward*, which is the first class of bailments as classified by Sir Wm. Jones, [*Jones on Bailm*, 36,] and the defendants liability, I think, falls within the rule applicable to this class. This class of bailees, he says, [p. 46,] "is only answerable for a *fraud*, or for *gross neglect*, which is considered an evidence of it, and not for such ordinary inattention as may be compatible with good faith." If this gross negligence which is evidence of fraud, can be rebutted by evidence that the depositary keeps his own goods of the same kind in a manner equally negligent, then he is not liable.

(4 Burr, R. 2,300. *Ld. Raym.*, 635. 2 Hawks, N. Car., 145. *Edw. on Bailm.*, 69, 70.) It is enough that the bailee keeps the property in the same manner as he does his own. (*Idem*, 72, 17 Mass. Rep., 479. *Foster vs. Essex Bank*, Id. 498-9.) It seems to me very clear, that there is nothing in this case to warrant the finding that the defendants were guilty of such gross negligence as is equivalent to fraud, or evidence of fraud, or bad faith. The plaintiff was riding in a car of a train which carried also the servants of the defendants, whose lives were in the same jeopardy with that of the plaintiff. A collision was likely to destroy much property of the defendants', and cause much loss of life, besides the lives of their servants and agents, for which the Company would be liable in heavy losses. There is and can be nothing in such a case upon which to base a charge of fraud or bad faith on the part of the defendants' agents or officers. There was not such gross negligence as implies fraud or is evidence of it. The defendants' officers and agents took the same care of the plaintiff that they did of themselves, and of the property of the defendants, and of the large number of passengers, for whose safe passage they were bound to watch and guard with the strictest degree of diligence and care. In such a case I cannot think the defendants liable for the injuries sustained by the plaintiff; and the judgment of the Special Term ought to be reversed, and a new trial granted; costs to abide the event.

INJURIES TO PROPERTY.—AVERMENT OF NEGLIGENCE.

The following opinion has been rendered in the State of Virginia, in a suit brought by the executor of Robert Kent against the Virginia and Tennessee Railroad Company:

The case came up on a demurrer to the first count of the declaration, which alleges that "on the first day of April, 1857, at the county of Wythe, the defendants, by themselves, their servants, engineers, conductors and drivers, and with and by a certain locomotive engine of the defendants, propelled by steam, did run in and upon, and against a certain horse, the property of the plaintiff, of great value, to wit: of the value of \$200; and did then and there wound, kill and destroy the said horse."

FULTON, J.—No negligence or want of care, on the part of the defendants, is charged, and it is insisted that such an averment is necessary. That upon proof of the allegations, the plaintiff will have made a case, *prima facie*, entitling them to a recovery. It will be found, I think, upon a careful examination of all the authorities, both in England and America, that the settled doctrine of the law is, that corporations are liable for injuries done either by themselves or their servants, in the same manner and to the same extent only as natural persons would be under like circumstances. Actions of trespass will lie against corporations, but to sustain such actions for the tortious acts of their servants, it is necessary to show that the act was directed, suffered or ratified by the corporation. When resort is had to the action of trespass on the case for injuries to the persons or property of individuals, negligence, or the want of skill and care must be shown before the plaintiff can be entitled to recover for the loss or injury. As to the amount

of proof necessary to establish the defendant's liability on the score of negligence, &c., that is a question for the jury in a case properly made by the pleadings, and in such cases negligence, the want of skill, &c., constitute in my judgment, the very gist of the action, and ought to be averred, and whatever is necessary to be averred must be proved. These are the familiar doctrines of the law. I have been unable, either upon reason or authority, to draw a distinction between natural and artificial persons in regard to the application of these doctrines. I do not consider that the act of our legislature, which provides that "in any case in which an action of trespass will lie, there may be maintained an action of trespass on the case," alters the case. The legislature, certainly, by that act, did not intend to change the form of pleading in respect to those actions, or authorize a count in case to be joined with a count in trespass. Both are actions *ex delicto*. Whichever form of action is adopted, the form of pleading, as recognized and required by the Common law rule, must be observed, except so far as those rules have been modified by legislative enactment. In trespass on the case, as before stated, the gist of the action is the negligence, &c., which must be averred and proved. I must, therefore, hold the count in this case to be defective for the omission to aver negligence, either on the part of the defendants, or their agents or servants.

These views, I think, will be sustained by consulting *Angel and Ames on Corporations*, from page 450 to 458, *Wilson v. Peverly*; 1 American Leading Cases, 617 notes; *Burroughs v. The Houstonian Railroad Company*, 1 American Railway Cases, page 30; *Beers v. Same*, page 114, and the notes to each of these cases, as well as others reported in same volume.

The demurrer is therefore sustained.

The Coast Survey.

Some attempts have recently been made to discredit the value of the United States Coast Survey, and to call in question the fitness, and even the honesty, of the eminent gentlemen concerned in its management. The taint of needless personalities has betrayed, and so far foiled the motives of the undertaking. But had it been the work of a genuine, though mistaken, public spirit, it would have resulted in good, on account of the investigation which it has promoted. The benefits of a coast survey are at once apparent. The have forced themselves upon the attention of every commercial nation in modern times. They are a part of that grand array of services which science tenders to trade, cutting off expenses, shortening time, eliminating casualties and saving life. To improve the build and moving quality of our ships would be merely one-sided progress, so long as accurate measurements and sounding of our coast waters were neglected. This fact was early impressed upon our merchants who were the originators, and are now the most devoted advocates of the continuance and completion of the United States Coast Survey. The unparalleled extent of our coast line, and the annual loss, in spite of light-houses, charts, and government aid of all kinds, of shipwrecked property, amounting to fifteen or twenty millions of dollars, may well account for this deep interest of the mercantile classes, which should be felt as the interest of all.

The coast survey was actually begun in 1832, under the superintendence of Mr. Hessler, who had charge of it till 1844, when he was succeeded by Professor Bache, who still holds that post. The work proceeded slowly for several years, although respectable progress was made, considering the manifold obstacles in the way. Upon the accession of Mr. Bache, a new plan of operations was tried, which has resulted in visible success just in

proportion to the means supplied. In order to give some idea of the amount of work done during the last fourteen years, we would state that the reconnaissance has been extended over 40,000 square miles; eight primary and forty-one secondary base lines have been measured; 30,000 square miles of primary triangulation have been executed; 15,000 miles of shore line surveyed by the plane table, the positions of 5,000 points determined; three million and five hundred soundings made; 1,400 manuscript maps executed. The records of the different kinds of observations and computations fill over 3,000 volumes! These are but a part of the statistics showing the amount of work done under Prof. Bache. An account of the discoveries of dangerous shoals, rocks and reefs, new channels and the development of the laws of the tides and currents along our coast, would occupy much more space than we have to spare. The work goes forward alike in summer and winter, and is impartially distributed over the different parts of the coast.

At the present time, as we learn from an authentic source, there are thirty-six Coast Survey parties in the field and afloat. On the Atlantic Coast, eighteen; on the Gulf Coast, twelve; and on the Pacific Coast, six. These are distributed for the winter as follows:—In the vicinity of Chesapeake Bay, (Va.) two; Coast of North Carolina, three; Coast of South Carolina and Georgia, seven; Florida peninsula, reefs and keys, twelve; Coast of Alabama, Mississippi and Louisiana, four; Coast of Texas, two; and Coast of California, Oregon and Washington Territories, six.

But it is the cost of this great undertaking which is made the pretence of attacking it. To most men this is a matter not susceptible of complete examination. The best we can do is to resort to a comparison with the cost of similar surveys made by other nations, and then to look at the salaries of the workmen. The total cost of the United States Coast Survey up to the present time is about \$4,500,000; and it is estimated that the Survey will be completed in twelve years more. The trigonometrical survey of the British Islands was commenced in 1791, and had cost, up to 1856, \$12,000,000, and it is estimated that \$8,000,000 more will be required for its completion. The hydrographic surveys of England have cost in the last twenty years \$10,000,000; and are still incomplete. The cost of the hydrography of France—which has a coast line of only 600 miles—has been \$1,300,000. Austria has expended \$500,000 annually for the last seventeen years in her trigonometrical survey, and contemplates an increase of yearly expenditure. Our annual expenditure of late years has been only \$300,000. It would appear, then, that our coast survey is relatively and absolutely much cheaper than that of the great European nations; while high foreign authorities speak of its execution as being surpassed by none in the world. This work has been carried forward by fewer employees than any foreign service of the kind can show. Thirty-seven officers and about two hundred laborers usually constitute the field forces. The former begin with \$15 per month and their board; and the average salary of the whole number is \$1,400 per annum. This is certainly not an extravagant sum for the support of a family, especially if we consider the hard and migratory character of the services rendered. The pay of the coast survey officers, at any rate, is said to be lower than that of any other employees of the government, taken as a class.

We do not say that the service may not be capable of retrenchment in some particulars, though we have no facts to indicate it. But we trust it will ever be under the vigilant inspection of Congress. Of the general competency and fidelity, however, of Professor Bache and his assistants, we entertain not the least doubt. Their services are absolutely invaluable, and it will require many years to appreciate them as they deserve. But at the same time we are satisfied that there is good sense and candor enough in the country to overwhelm any sinister designs which may be aimed either at those gentlemen or their great work. Boston Journal.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,923,911	545,762	150,221	6	---
Androscog & Kennebec	55	457,909	1,835,304	2,210,947	159,518	83,368	none	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	213,255	---	---	---
Portl., Saco & Portland	51	1,396,400	---	1,359,373	253,717	120,909	8	94 1/2
Boston, Concord & Montreal	93	---	1,104,596	3,244,977	324,767	174,025	16	---
Oneshaire	54	1,000,000	899,813	3,170,687	355,629	113,077	6	---
Concord	35	1,500,000	8,242	1,412,676	317,056	125,664	6	50
Northern, N. H.	82	3,088,400	406,286	3,068,400	305,890	146,996	4	45
Con't & Passumps. Riv.	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---
Rutland & Burlington	117	2,233,376	4,168,763	4,584,008	332,115	41,688	none	---
Vermont and Canada	47	1,350,000	---	1,380,693	127,389	---	30	---
Vermont Central	122	5,000,000	5,276,299	8,402,054	705,538	127,389	6	96 1/2
Boston and Lowell	29	1,830,000	438,920	2,412,251	435,983	171,392	6	98 1/2
Boston and Maine	74	4,076,974	---	4,229,231	770,802	305,502	6	18
Boston and Providence	44	3,160,000	239,730	3,534,458	434,176	245,146	6	98 1/2
Boston and Worcester	44	4,500,000	599,974	4,847,779	1,019,149	383,613	6	94
Cape Cod	47	681,690	291,007	1,031,625	122,960	39,899	49 1/2	---
Connecticut River	50	1,591,110	275,772	1,801,244	267,710	56,096	3	65
Eastern, Mass.	60	2,683,400	2,441,873	5,082,607	616,156	272,479	45	---
Fitchburg	37	3,540,000	100,000	3,872,821	668,974	250,833	6	94
N. Bedford and Taunton	21	500,000	---	541,580	168,925	27,827	6	---
Old Coffey and Fall River	77	3,016,100	260,100	3,362,949	683,357	305,140	6	95
Vermont and Mass.	69	2,232,541	1,019,146	3,241,975	240,133	52,287	none	12 1/2
Western, Mass.	155	5,160,000	6,839,090	10,495,090	1,117,982	899,763	5	104
Worcester and Nashua	46	1,141,000	205,565	1,351,271	216,985	82,720	4	47
Providence and Worcester	43	1,510,020	300,000	1,781,048	344,773	155,044	7	84 1/2
Hartford and N. Haven	72	2,356,000	944,000	3,329,600	769,065	304,835	10	12
Hartford, Prov. and Fitchburg	122	1,936,246	2,112,692	4,205,966	373,428	112,325	none	---
Housatonic	74	2,000,000	423,855	2,438,947	318,475	109,344	none	---
Saugatuck	57	1,031,800	524,244	1,580,723	237,416	114,237	---	---
N. York and N. Haven	62	2,980,836	3,232,240	5,259,232	1,157,055	254,569	3	40
N. Haven and N. London	50	738,258	161,462	1,450,318	89,007	30,318	none	---
N. London, W. & Palmer	66	510,700	1,062,000	1,603,230	120,571	61,434	none	---
Norwich and Worcester	66	2,122,300	724,182	2,598,671	265,417	44,547	---	---
Albany Northern	32	439,000	1,025,098	1,840,695	117,718	9,904	---	---
Black River and Utica	35	643,370	317,359	974,323	In progr.	---	---	---
Buffalo, Conn. and N. Y.	100	1,487,874	1,501,183	2,819,096	172,476	68,333	none	---
Buffalo and N. Y. City	92	798,439	2,597,849	3,401,868	288,392	31,896	none	---
Buffalo and St. Louis	69	1,300,000	1,040,000	2,494,364	679,750	355,763	10	---
Canandaigua and Elmira	47	434,111	922,393	1,275,796	174,089	69,500	---	---
Canandaigua & Niagara Falls	98	1,315,000	2,279,554	3,495,832	---	---	---	---
Cayuga & Susquehanna	36	687,000	500,659	1,187,562	135,433	48,649	none	---
Hudson River	144	3,768,466	9,250,692	12,737,898	1,902,828	688,580	none	33 1/2
Long Island	95	3,000,000	647,193	2,655,966	325,111	56,126	none	11 1/2
New York Central	556	24,182,400	14,407,635	30,732,518	6,253,413	3,041,120	8	84
New York and Erie	164	11,000,000	28,041,468	34,469,324	742,607	1,454,032	none	16 1/2
New York and Harlem	138	7,117,100	4,822,498	8,768,203	1,040,393	324,891	none	12 1/2
Northern, N. Y.	118	1,633,022	4,406,874	5,470,714	520,153	135,754	none	1
Oswego and Syracuse	35	309,130	213,025	762,031	149,373	78,754	---	---
Potsdam and Watertown	29	467,200	294,139	749,833	In progr.	---	---	---
Rensselaer & Saratoga	25	610,000	140,000	896,423	241,149	82,600	7	---
Saratoga and Whitehall	48	500,000	395,600	719,909	21,089	---	---	---
Syracuse & Binghamton	80	768,389	1,176,804	2,272,777	159,484	22,503	none	---
Troy and Boston	27	437,330	737,079	1,109,922	156,363	55,184	---	---
Watertown and Rome	97	1,500,000	700,979	2,200,500	440,290	162,037	3 1/2	63
Belvidere Delaware	64	1,000,000	1,619,000	2,844,000	243,398	114,113	none	9 1/2
Osaden and Amboy	94	3,000,000	11,407,200	8,794,090	1,640,787	594,632	12	117
Pauden and Atlantic	30	3,485,000	1,650,854	1,738,171	117,939	45,542	none	---
New Jersey Central	63	2,000,000	3,592,828	5,621,829	692,940	367,193	---	---
Morris and Essex	53	1,157,806	3,490,400	1,684,127	237,765	101,542	3 1/2	---
Allegheny Valley	44	1,577,900	609,046	1,700,600	85,000	45,000	---	---
Cataw. Wil. & Erie	63	1,700,000	1,940,000	3,640,000	219,253	52,450	---	---
Cumberland Valley	52	1,018,050	213,504	1,225,675	156,463	77,92	---	---
Del. Lack. & Western	170	3,292,772	6,194,551	8,013,761	816,768	41,139	6	60
Erie and North East	20	600,000	150,000	750,000	---	---	---	---
Philad. & Sunbury	33	600,000	1,200,000	1,348,812	89,535	53,335	---	---
Little Schuylkill	28	2,606,100	548,222	3,407,651	353,301	255,930	9	---
North Penn.	56	3,061,865	2,820,165	5,106,341	248,784	136,597	---	---
Pennsylvania	266	13,206,625	10,690,524	27,266,982	4,855,670	1,854,927	6	85 1/2
Phil. and Reading	96	11,276,541	9,423,509	19,263,720	3,065,522	1,583,776	10	---
Phil. Wil. and Baltimore	98	6,000,000	2,673,450	8,568,369	1,143,853	378,576	4	36 1/2
Phil. Germ. & Norristown	38	899,350	376,800	1,274,150	206,981	113,443	9	---
Pittch. and Connelville	60	1,748,052	1,613,403	2,235,606	4,587	4,318	---	---
Pittsburg & Steubenville	32	1,221,277	280,000	914,690	In progr.	142,628	---	---
Sunbury and Erie	209	3,670,000	875,293	3,235,293	105,890	40,500	---	---
Williamsport and Elmira	78	1,600,000	1,990,000	3,464,454	274,664	167,458	---	---
Baltimore and Ohio	382	13,118,902	10,980,804	24,802,646	3,895,486	1,326,257	56 1/2	---
Washington Branch	41	1,660,000	26,000	1,650,000	369,229	124,961	6	---
Northern Central, Md.	84	2,260,000	5,413,816	7,233,540	741,685	283,284	---	---
Northern Western Va.	168	468,305	6,719,229	5,324,150	294,004	600,000	---	---
Alexandria and Lynchburg	97	1,417,000	1,006,434	2,028,968	275,791	138,642	---	---
South Side	123	1,371,800	2,131,274	3,365,900	376,297	183,345	none	---
Virginia Central	175	3,122,988	1,834,710	5,341,250	58,832	293,716	none	---
Virginia and Tennessee	204	3,553,209	3,251,965	6,760,155	481,121	232,210	---	---
Richmond and Danville	140	1,977,399	524,047	2,481,088	41,918	255,36	---	---
Richmond & Petersburg	22	854,600	230,869	1,205,412	156,906	86,189	6	---
Richm. Fred. & Potomac	130	1,000,000	730,500	1,708,169	232,172	120,212	7	---
Petersburg & Norfolk	63	769,000	158,802	1,009,116	263,874	123,661	4	---
North Carolina	228	4,000,000	---	4,439,000	Recently opened.	---	---	---
Wilmington & Manchester	171	1,123,555	1,416,909	2,375,168	462,574	240,938	none	---
Wilmington & Gaston	97	970,300	126,200	1,240,241	206,917	108,541	2 1/2	---
Charlotte & S. Carol.	109	1,201,000	380,000	1,719,045	240,722	121,555	6	---
Greenville & Columbia	166	1,293,454	968,800	1,999,090	214,865	206,774	---	---
North Eastern	102	886,650	1,814,990	1,901,478	99,404	38,272	---	---
South Carolina	203	4,179,205	3,813,525	7,989,037	1,449,803	740,533	9	---
Atlanta and La Grange	87	1,000,000	199,000	1,171,707	317,770	191,892	8	---
Georgia	211	4,169,000	476,899	4,174,491	1,036,572	324,171	7 1/2	---
Florida Central	191	3,725,919	291,767	3,760,000	1,124,646	582,310	---	---
Florida and Western	102	1,438,680	98,000	1,500,000	298,281	133,627	8	90
Mobile and W. Point	114	1,414,924	992,584	2,444,722	300,834	116,171	---	---

U. S. GOVERNMENT SECURITIES.

Loan, 6 per ct.	OFF'D. PERCT.	ASKED PERCT.	Loan, 6 per ct.	OFF'D. PERCT.	ASKED PERCT.
Do. 6 do.	1862-103 1/2	112 1/2	Do. 5 do.	1868-111	112
Do. 6 do.	1867-112	112 1/2	Do. 5 do.	1865-102	102 1/2
Do. 6 do.	1868-111	112	Do. 5 do.	1874-104 1/2	104 1/2

STATE SECURITIES.

Maine, 6 per ct.	1860-10 1/2	103	Indiana, Can. Loan 6 per ct.	---	---
Massachusetts, 6 per ct. 1859-100	100 1/2	104	Do. do. pref. 5 do.	---	---
New York, 6 per ct. 1860-62-102	102	104	Kentucky, 6 per ct. 1869-72-104	104	106 1/2
Do. 6 do. 1864-65-118	111	113	Louisiana, 6 do. cp. long. 94	94	96
Do. 6 do. 1866-67-110	111	113	Maryland, 6 do. cp. 1870-90-104	104	106
Do. 6 do. 1872-75-113	113	115	Do. 6 do. cp. 1875-104 1/2	104 1/2	106 1/2
Do. 6 do. 1860-61-102	102	104	Missouri, 6 do. cp. 1872-87	87	90 1/2
Do. 6 do. 1865-103	103	105	N. Carolina, 6 do. cp. 1873-106 1/2	106 1/2	108 1/2
Do. 6 do. 1866-74-102	102	104	Ohio, 6 do. cp. 1869-101	101	103 1/2
Do. 4 do. 1858-69-84	84	90	Do. 6 do. 1870-106 1/2	106 1/2	108 1/2
Alabama, 6 do. coop. 85	85	90	Do. 6 do. 1875-106 1/2	106 1/2	108 1/2
California, 7 do. coop. 1877-92	92	94	Do. 6 do. 1876-106 1/2	106 1/2	108 1/2
Georgia, 6 do. do. 1872-102	102	104	Penn., 6 do. cp. 1877-96	96	98
Florida Int. Imp. 7 p. t. 1891	85	90	Do. 6 do. cp. 1877-96	96	98
Illinois Int. Imp. 6 per ct. 1847-102 1/2	102 1/2	104 1/2	Tennessee, 6 do. cp. 1872-92	92	94 1/2
Indiana 8 do. 92	92	94	Do. 6 do. cp. 1873-92	92	94 1/2
Do. 2 do. 91	91	93	Virginia, 6 do. sp. 1868-96 1/2	96 1/2	97 1/2

Iowa, 1868, January, July-100

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are as interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$333,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	85
Buffalo and State Line	500,000	Do. Inconvertible	7	April, October	"	1866	91 1/2	91 1/2
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	85
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	85	85
Do. do.	200,000	Income, guar. Cl Col & Cin	7	Feb'y, August	"	1869	85	85
Central Ohio	1,250,000	1st mort. conv. east sec.	7	Divers	"	1861-64	60	70
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	0	55
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	82	85
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	72 1/2	75
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	85	85
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	85	85
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	94	96
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	65	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	52	55
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	77	82 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	60	60
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	60	60
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	62 1/2	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	40	47 1/2
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	86 1/2	87
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1861	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	72 1/2	72 1/2
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	98 1/2	99
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90 1/2	90 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	87 1/2	93
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	85	85
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	85	85
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	85	85
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	65	82 1/2
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	75	82 1/2
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1866	73	76
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	81 1/2	82 1/2
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	94	99
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	92	94
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	70	80
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	70	77 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	75	78
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62	90	90
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75	90	90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	75	75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	85	85
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	75	75
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	60	60
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	101 1/2	102
Racine and Mississippi	650,000	Do. conv., sink'g f'd	8	Feb'y, August	N.Y.	1875	75	75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	85	85
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	85	85
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	85	85
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,123,500	Mortgage	6	Jan'y, July	Balt.	1876	88 1/2	89
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	96	97 1/2
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage convertible	7	March, Sept.	"	1869	85	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	76 1/2	78 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1880	62	63
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	41 1/2	42
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1877	41	41 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	41	41 1/2
Hudson River	4,000,000	1st mortgage, inscription	7	Feb'y, August	"	1869-70	103 1/2	104
Do. do.	2,000,000	2d do. do.	7	Feb'y, August	"	1860	94 1/2	95 1/2
Do. do.	3,000,000	3d do. convertible	7	16 June, 16 Dec.	"	1870	75 1/2	76
Illinois Central	17,000,000	Mortgage, inconvertible	7	May, Novemb.	"	1875	67 1/2	68
Do. (Free Land)	3,000,000	Mfgs 345,000 acrs-priv. 7 shars	7	March, Sept.	"	1860	85 1/2	87
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1861-72	88 1/2	89
New York and Harlem	1,200,000	Do. do.	7	May, Novemb.	"	1861-72	88 1/2	89
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1856-60	90	95
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	85 1/2	87
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1863	74 1/2	76
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	60 1/2	60 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	101 1/2	102
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	115	115
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	82 1/2	83 1/2
Do. do.	1,800,000	Do. convertible	6	Jan'y, July	"	1870	82 1/2	83 1/2
Do. do.	3,468,000	Do. inconvertible	6	April, October	"	1866	73 1/2	73 1/2

CITY SECURITIES.	Int'at payable.	Off'd.	Asked.	CITY SECURITIES.	Int'at payable.	Off'd.	Asked.
New York, 5 per ct. 1858-60	97	99		Milwaukee, 7 per ct coup.	X	Divers	50
Do. 5 per ct. 1870-75	95	95		New Orleans, 6 per ct. cp. R.R. X	X	Do.	72 1/2
Do. 6 do. 1883	103 1/2	103 1/2		N. Orleans, 6 per ct. cp. municip. X	X	Jan'y, July	85
Do. 6 do. 1890-98	90	94		Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	102 1/2
Albany, 6 per ct. coup. 1871-81 X	105	105 1/2		Pittsburgh, 6 per ct. coup.	X	Divers	52
Alleghany, 6 per ct. coup.	55	70		Quincy, 8 per ct. coup.	1868 X	Jan'y, July	62 1/2
Baltimore, 6 per ct. 1879-90	97	99 1/2		Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug	80
Boston, 5 per ct. coup.	101	101 1/2		Rochester, 6 per cent. coup.	X	Divers	90
Brooklyn, 6 per ct. coup. Long X	101 1/2	102		St. Louis, 6 per ct. coup. Long X	X	Do.	85 1/2
Clev'Pd, 7 per ct. cp. W.W. 1879 X	100	101		Do. do. Municipal X	X	Do.	87 1/2
Cincinnati, 6 per ct. coup.	80	92 1/2		Sacramento, 10 per ct. cp. 1862-74 X	X	Do.	37
Chicago, 6 per ct. coup. 1873-77 X	98	98 1/2		S.F. Francisco, 7 per ct. cp. 1865, pay. N.Y. X	X	May, Novemb.	60
Do. 7 per ct. coup. 1880 X	98	99 1/2		Do. 10 p. ct. cp. 1871 X	X	Do.	87
Detroit, 7 per ct. cp. W.W. 1873-78 X	100	102		Do. 10 do. pay. N.Y. X	X	Jan'y, July	56
Dubuque, 8 per ct. cp. Long X	99	100		Do. 6 per ct. pay. N.Y. 1875 X	X	Do.	60
Jersey City, 6 per ct. cp. W.W. 1877 X	99	99		Whooping, 6 per ct. coupon X	X	Divers	60
Louisville, 6 per ct. cp. 1880-88 X	70	72 1/2		Do. 6 per ct. Mun. 1874 X	X	March, Sept.	81 1/2
Memphis, 6 per ct. coup. 1882 X	64	65		Zeroville, 7 do. 1880 X	X	April, October	85

Extract from De Coppet & Co.'s Money Circular for the European Steamers of January 5th.

[TRANSLATED.]

NEW YORK, Monday, Jan. 3d, 1859.

The aspect of our Stock market has not materially changed since the 21st ult., date of our last advices. The fluctuations in prices from day to day have been unimportant, but on the whole quotations are slightly higher both for State Stocks and Railroad Securities. State Stocks—Missouri 6s have advanced $\frac{3}{8}$; Tennessee 6s, $\frac{3}{4}$; Virginia 6s, $1\frac{1}{2}$, and North Carolina 6s, 2 per ct.; California 7s have risen $\frac{1}{2}$, being now quoted ex. 1 year's interest. The new Government Loan is steady at 104 $\frac{1}{2}$. City and County Bonds have been in moderate demand. We note sales of Brooklyn 6s, St. Louis Municipal 6s, Memphis guaranteed 6s, Louisville Railroad 6s and Detroit 7s at hardening prices. A few Muskingum County (Ohio) 7s have been sold at 88, and some Fayette County (Ky.) 5s within our quotations.

Railroad Bonds are inactive, but prices, with few exceptions, have improved. Illinois Central Construction 7s have risen $1\frac{1}{4}$; Erie, Second Mortgage, 2; Erie Convertible 2a3; Michigan Southern, First Mortgage, 1; Michigan Central 8s, $1\frac{1}{4}$; Harlem, First Mortgage, $1\frac{1}{4}$; Chicago and Rock Island 7s, 1; Hudson River, First Mortgage, 1; and Lake Erie, Wabash and Western, First Mortgage, $1\frac{1}{2}$ per cent.; Erie Third Mortgage have declined $\frac{1}{4}$; Erie, Fourth Mortgage, $\frac{1}{2}$; and Galena and Chicago, First and Second Mortgages, $\frac{1}{2}$ per cent. Sales of Milwaukee and Mississippi, First Mortgage on Third Section, at 73 and interest; and of Cleveland and Toledo, First Mortgage, at 78 and interest. Railroad Shares—Prices for the greater part, are somewhat higher. New York Central have advanced $\frac{1}{4}$; Michigan Central, $1\frac{1}{4}$. Reading, $1\frac{1}{2}$, and Panama, 3 per cent. There have been sales of Harlem Preferred Stock as high as 36 $\frac{1}{2}$, which is a material advance. Erie shares have declined $\frac{3}{8}$, and Chicago and Rock Island $\frac{1}{8}$. Money—Rates of interest are firmer. Loans on call, $3\frac{1}{2}$ a 5; endorsed paper, $4\frac{1}{2}$ a 7 per cent. Exchange on Europe—The demand has not been active, and the market has been weak. The bulk of business on London has been done at 109 $\frac{1}{2}$ a 109 $\frac{1}{4}$, and on Paris at 5.16 $\frac{1}{2}$ a 5.15.

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending December 18th, were.....\$45,070 51
Week ending December 19, 1857..... 53,131 88

Decrease.....\$8,061 36
Total traffic from July 1st.....\$1,112,228 63
Same period last year..... 1,202,361 44

Decrease.....\$90,132 81
The earnings of the New Albany and Salem Railroad for November were.....\$51,889 32
Expenses..... 39,865 41

The receipts of the New York and New Haven Railroad for December were as follows:

Passenger receipts.....\$73,005 16
Freight do..... 13,000 00

Total.....\$86,005 16
Less due other roads..... 19,754 96

Balance.....\$66,250 22
Receipts for December, 1857..... 53,504 54

Increase.....\$12,745 68

United States Mint.

The statement of the U. S. Mint for the month of December shows a gold coinage of \$831,390, nearly all of which was in double eagles. The silver coinage for the same time covered 2,962,000 pieces, of the value of \$545,500. Of cents there

were 2,200,000 coined. The aggregate coinage is \$1,934,336 pieces of the value of \$1,308,890.

American Railroad Journal.

Saturday, January 8, 1859.

The Erie Canal and Competing Railroad.

A Convention of forwarders and others on the Erie and other Canals of the State, of parties in interest with them, met in Convention at Syracuse on the 8th ult. The object of the Convention is fully set forth in the resolutions adopted, and which we subjoin:

1. *Resolved*, That this Convention recommend to the Legislature, during its approaching session, to enact a law submitting to the people the question of authorizing a loan to provide for the full payment of the Canal Debt existing on the 1st day of January, 1859.

2. *Resolved*, That the further work of the completion of the enlargement should be provided for by a law to be passed at the earliest possible day in the session, raising moneys by direct tax to be applied to the completion of the remaining work of the enlargement of the Erie, Oswego, and Cayuga and Seneca Canals, Black River and Genesee Canals, and the docks on the Champlain Canal, in accordance with existing plans and contracts, and giving to the other canals such appropriations as their necessities require. The sums thus raised by tax to be expended in such a manner as to secure the greatest depth of water in the canals on the opening of navigation, next spring. The dredging of the old line of canal through the Cayuga Marshes is an essential part of this plan of expenditure.

3. *Resolved*, That in justice to the creditors of the state an interest bill should be enacted, allowing interest on all commissioners' drafts issued for work done after the suspension of navigation in 1858.

4. *Resolved*, That a due regard for the rights of the citizens of this state transporting freight upon the railroads created by the state, requires the passage of a law providing for the publication of the rates of freights on railroads at stated periods; for the equalization of way with through freights at a *pro rata* established by law, with stringent penalties for violation; and a provision forbidding the increase of winter tariffs to a rate exceeding twenty per cent. above the lowest rates charged during the season of canal navigation.

5. *Resolved*, That the remedy for the existing financial embarrassments of the state, and the slow progress of our public works, will be found in the repeal of the law of 1851, releasing tolls on railroads; and such legislation as will subject the railway corporations for whose advantage it was passed, to the conditions upon which they were permitted to carry freight by the law of 1847.

6. *Resolved*, That it is the duty of the General Government to protect the commerce of the waters over which its jurisdiction extends, and that we therefore cordially approve the principles embodied in the memorial now pending before the Canal Board, asking for an appropriation by Congress for the improvement of the Lake harbors of Buffalo and Oswego, and for the reimbursement of the money expended by the state on the harbor works of those ports.

7. *Resolved*, That a large portion of the people of the state of New York, believing that the tolls upon railroads competing with the Erie Canal in transporting freight, (as those tolls existed prior to the year 1851) should be considered as an important portion of the resources of the state in which reliance should be placed for the preservation of the security solemnly pledged by the Constitution of 1846, for the preservation of the public faith in the payment of the State Debt, incurred for the enlargement of the Erie and Oswego Canals, and the improvement or completion of certain lateral canals—the said tolls on railroads being only needed until the fulfilment of the Constitutional obli-

gation for paying of the Public Debt—as the Erie Canal, when fully enlarged and paid for, will so *cheapen transportation* as to bid defiance to all competition in the immense inland commerce between the Atlantic Ocean and the Western States.

When men are bent on a foolish errand, we must not expect anything but only foolish conduct. What do the people want? Why, to tax commerce in which millions are interested, for the benefit of the few who are always, as in the present case, seeking to create a monopoly, and to embarrass the free movement of merchandise for their own benefit. Suppose the tolls on railroads be reimposed, and that thereby the cost of transportation on the canals be increased, into whose pockets goes such increase? Why, to the pockets of the canal forwarders, who wish to levy a toll upon merchandise in addition to that imposed by the state, and also in addition to the cost of transportation. It strikes us that the most conspicuous feature about the proceedings of the Convention, is the impudence displayed in a small body of men to insist in taxing the whole commerce of the country for their advantage. If transportation on the canal does not pay, let those engaged in it quit it. The idea of making up their losses by taxing railroads is utterly preposterous, and it will soon not have an advocate outside the canal men.

Mississippi and Tennessee Railroad.

We have received the report of this Company for the year ending October 1, 1858, from which we learn that the receipts have been—

From passengers	\$56,857 84
" freight	101,685 82
" mails	2,458 33
	<hr/> \$161,001 49

And the expenses were:

For conducting transportation	\$23,346 12
For maintenance of way ..	21,892 35
For motive power	12,154 12
For maintenance of cars ..	3,770 57
	<hr/> 61,163 16

Leaving as net earnings \$99,838 33
—being 62 per ct. of the gross receipts, and nearly 9 per cent. on the cost and outfit of the road.

If to the operative expenses we add the salaries of the officers, which in a road under construction is not properly chargeable thereto, together with office expenses, and the interest on the funded and floating debt for the year, amounting in the aggregate to \$93,297 98, we have as net earnings \$67,703 51, sufficient to pay to each stockholder a dividend of 9 per cent. The receipts of the road will, of course, be greatly augmented when the southern connection is made at Grenada.

At the date of the previous report of this company, there were in operation 59 miles of road from Memphis to Panola, and contracts for the graduation of 12 additional miles to Yockana were being let; but owing to the financial pressure, these contracts were recalled, and further operations in the construction department suspended until July last. Since then the work has been prosecuted with vigor, and it is hoped that by March next these 12 miles will be ready for the iron.

The floating debt of the company at the commencement of the fiscal year was \$227,494 37; this was subsequently increased to \$271,175 96, by estimates for work that was unfinished at the

date of the report. This debt has since been reduced to \$161,991 42, toward the still further liquidation of which, the company have \$62,048 86 of reliable bills receivable falling due, and \$89,227 of uncollected stock subscriptions, a considerable portion of which is available.

It is proposed to defer the further prosecution of the work on the additional 28 miles to Grenada, until the debt of the company is still further reduced.

The estimated cost of the unfinished 12 miles to Yockana is	\$230,000 00
Less amount already estimated and settled	\$34,362 18
Less iron on hand and settled	35,000 00
Less one-fourth paid contractors in stock	30,000 00
	<hr/> 99,362 18

Thence to Grenada, 28 miles	\$130,637 82
Add for additional equipment when the road is finished	573,800 00
Add present floating indebtedness ..	110,000 00
	<hr/> 161,991 42
	<hr/> \$976,429 24

To meet which the company has:

First mortgage bonds undisposed of ..	\$429,000 00
Bills receivable	62,048 86
Estimated available portion of uncollected stock subscriptions of \$89,227 ..	50,000 00
Mississippi loan, uncollected	18,150 00
Estimated net receipts for year 1858-'9 ..	80,000 00
Do. from road, year 1859-60	100,000 00
	<hr/> \$739,198 36

—a deficit of assets, compared with the estimated expenditure, of \$237,230 80; to which should be added \$200,000 of the above bonds deposited as collateral with the State. To supply this deficiency, it is proposed to issue \$600,000 of income bonds, maturing in 10 years, with 7 per cent. interest, payable in Memphis, semi-annually, secured by a mortgage of the income of the road. It is thought that the earnings of the road will suffice to pay the interest on this debt, and still leave a handsome dividend for the stockholders.

The equipment of the road consists of 5 engines, 3 passenger, 2 baggage, 1 express, and 126 freight and construction cars.

GENERAL STATEMENT.

Capital stock paid viz., in	
Memphis bonds	\$250,000 00
Cash	417,476 76
Work and materials	79,679 38
Bills receivable	10,384 24
	<hr/> \$757,540 38
Bills payable	140,013 81
Tennessee bonds, due in 1885	98,000 00
First mortgage bonds, due in 1876 ..	171,000 00
Mississippi State loan	202,799 07
Earnings of the road	286,863 96
Ledger balances	30,609 18
	<hr/> \$1,686,826 40
Construction	\$1,038,499 14
Equipment	135,798 63
Maintenance of road and equipment ..	171,563 79
Cash	4,521 15
Bills receivable	62,048 36
Discount and interest account	216,709 85
General and contingent expenses	49,053 91
Ledger balances	8,631 51
	<hr/> \$1,686,826 40

The officers of the company are:

President, F. M. WATTS, Memphis, Tenn.

Directors.—J. C. N. Robertson, A. N. McKay, Desoto Co., Miss.; Edward F. McGehee, N. R. Sledge, Wm. B. Dickins, Panola Co., Miss.; Nathaniel Howard, Grenada, Miss.; Robt. S. Rayburn, Yallabusha Co., Miss.; James Elder, Barnett Graham, Samuel Mosby, Memphis, Tenn.
C. F. VANCE, Secretary and Treasurer.
N. MERRIWETHER, Chief Engineer.
M. W. NEWELL, Superintendent.

Michigan Central Railroad.

From the circular of this Company, just issued, we gather the following items:

Receipts for six months ending Nov.
 30th \$1,114,620 01
 Operating expenses 571,790 34

Balance \$542,829 67
 Interest \$388,965 92
 Sinking Fund 60,000 00
 443,965 92

Net earnings for six months \$98,863 75
 Add balance to credit of income account June 1, 1858 87,418 97

Total \$186,282 72

The net earnings for the six months are something less than two per cent.

The following is an estimate of what will be the financial position of the Company on the 1st July, 1859:

Actual Liabilities to July 1st, 1859, inclusive:
 Bonds maturing \$301,150 00
 Coupons maturing 357,058 00
 Joliet rent maturing 22,250 00

Total liabilities \$680,458 00
Resources to July 1st, 1859, inclusive:

Cash on hand and loaned on call \$163,226 03
 Bills receivable maturing 33,500 00
 Estimated net receipts from road 420,000 00

Total receipts 616,726 03

Excess of liabilities over receipts.. \$63,731 97
 To meet this deficiency, the Company has sinking fund bonds of 1882 (included in the mortgage) \$78,000 00
 Other available assets estimated at cash value. 200,000 00

Total \$278,000 00
 Deficiency, as above, deducted 63,731 97

Leaving a balance, in value of... \$214,268 03

From this it appears that after all liabilities to July 1st, 1859, inclusive, shall have been paid, there will remain of assets an amount equal in value to \$214,268 03. The floating debt is entirely extinguished, and the bonded debt of the Company previous to 1860, matures as follows:—

Overdue, and not yet presented for payment \$1,450
 January 1, 1859 38,500
 February 1, 1859 1,000
 March 1, 1859 2,000
 April 1, 1859 2,200
 July 1, 1859 256,000

There will fall due in 1860 bonds to the amount of \$1,275,000, and the Company propose to exchange these for 1st mortgage 8 per cent. bonds, due in 1882, at par, any time previous to October, 1859, and as an inducement offer to increase the sinking fund to \$75,000 per annum, which will absorb the whole amount of bonds before maturity.

Debt of Boston.

From the report of the committee on the reduction of the city debt, it appears that the financial condition of the city on the 24th ult., was as follows:—

The whole amount of the consolidated funded debt on the first of May, 1858, was as follows:

City debt \$3,376,238 66
 Water debt 5,724,961 11

Total \$8,101,199 77

Added to city debt since May 1, and on which nothing is yet due or paid 832,350 00

Added to water debt for new main from Brookline to the city \$400,000 00

Paid on water account.. 170,500 00

Total city debt \$329,500 00

Total city debt \$4,208,588 66
 Water debt 4,954,461 11

Total rounded debt \$9,163,049 77

Means of Paying the Debt.

Cash on 1st of May \$577,028 25

Cash received since that date from bonds and mortgages 199,278 50

Cash from sales of lands and other city property 34,521 30

Cash from tax of 1858 105,000 00

..... \$915,828 05

Less amount paid on water debt 170,500 00

..... \$745,328 05

Bonds, notes and mortgages 503,797 57

..... \$1,249,115 62

Net city debt this year \$7,913,924 15

Do. last year 7,178,488 09

Increase \$131,436 06

Finances of Missouri.

Revenue for 1857 \$605,252 73

Do. 1858 766,115 61

Total for 2 years ending Oct. 1, '58.. \$1,361,368 34

Expenditures for 1857 \$735,016 21

Do. 1858 397,158 79

Total for 2 years ending Oct. 1, '58.. \$1,132,175 00

Balance in Treasury Oct. 1, 1858..... \$54,264 24

Estimates for 1859 and 1860.

In Treasury 1st Oct., 1858 \$54,264 24

Estimated revenue for 1859 and '60.. 1,950,777 55

Total \$2,005,041 79

Estimated ordinary expenditure for 2 years 600,000 00

..... \$1,405,041 79

Which is subject to a deduction of 25 per cent. of the revenue receipts, for the use of Common Schools 487,694 38

Balance 1st Oct., 1860 \$917,347 41

—subject to such special appropriations, however, as the Legislature may legalize. The extraordinary expenditures in 1857-8 amounted to \$222,113 66; and the Commissioners of the State interest fund have invested in the same two years

\$149,565 04 in State bonds.

Hudson Iron Company.

The Hudson Star states that C. C. ALGER, Esq., has purchased the Jordan farms, near that city, with the view of erecting another blast furnace, and that there is a prospect of an increase of the capital of the Hudson Iron Company to the extent of \$200,000.

Debt of the City of New York.

The debt of the City of New York on the 1st January, 1859, is stated in the Mayor's Annual Message and the Common Council to be as follows:

Permanent city debt redeem-

able from sinking funds. \$14,400,898

Less sinking fund 4,437,218 \$9,963,679

Funded debt redeemable from taxation. 1,224,000

Bonds of County of New York. 10,000

Revenue Bonds 4,368,750

Central Park assessment bonds 1,600,000

Assessment bonds 1,095,700

Total debt 1st Jan. 1859..... \$18,362,129

The permanent city debt redeemable from the sinking fund, as above stated, is made up of the following several amounts:

5 per ct. Water Stock, 1858 \$100,330

5 per ct. " 1860 2,500,000

5 per ct. " 1870 3,000,000

5 per ct. " 1875 255,600

5 per ct. " 1880 2,147,600

5 and 6 per ct. " 1790 1,000,000

5 per ct. Fire Indemnity Stock, 1768.. 402,768

5 per ct. Building Loan Stock, No. 3, 1870..... 75,000

5 per ct. " " No. 4, 1873 115,000

5 per ct. Water Loan Stock, (New Reservoir) 1875 29,100

6 per ct. " " " 1875 1,000,000

5 p. ct. Central Park Fund Stock, 1898 400,200

6 per ct. " " (Arsenal) 1898 275,000

6 per ct. " " 1887 2,382,900

6 per ct. C. P. Impr. Fund Stock, 1887 650,000

..... \$14,400,898

Less investment by Com. of S. F. in City Stocks..... \$3,780,852

And in Bonds and Mortgages 656,366

..... 4,437,218

Amount unprovided for 1st Jan., 1859 \$9,963,679

" " 1st Jan., 1858 10,773,294

Amount of reduction last year.. \$809,614

The debt of the city redeemable from taxation, is constituted as follows:

5 per cent. building stock, No. 3, payable in annual instalments of \$50,000 from 1859 to 1866 \$400,000

5 per ct. stock for docks and slips, payable in annual instalments of \$50,000, from 1867 to 1876..... 500,000

5 per ct. Public Educ. St'k, payable 1873 154,000

6 per ct. Tompkins Market Stock, payable in annual instalments of \$17,000, 1860 to 1869 170,000

Total amount. \$1,224,000

Finances of Pennsylvania.

The annual statement of receipts and expenditures of the State of Pennsylvania, made out for the fiscal year ending November 30th, 1858, shows a balance in the Treasury of \$892,027 76. The balance in the Treasury November 30th, 1857, one year ago, was \$528,106 47, or \$363,921 29 less than the balance of this year. We have information that there has been, during the past year, a greater reduction of the principal of the state debt, than there has ever been in any previous year. A better proof of the wisdom of selling the Canals could not be desired. The Main Line was sold a year ago last summer, and the other Canals were sold last spring. The people are no longer taxed to keep up the Canals, but the taxes go to pay the debt of the State, and the very first year after the Commonwealth ceased to be a canal owner, the largest reduction of her debt ever known is accomplished.

Brooklyn City Railroad.

The following is a comparative statement of the monthly earnings for the years 1857 and 1858:

	1857.	1858.
January	\$24,515 29	\$26,880 12
February	23,858 81	21,687 63
March	25,648 74	26,508 47
April	29,869 76	30,195 24
May	34,735 34	34,238 44
June	37,217 43	38,004 69
July	38,549 69	39,490 52
August	37,976 14	40,728 06
September	37,620 89	39,448 19
October	33,234 96	39,252 88
November	28,384 06	33,754 00
December	26,491 46	33,364 17

Total.....\$377,497 57 \$408,552 53

The earnings for the year ending September 30th, were, \$395,026 80; and the expenses for same time were \$288,771 22—leaving as net earnings \$106,255 58. The Company has no debt of any kind. The capital is \$1,000,000. The number of passengers carried during the year was 7,705,839, and number of miles run was 1,994,185. The road divided \$80,000 in dividends, or 8 per cent., with a surplus of \$38,346 73, and the amount of cash in the Treasury, on the 1st of October, 1858, was \$30,878 56.

Cambridge and Union (Mass.) Railroad.

The third annual report of this Company has been prepared for submission to the Legislature. The Cambridge Company, which owns the track only, is represented by stock of \$160,000, and a funded debt of \$150,000. The total length of the road and branches is 33,715 feet, or nearly ten miles of a single track road. The funded debt is protected by a sinking fund, which already amounts to \$10,755, and by a first mortgage of the whole property. The "Cambridge" is operated by the Union Company, which owns the equipment, stables, &c., &c., and which pays an annual rent of 9 per cent. on the Cambridge stock, and the interest on the \$150,000 bonds, and makes the required payments to the sinking fund. The "Union" has a capital of \$160,000. It owes a debt of \$60,476, and has reliable assets on hand of \$49,100, in the secured notes of the stockholders, payable on demand. It has also an ultimate interest in the Cambridge Railroad sinking fund, created and continued by its payments. On the final liquidation of the bonds, the Union Company will receive \$150,000 of Cambridge stock, from the Cambridge Company, to recompense for the annual payments now made by the Union to the sinking fund of the Cambridge. The entire equipment of the road, including horses, cars, furniture, real estate, buildings, &c., as contained by actual appraisement, stands at \$159,988. The Company has 35 cars and 251 horses. During the year, 1,754,201 passengers have been carried. The gross earnings have been \$154,819; the entire expenses, \$155,121. The latter sum includes a large charge for depreciation, on the actual appraisement of the property. The net profits, therefore, are \$19,698, or somewhat over one cent for each passenger. From July 1, 1857, to Nov. 30, 1858, the Union has paid 15 per cent. in dividends, or at the rate 10-58 per cent. per annum. The present surplus on hand is \$5,838 48.

Pacific Railroad.

The Pacific Railroad convention, held in New Orleans on the 25th ult. authorized the issue of a trust deed for the indebtedness of the Pacific Railroad Company, amounting to \$327,000. The entire liabilities are \$500,000, to meet the former there is \$135,000 in hand, and \$110,000 from other sources, leaving about \$95,000 to be provided for by the New Orleans and other stockholders.

Vicksburg, Shreveport and Texas Railroad.

The Sixth Annual Report of the President to the stockholders of the Vicksburg, Shreveport and Texas Railroad dated 27th September, 1858, has been published. From this document we learn that the Company has expended during the past year:

For work done and materials furnished	
including engine and cars	\$148,325 25
For depot grounds and right of way ..	7,924 92
For surveying and engineering	11,461 85
For salaries	6,679 15
For contingent expenses	4,568 12
For balance of interest	1,600 09
For office, printing, commissions, etc..	1,765 49

Total.....\$182,324 87

These amounts added to the expenditures heretofore made and reported show the entire amount of expenditures from the commencement of operations to the present time to be as follows:

For labor, materials and rolling stock,	\$764,727 24
For depot grounds and right of way ..	22,071 10
For surveying and engineering	69,935 17
For salaries	26,057 51
For printing	3,673 51
For office expenses	2,301 50
For contingent expenses	14,719 13
For commissions	8,788 61
For interest (balance of)	17,126 49

\$929,418 44

Cash Assets.....62,632 30

Total assets.....\$992,050 74

The entire amount received by the company from the commencement of operations to date has been derived from the following sources:

Individual subscriptions	\$349,910 11
Less amount of tax reduction	20,134 62

\$329,775 49

Contractors paid in stock	210,586 02
State subscription	174,000 00
Subscription of Madison Parish, cash,	71,587 50
Do. Caddo do. do.	54,282 67
Do. City of Shreveport do.	12,689 79
Bonds earned by Bonner & Co.	14,194 45
Do. Fannin & Co.	44,549 38
Cash due to do.	49,540 70
Land sold, rent, voluntary subscrip-	
tions, etc.	844 74

\$992,050 14

The above is a full statement of the financial condition of the company. There are no outstanding unsettled accounts, no floating debt, no indebtedness of the Company of any form; except what is shown in the exhibit.

The means of the Company to prosecute the work to completion are:

Stock not paid in—Individual	\$279,424 51
Do. Madison, (cash)	28,412 80
Do. Caddo, do.	45,417 32
Do. Shreveport, do.	17,310 21
State, payable in bonds	426,000 00
Subscription of Fannin, Grant & Co.	1,577,000 00

Total subscription capital unpaid, \$2,373,861 55

420,924 acres of land at \$10.....4,209,240 00

1st mortgage bonds ..\$2,000,000 00

Less earned by contractors.....58,743 83

1,941,256 17

Total means unexpended.....\$8,524,360 72

The estimated total cost of the road—of which 21 miles is in operation, and 50 miles in progress—will amount to \$9,924,360 72. Against this the total capital issued and to be issued will be:

Stock subscriptions	\$3,200,000
Bonds	2,000,000

Total.....\$5,200,000

showing a clear gain to the stockholders of \$4-724,360 72. The amount of gain, however, may be greatly modified by the actual values obtained for the Company's lands.

The President, C. G. Young, Esq., is unable to furnish any information respecting the earnings of the finished portion of the road. It is operated by the contractors, Fannin, Grant & Co., and its revenues belong to them until the 1st January, 1863, and they have declined to furnish any statement of its business for the past years. "It is apparent, however," says Mr. Y., "to all who have opportunity of seeing the business done on the road, that it exceeds all the calculations of its most sanguine friends, and gives full assurance that when completed, it will pay large dividends upon its cost."

Mobile and Ohio Railroad.

We give below a very lucid and satisfactory statement, showing the present condition of this important work, which is now fast approaching completion. The company have the rails for the entire line and now wish to dispose of their securities which appear to have every attribute of safety and security.

OFFICE OF THE M. & O. R. R. Co., }
Mobile, Dec. 4, 1858. }

At the opening of the present year of the six million sterling mortgage bonds the Company had sold.....\$38,000

And there was hypothecated.....5,281,000

Leaving at the control of the Company.. 681,000

\$6,000,000

During the present year \$2,118,000 of these hypothecated bonds have been taken up, and \$1,026,000 of them have been sold.

Of our floating debt \$1,207,120 48 has been funded and paid by the sale of these bonds.

We now have on hand (including those set apart on account of the recent purchase of rails and fastenings) \$1,713,000 of these Sterling Mortgage Bonds. Of this amount, \$583,000 has been set apart to pay the bond portion of the purchase above referred to, leaving in the hands of the Company, after paying the one-half for all the rails and fastenings required to complete the entire road, including the Columbus Branch, \$1,130,000.

It is to be observed that the \$583,000 of bonds above referred to pays the one-half of the foreign cost of the rails and fastenings for the entire uncompleted portion of the road, including the fifty miles in Tennessee. This saves about \$105,000 of the Tennessee fund, to which, if the contract is carried out, the general fund of the company will be entitled. This, added to the remaining sterling mortgage bonds, gives \$1,235,000 applicable to the payment of the cash part of the contract for rails and fastenings, the payment of freights and duties and the laying down of the track through the State of Mississippi; as the remaining fund applicable to the Tennessee portion is ample to finish the road in that State. In this view of the case, no one can doubt the sufficiency of the means to finish the road at an early day, if they can be made available. This depends on the sale of a sufficient amount of the sterling mortgage bonds to pay the cash part of the contract for rails and fastenings, to pay freights and duties and to lay down the rails through the State of Mississippi.

That these bonds are perfectly secure investments and deserve to rank—and when the subject is properly understood will rank—with the first class American securities is capable of the clearest demonstration.

Facts are the best argument :

There are \$6,000,000 of these bonds, holding for their security the first lien on the road in Alabama, Mississippi and Kentucky, including rolling stock, equipments, machine shops and every thing belonging to the road. In addition to this the mortgage covers all the lands donated by the general government to the Company, embracing about 1,100,000 acres.

The bonds can never be increased in number or amount, but are on the decrease. The sales of the lands are now going on more rapidly and favorably than at any former period. The proceeds of these lands are being invested in the bonds, as the mortgage requires, and the bonds cancelled. Already sixty thousand dollars of them have been paid off, and the process has but just begun. The lands are coming into market rapidly, and a most effectual sinking fund is already established.

Two hundred and thirty-two miles of the south end of the road are in operation. This portion of the road, including machine shops, rolling stock and equipments of every kind, cost (see 10th annual report, \$4,895,349. The net earnings of this part of the road, (estimating December at the income of November,) will be \$380,000 for the present year. This it will be seen is over 7½ per cent. on the entire cost of this part of the road, including rolling stock, machine shops and equipments of every kind. This is before the road has any through connections.

While on other roads the largest, and in some cases the chief income is from passengers, this road receives nothing beyond a local travel. But notwithstanding these disadvantages, as the country settles up and is being developed, the income of the road is rapidly increasing.

The receipts for September of last year were \$43,211 76; for the same month this year \$56,553 75; for October, 1857, \$74,410 64; October, 1858, \$105,087 20. In November of last year, \$76,615 05; the corresponding month in 1858, \$125,764 92, showing an increase for the three months of \$93,166 40.

In the foregoing statement the income of the southern portion of the road alone has been referred to. Lately 87 miles at the northern end has been finished and put in running order. The Chief Engineer and General Superintendent think this part of the road will earn as much as an average per mile of the south end. If so, this will hereafter add largely to our income. The city of Paducah, Ky., has lately voted a tax of \$150,000 dollars to finish the branch to that place. This insures its early completion. Every indication is that the Iron Mountain road from St. Louis will meet our road at Kentucky City. With these powerful feeders completed, the north end of the road will be the outlet and inlet of an immense trade and travel.

And when our road is finished and the mighty work accomplished of connecting the mouth of the Ohio with the Gulf at Mobile, the highest expectations of the friends of this great enterprise will be fully met.

But to return to facts and figures:

I have show that the present income of the south end of the road alone yields a net revenue, after paying all expenses, of \$380,000. This is, of itself, enough to cover the interest on the entire six millions of dollars of sterling mortgage bonds, even if they were all issued. And now that eighty-seven miles at the north end are in operation, the income will far exceed our interest account. With this certain and unquestionable power to meet our interest account from the income of our road, even in its unfinished state, and the certainty that that income will greatly increase as the road progresses, can any one doubt the perfect security of these bonds?

It is a remarkable fact that the actual income of the Mobile and Ohio railroad has fully equalled the estimate made of its probable earnings when the enterprise was first brought before the public. This cannot be said of any other road of which I have any knowledge.

Having established, as I think, the unquestion-

able safety and soundness of the securities referred to I will now refer to the present wants of the Company.

A contract has been entered into for all the rails and fastenings necessary to complete the entire road, including the Columbus, Mississippi branch.

The contract is, to pay one-half in our sterling mortgage bonds and the other half in cash. For this purpose, and to pay freights and duties and for laying down the iron from the present terminus, West Point, to the Tennessee line, will require about \$700,000.

Since the contract was made rails and fastenings have advanced in price and are likely to rise much higher, and it will be to the interest of the vendor to get clear of his contract. We, therefore, desire to sell of our bonds an amount sufficient to carry out this contract. We offer a sound, safe and unquestionably good investment.

MILTON BROWN, President,
Mobile & Ohio R. R. Co.

Mexico---Its Wealth, Soil, Cities, Population, &c.

Some time since Senor Tojada published a series of articles upon the condition of Mexico, giving a very good idea of its natural wealth, the quality of its soil, the richness of its mines, the size of its cities, &c. It has command of a large ocean front, with numerous gulfs, bays and inlets, many of which furnish excellent harbors. There are some twelve or fifteen rivers, the longest of which is the Rio Bravo del Norte, all of which are navigable to a certain distance; in most cases, however, very short. A good many of these and of the lesser streams of the country would furnish an abundance of water-power which now runs to waste. The more southerly portions of the country are almost uniformly fertile. Sterility is impressed chiefly on the northern plains and the mountainous regions. A great deal of the finest soil of Mexico is yet unreclaimed. It abounds in the most valuable timber trees, and a growth which affords rich dyes and many of the prized gums of commerce and medicinal extracts. Of its mineral wealth, not a word need be said. There is scarcely a known metal which is not found in its mines.

Table of the Capital Cities of Each State and Territory, the Number of Inhabitants of Each, and the distance from the City of Mexico.

	No. of Inhabitants.	Dist. from Mexico.
Agua Calientes	39,699	140
San Cristobal	7,649	289
Chihuahua	12,004	333
Saltillo [a] Leona Vicaria	8,105	209
Durango	14,000	203
Guanajuato	36,921	94
Tixtla (Ciudad Cuernavaca)	6,501	70
Guadalajara	68,000	161
Toluca	12,000	16
Morelia	22,600	69
Monterrey	17,399	234
Oajaca	25,000	108
Puebla	70,000	28
Queretaro	27,456	57
San Luis Potosi	19,678	114
Cobacan	9,646	403
Ures	6,000	582
San Juan Baptista	5,500	239
Ciudad Victoria	4,621	195
Vera Cruz	9,647	93
Merida	23,575	386
Zacatecas	15,427	130
Mexico	185,000	..
Texcala	3,463	28
Colima	31,774	172
La Paz	1,254	416
Minatitlan	339	163
Villa del Carmen	3,068	309
San Luis de la Paz	4,411	95

Total No. inhabitants 690,044

There were at the latest examination of the de-

partment, but 9,234 foreigners residing in the country, of which there were 5,141 old Spaniards, 2,048 Frenchmen, 615 Englishmen, 581 Germans, 444 Americans, and of other nations 405.

The agricultural wealth is estimated at \$260,000,000, and the yield of the mines at \$24,000,000 annually. The value of domestic manufactures is set down at \$90,000,000. There are forty-six cotton and eight woolen manufactories, located chiefly in the middle States of the Republic. About forty thousand pounds of silk are made in silkeries at the capital, and in Puebla and Guadalajara.

Money lending, especially in the capital, is done extensively, about ten millions of capital being employed in the business.

It is not known now, such is the anarchy which prevails, what the present annual revenue is, but in 1854 it was \$15,000,000. The annual expenditure is about \$25,000,000. The national debt is about \$120,000,000. In 1855 the army was composed of 11,700 men, and of this number there were no less than 5,800 officers.

The property of the church is supposed to be between two hundred and fifty and three hundred millions of dollars. At the capital, the clergy own more than half the buildings, and the whole are valued at \$80,000,000. Adding the rents of landed property to all other sources, and his estimate is that the total income of the Church, annually, is \$80,000,000.

Worcester and Nashua Railroad.

The annual report of the Worcester and Nashua Railroad states the amount of capital paid in as \$1,141,000, and the amount of bonds issued \$200,000. The cost of the road and equipment has been \$1,328,897.

The earnings of the road for the past year were \$185,127, of which \$85,511 was from passengers, and \$92,043 from freight. Expenses of operating the road \$101,278. Net earnings after deducting expenses, \$88,849. Deduct interest on debt, \$11,235, and two dividends of \$2 per share each, making in all \$72,123, leaves balance to reserved fund \$11,726. This added to \$32,618 surplus not divided last year, makes the present surplus \$44,344.

The income of the past year has been \$22,200 less than in 1857, and the expenses and interest \$24,512 less. The semi-annual dividend of 2 per cent. was payable on Monday, Jan. 3d.

Pacific Railroad.

The Pacific Railroad projects have been so numerous during the present Congress, that it may be well to sketch the leading points of each.

The Select Committee's Bill (reported in January) fixes San Francisco as the Western, and a point on the Missouri River, between the mouths of the Kansas and Big Sioux, as the eastern terminus, and provides for its construction by Land Grants and Government Bonds.

Senator Gwin's bill (December, 1857) proposes three roads and telegraphs—one starting from Texas, one from Missouri, and one from Minnesota—to be built by Land Grants.

Senator Iverson's project is to invite proposals for one route south of the 36th parallel, which would take it through Texas and New Mexico.

Senator Foot's bill runs the route from the Red River of the North (Minnesota) to Puget's Sound in Washington Territory. (This is the shortest of all.) Thence it is to run to San Francisco.

Senator Davis' bill provides land grants of alternate sections six miles wide, and a money grant of \$10,800,000 cash. Route not specified.

Senator Cameron's project is to have a board of experienced engineers select the route, and the Government to raise money for its construction, by bonds redeemable in fifty years, which bonds are finally to be assumed and paid by the respective States through which the road runs.

Senator Wilson's project locates it between the 34th and 45th parallels of latitude; leaving five engineers to determine the route; the funds to be raised by Government loans, which are to be re-

paid by the proceeds of the sales of the public lands.

Senator Rice's project is to build two roads, one through Texas and one from Minnesota, omitting the central one altogether.

Mr. Phelps' project is to give land grants to California, Missouri, Louisiana, Arkansas, Nebraska and Kansas, similar to those given to other States, and to issue 30 years' bonds in aid of the road, which is to have three eastern branches, one running to Mississippi and the other two to Missouri.

Mr. Smith (Tenn.) offers a project that the United States shall turn in and help the Texas "Southern Atlantic and Pacific R. R. Company" (of which V. K. Stevenson, of Tennessee, is President) to extend their line to San Francisco; then to help the "Northern Pacific Railroad Company" (of which A. Ramsey, of Minnesota, is President) to extend their line to Puget's Sound, and finally to help a third company, not yet organized, to build a line from the Missouri River to the Pacific Coast.

Mr. McKibben, of California, proposed two roads, one to commence north of 38th parallel, the other South of 36th parallel, both to run to San Francisco, with branches to Puget's Sound and San Diego.

There have been several other bills introduced at the last and the present sessions, but they were mostly modifications of the above.

Passengers by the Steamers.

The number of passengers who have crossed the Atlantic within the past year, both eastward and westward, is as follows:

	Eastw'd.	Westw'd.	Total.
Collins line	105	52	157
Cunard line (New York).....	2,789	2,570	5,349
Cunard line (Boston br.).....	1,767	2,009	3,786
Liverpool and N. Y. screw line.....	5,123	5,448	10,576
Southampton and Havre (Vaubert).....	1,493	1,332	2,825
Havre line (Fulton and Arago).....	1,826	1,878	3,784
Vaubert's line	2,146	1,843	3,987
Glasgow line	2,012	1,772	3,774
Hamburg line.....	3,472	5,782	9,254
Bremen line.....	702	963	1,665
Galway line.....	1,361	3,040	3,401
Portland and Liverpool line.....	392	759	1,151
Transit steamers.....	201	187	388
Total, 1858	23,384	26,635	50,619
Total, 1857	20,171	34,575	54,746
Increase (1858)	3,213	Dec. 7,940	4,127

Finances of Wisconsin.

The Report of the State Treasurer of Wisconsin, for the fiscal year ending September 30, has been published. It exhibits the following condition of affairs: at the close of the fiscal year the general fund was not only exhausted, but \$27,828 had been paid out from other funds on its account. The amount of outstanding claims on the 1st of October was \$201,678 32. The aggregate of the resources of State, previous and up to that time, \$126,678 33. Should the whole of this amount be promptly paid, there would still remain \$75,232 52 of indebtedness to be paid out of the State tax. The Treasurer estimates, however, that not over \$75,000 will be received from these arrearages, and, consequently, a balance will be left of over \$125,000 to be paid from the next State tax.

Progress of Spain.

Spain has progressed rapidly during the last few years. Her population in 1854 was reported at 12,168,174; in 1857 it was 16,301,851. Its revenue in 1852 was £11,379,274; in 1857 it was £18,126,314. The total tonnage in 1850 was 244,854; in 1857, 349,762. Its imports and exports together were in 1851, £11,857,559; in 1857, £23,677,851. In 1855 the number of miles of railway opened was 180; in 1858, 456.

Bank Statements.

The following is a comparative statement of the New York Banks for the weeks ending Dec. 25th, and January 1st:

	Dec. 25th.	Jan'y 1st.
Loans	\$126,716,365	\$127,684,319
Specie	26,868,272	27,129,725
Circulation	7,704,348	7,851,090
Deposits	88,679,095	90,684,191

The following is a comparative statement of the Philadelphia Banks for the weeks ending Dec. 27th, and Jan'y 3rd:

	Dec. 27th.	Jan'y 3rd.
Loans	\$26,232,551	\$26,451,057
Specie	6,274,515	6,063,356
Circulation	2,701,127	2,741,754
Deposits	16,723,390	17,049,005

The following is a comparative statement of the Boston Banks for the weeks ending Dec. 27th, and Jan'y 3rd:

	Dec. 27th.	Jan'y 3rd.
Loans	\$53,701,041	\$60,069,500
Specie	8,775,328	8,540,000
Circulation	6,678,970	6,545,000
Deposits	21,756,302	22,337,800

The following is a comparative statement of the New Orleans Banks for the weeks ending Dec. 18th, and 27th:

	Dec. 18th.	Dec. 27th.
Loans	\$18,877,458	\$19,440,302
Specie	15,742,694	16,253,971
Circulation	8,353,009	9,094,189
Deposits	23,863,983	21,832,533

The Bank movement in the four principal cities of the Union, as compiled from the above, is as follows:

	LOANS.	SPECIE.	CIRCULATION.	DEPOSITS.
N.Y., Jan. 1.....	\$127,684,319	\$27,129,725	\$7,851,090	\$90,684,191
Philad., " 3.....	26,451,057	6,063,356	2,741,754	17,049,005
Boston, " 3.....	60,069,500	8,540,000	6,545,000	22,337,800
N.Orl., " 27.....	19,440,303	16,253,971	9,094,189	21,832,533
Total.....	\$233,645,179	\$57,987,052	\$26,235,033	\$151,903,519
Last week	231,527,338	57,160,480	26,437,484	151,022,475
Increase.....	\$2,117,841	\$826,572	\$797,549	\$881,044

Manufacture of Boots and Shoes.

The United States *Economist* has collected some interesting statistics on the manufacture of boots and shoes in this country. The quantity required for the consumption of the United States is not far from 75,000,000 pairs per annum. Of these 12,000,000 are made in Massachusetts, at a value of \$40,000,000 per annum, and they employ 45,000 men, and 32,826 women. One-half of this employment is in Lynn, which is the largest shop in the United States. The next is in Philadelphia, which makes \$4,000,000, mostly fine work, while that of Lynn is coarse work. The production is great in every city, town and hamlet of the Union, and the whole value is not less than \$80,000,000 per annum. In Philadelphia there are 457 manufacturers, whose aggregate sales amount to \$4,141,000, and Philadelphia sells perhaps \$10,000,000 worth of eastern work in addition.

Philadelphia Clearing House.

At the recent stated meeting of this association, Mr. Mitchell, the President of the Mechanics' Bank, was re-elected President for the ensuing year, and Mr. Jordan, of the Manufacturers' and Merchants' Bank, was re-elected Secretary. The Executive Committee, consisting of Messrs. Rogers, Comegys, Lewis, Dickson, and Jordan, were also re-elected for the ensuing year. The Clearing House is now fully and efficiently organized, and appears to afford very general satisfaction.

Little Miami Railroad.

At the annual meeting of the stockholders of this Company, held in Cincinnati on the 28th ult., the following gentlemen were elected Directors for the ensuing year, viz.: Jacob Strader, Wm. B. Hubbard, Henry Hanna, R. R. Springer, Jno. H. Groesbeck, Nath. Wright, Jno. Bacon, Abram Hivling, James Hicks, Jr., Larz Anderson, Alph. Taft, C. H. Kilgour.

NATH. WRIGHT was elected President; D. G. A. Davenport, Treasurer; Smithson E. Wright, Auditor; C. H. Kilgour, Secretary; Jno. Durand, Superintendent.

Androscoggin Railroad.

The following gentlemen have been elected Directors for the ensuing year:—John B. Jones, Lewiston; Ensign Otis, Leeds; John Smith, Livermore; Giddings Lane, Leeds; John Dyer, Freeman; Ozias Millet; Steph. H. Reed, Lewiston.

Railroad Dividends.

The Terre Haute and Richmond R. R. Co. has declared a semi-annual dividend of 6 per cent., payable to eastern stockholders at the office of the Farmers' Loan and Trust Co., 28 Exchange Place.

The Panama R. R. Co., a semi-annual dividend of 6 per cent., payable on the 10th inst.

The Watertown and Rome R. R. Co., a dividend of 3 per cent., payable at the People's Bank on the 15th inst.

The Second Avenue R. R. Co., a quarterly dividend of 2 per cent., payable on the 10th inst., at the office of Wm. & J. O'Brien, 29 Wall st.

The Eighth Avenue R. R. Co., a quarterly dividend of 3 per cent., payable on demand.

Interest on State, County, Railroad and Other Bonds.

The interest on the bonds of Marion County, Ohio, indorsed by the Bellefontaine and Indiana Railroad Company, due on or before April 1, 1859, will be paid at the American Exchange Bank, upon presentation of the proper interest coupons.

The coupons of the bonds of the Chicago and Rock Island R. R. Co., due 10th inst., will be paid at the Corn Exchange Bank.

The outstanding coupons of the bonds of Athens County, O., due 1st inst., together with those due 1st Jan., 1858, will be paid by Wm. Hoge & Co., 40 Wall St.

The interest due on 1st inst., on the stocks issued by the State of Ohio, redeemable in this city, will be paid at the office of the Ohio State Agency in this city, if presented prior to the 15th inst., after which date they will be paid only at the office of the Commissioners of the Sinking Fund at Columbus, O.

The coupons due in this city on 1st inst., on the general mortgage construction bonds of the Pittsburgh, Ft. Wayne and Chicago R. R. Co., dated Jan. 1, 1857, and on the Sinking Fund Bonds dated Jan. 1, 1858, will be paid at the office of the Company, 37 William St.

The coupons on the bonds of St. Louis Co., Mo., Miami, Pickaway, Zenia, and Silver Creek, O., will be paid at the Continental Bank.

The coupons on the bonds of the Boston, Concord and Montreal R. R. Co., due 1st inst., will be paid by J. A. Underwood & Son, 18 Exchange Place.

The coupons due 1st inst., on bonds issued by the city of Quincy, Ill., will be paid by Woodruff & Co., 40 Broad St.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the Delaware, Lackawanna and Western Railroad, this Company was enabled to obtain the Magnetic Ores from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, at the same time, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per lineal yard, viz:—25, 30, 35, 40, 45, 50, 60, 62, and 75 lbs.

Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.

Address J. H. SCRANTON, President,
SCRANTON, Pa.,
or THEO STURGES, Treasurer,
46 Exchange Place,
NEW YORK

4017

THE ROUGH AND READY ROLLING MILLS OF DANVILLE, PA.,

ARE prepared to fill orders for RAILS of the best quality at the market price.

T. A. HOWLAND & CO., Agents,
54 William St., NEW YORK.

RAILROAD IRON. THE RENSSELAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:
BUSSING, CROCKER & DODGE,
32 CHURCH ST.

IRON BOILER FLUES.

Lap-Welded Boiler Flues,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

Warehouse—209 South Third St.,
PHILADELPHIA.

STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR., STEPHEN P. M. TASKER.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
Agents for the United States,
12 SOUTH CHARLES STREET,
BALTIMORE.

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And 17 NASSAU STREET, NEW YORK.

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
OUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854.

1733

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago, in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation.

February, 1853.

RAILROAD IRON. The Crescent Manufacturing Company, WHEELING, VA.

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

Address N. WILKINSON, Secy,
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CONTRACTS FOR RAILS,
AT A FIXED PRICE OR ON COMMISSION,
DELIVERED AT AN ENGLISH PORT,
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On board ship at Liverpool, or Welsh port.
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Its density is greater,
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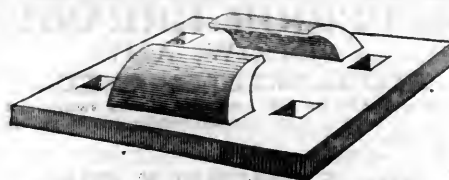
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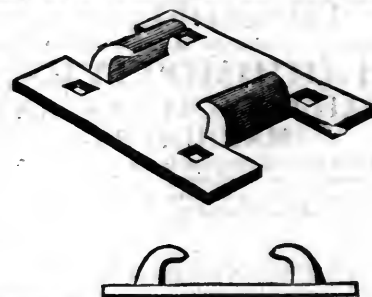
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BRASS and IRON CASTINGS; LOCOMOTIVE TYRES welded and blocked to exact sizes, and every thing connected with the building or repairing of Locomotives furnished on short notice.

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PLATE CAR WHEELS and CHILLED TYRES, equal to any produced in the country.

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WARRANTED NOT TO GUM

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The BURNING OIL will burn in any lamp that will burn Sperm, lasting longer, and burning without smell or smoke.

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Several have attempted to imitate our Oil, calling it "METALLIC OIL," as well as giving it a similar appearance; and we would CAUTION buyers against them, and advise them to see that our brand—

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4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

Also,—

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Buyers are requested to give this OIL a trial, as it is believed that it will be found the

CHEAPEST, CLEANEST AND BEST OIL FOR BURNING,

(all things considered), in the market.

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Parties ordering, will please state the kind of box, or description of machinery.

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IMPROVED ENGINE and SIGNAL OIL,

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PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Sperm Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 3.]

SATURDAY, JANUARY 15, 1859.

[WHOLE No. 1,187, VOL. XXXII.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, January 15, 1859.

London Correspondence.

26, THROGMORTON STREET,
LONDON, December 17th, 1858. }

To the Editor of the AM. RAILROAD JOURNAL.

DEAR SIR,—Your remarks upon the unnatural combinations for procuring the foreclosure of the mortgages executed by the Marietta and Cincinnati Railway Company have attracted much attention here, and probably some better scheme may be adopted for the benefit of the parties interested. That the second mortgage should take so prominent a position, to the detriment of the first mortgage holders, seems most unjust, and it is to be hoped the laws of the United States will discountenance so inequitable an arrangement, if there be even one dissenting first mortgage holder to protest against it. The holders of upwards of \$200,000 first mortgage bonds object to the right of Mr. Hallet to compel them to agree to his terms, more particularly as the threat has been held out, of their obtaining only their proportion

of the nominal sale of the road if they do not fall into his proposal.

Considerable excitement has occurred in the market, in reference to the shares of the Illinois Central Railway, in consequence of the renewed report in the New York papers, of a call of \$20 per share, to be made upon the share capital of that Company; and a broker who is largely interested in the line condemns the conduct of the deputation of London shareholders, for withholding the report of the condition of the Company's finances, as supplied to it by the Directors, when the deputation visited America. There certainly must be some great error as to the amount of call. Certainly \$5 per share would amply suffice for the current year, if there is any dependence upon the accounts hitherto presented. Our great authority, "The Times," is setting up this line as the model of American railways, overlooking the fact that it was more of a land or State speculation than a commercial enterprise. From Cairo to Chicago could never have been any very great route of commerce, otherwise, now that a railroad connects the two cities, one would have sprung up. The line may pay as a local line, but its great length will possibly prove a bar to a profitable through traffic for freight. The report of the London deputation recommends an issue of bonds in the place of a call upon the share capital, but it is understood here that if the committee of London shareholders does not provide the money required by the Company, the Directors will make the call of \$5 per share. At any rate, the known want of money has affected the value of the Company's shares, and this week they touched the lowest price they have yet reached in the London market.

A fair amount of business has been done this last week in State Stocks, first class American Railway Bonds, the Construction Bonds of the Illinois Central, the New York Central, and the Pennsylvania Central. The Illinois Central 7 per cent. construction bonds have officially marked 80½, 81½, and 82; Freeland's, 82. The shares, 29½, 30, 32, 31, 33, 32. Michigan Central Sinking Fund Bonds have marked 87½, 86½; New York Central Bonds close 1 per cent better, and the shares 2 per cent. better, the last price being 78½; New York and Erie Sinking Fund Bonds have gone up one per cent., and the Company's shares mark 16½,

and are one per cent. better than last week; Pennsylvania Central Shares have also advanced one per cent.

Yours truly, &c.,

WILLIAM LANCE.

New York and Erie Railroad.

REPORT FOR 1858.

The accounts of this Company for the fiscal year ending 30th September, are herewith submitted. In judging the results they present, it must be borne in mind that the past fiscal year has been one of unparalleled trials and difficulties to most of the railroads of the country. It was inaugurated by the financial crisis in October, which caused the suspension, not only of this and so many other Railroad Companies, but also of nearly all the Banks of the Union. The annihilation of credit both here and in Europe, which followed, arrested suddenly all commercial and industrial operations, greatly reducing the traffic of the country, and thereby most injuriously affecting the revenue of all railroads. The agreement between the four great lines of Railroads sustained, for a while, the rates of transportation, notwithstanding the limited amount of traffic offering; but in December last, the competition between the great lines recommenced, producing the usual and inevitable result: a gradual but steady and important reduction in the rates of transportation, further increased on the opening of inland navigation, by the competition of canal forwarders, who were enabled to reduce the rates of transportation unusually low in consequence of the important reduction made in the Canal Tolls. This Company made every possible effort to arrest this ruinous and constantly increasing reduction in the rates of transportation, but without success, and finally, in self-defence, was forced, in June last, to reduce the rates of passenger fares. Thus, a greatly reduced traffic had to be done at unprecedentedly low rates, whilst the condition of the road and equipment, rendered large expenditures imperatively necessary, to restore them to the condition required for the safe and economical administration of the road.—The embarrassed finances of the company were burthened by the interest on \$1,750,000 expended in the purchase of lands and the construction of the Tunnel and Docks in Jersey City, whilst the unfinished condition of these valuable improvements prevented the Company from deriving the slightest benefit from them. Numerous old claims and law suits were pressing on the company, which, when adjusted, further burthened its finances. A large portion of the fuel consumed during the year, was of inferior quality, purchased at high prices, so long since, that it had partially decayed, and which had to be removed at considerable expense because lying at points where it could not be used. The use of inside bearing journals, condemned by

every practical machinist, rendered it impossible to reduce essentially the expenditure for oil and for repairs of running gear, without first altering the entire equipment of the road. These are some of the reasons why the revenue of the Company is less than it has been since the year 1852-53, whilst the expenditures reach a per centage exceeding that of any previous year.

The gross revenue of the year amounts to \$5,151,616 43

Less:—

Ordinary expenses, including taxes, loss on propellers charted, fuel destroyed, etc. \$3,871,908 69

Extraordinary expenses, doubtful assets, depreciat'n of wood, filling cascade 85,732 60

Construction account.. 24,952 47

3,982,593 76

Applicable to interest and rent of

Union and Chemung Railroads... \$1,169,022 67

Whereas, these items amount to 1,977,651 23

Leaving a deficit of \$808,628 56

Less profit on bonds purchased for

Sinking Fund and interest on bonds

held by Sinking Fund 117,610 58

Actual deficit on the year's operations, \$691,017 98

PROOF:—

Increase in funded debt \$1,547,016 55

Do. accounts payable 182,143 32

Decrease in materials 60,658 94

Do. fuel 254,450 82

Do. other assets 48,412 96

Do. bills and accounts receivable 174,851 08

Total \$2,269,532 67

Less:—

Increase in Long Dock \$229,040 78

Do. cash & cash

items 23,249 35

Decrease of bonded debt, 76,000 00

Do. bills payable, 1,250,224 56

1,578,514 69

Increase of liabilities and decrease

of assets in the year \$691,017 98

The gross revenue and the expenditures are both

increased \$175,595 38, by charging transportation

on all material for Company's use. This has been

done to attract the attention of employees to this

important item. Formerly materials were often

transported great distances to effect a saving in

first cost, while the expense of transportation far

exceeded the nominal saving.

	1856-'57.	1857-'58.	Decr.
Freight moved, tons	978,069	816,964	16½

	1856-'57.	1857-'58.	Decr.
Freight moved 1 mile, tons ...	166,775,979	165,895,635	*½

	1856-'57.	1857-'58.	Decr.
Pass'gers carried, 1,016,086½		793,661½	23½

	1856-'57.	1857-'58.	Decr.
Do. carried 1 mile	85,362,657	64,931,456	25

	1856-'57.	1857-'58.	Decr.
Miles run by fr't trains	1,736,846	1,784,991	*2¾

	1856-'57.	1857-'58.	Decr.
Do. run by passenger trains ..	1,315,825	1,216,378	7½

* Increase.

With a decrease in passengers moved of 23½

per cent., the miles run by passenger trains are

only decreased 7½ per cent., as it was impossible

to reduce the number of trains below a certain

point; and with a decrease of 16½ per cent. in

the tonnage moved, the miles run by freight

trains show an increase of 2½ per cent.—the

through traffic having formed an unusually large

portion of the whole.

This result seems discouraging, but under the

circumstances what else could have been expected?

In the accounts annexed no attempts have

been made to present the results in a more favor-

able light than the facts warrant. In them, as in everything else, the naked truth is laid before you. During the whole year the future has in no case been sacrificed to the present. On every occasion the difficulties, as they arose, were fully met and firmly grappled with, instead of being set aside and deferred to some future day to return with greater intensity. Whilst all possible efforts have been made to reduce the expenditures, it has been kept constantly in mind that true economy required that the road and equipment should be in the highest possible condition; since a railroad, like any other machinery, can only be worked advantageously and economically when in perfect condition. With this view, notwithstanding the embarrassed condition of the finances of the Company, the filling of the chasm at Cascade Bridge has been commenced—the road-bed has been greatly improved, particularly by ballasting many portions of the Road not heretofore ballasted—a large number of new ties, placed much closer than originally, and a large amount of new rails of superior quality, manufactured expressly for this Company, have been laid in the track. By reference to the detailed statement it will be seen that the expenditures were

	1856-1857.	1857-1858.	Incr.
Repairs of Track. \$776,436 54	\$936,546 55	21	
Do. bridges. 46,096 23	84,300 35	83	
Do. stations, &c. 34,682 09	40,972 46	18	
Do. cars 392,271 21	471,122 27	20	
Damages for injuries to persons. 15,225 77	33,975 12	123*	
		Dec.	
Office and station expenses..... 414,965 04	333,466 64	19	
Cost of running.. 1,131,472 67	987,926 55	13	
General expenses, loss and damage of goods & baggage and contingencies 225,025 24	213,860 64	19	
Repairs of engines & tenders, tools and machinery in shops..... 489,815 09	419,151 83	14½	
Incidental & miscellaneous expenses..... 288,822 94	207,878 58	28	
	\$3,844,812 82	\$3,729,200 99	

The decrease in the expenditure for the administration of the Company and its traffic is \$117,816 74, whilst in the repairs of the track and roadway, bridges and cars, which maintain or increase the value of the property of the Company, there has been an increase of \$283,455 56 over the already large expenditures of the previous year for the same object. The large expenditures for the two past years on the road bed and equipment, prove conclusively the folly of attempting to economize by deferring the repairs of these important departments. For every dollar economized by such means, several dollars have to be expended ere long. Of the extraordinary expenditures, \$16,909 74 are for Cascade embankment; \$22,287 82 for depreciation on old wood remaining on hand on the 30th September; \$39,153 54 doubtful assets previous to 1857. All the extraordinary expenditures, as well as those strictly belonging to the construction account, have been deducted from the gross revenue of the year, and thus form part of the deficit. At no previous period have so few unadjusted claims been outstanding against the Company. The reduction in the working expenses are far from being as great as they should be, but it must be remembered that a system which has existed for years, cannot be altered at once. In the course of the present fiscal year, the road and equipment will be further improved, which will greatly contribute to reduce permanently the working expenses.

During the past year experiments have been

* The consequence of the unfortunate accident at Shin Hollow, which threw two cars down an embankment.

made to substitute coal for wood, with satisfactory results, and ere long coal will no doubt, be generally consumed, with an important saving to the Company.

The entire indebtedness of the Company was—

	Sept. 30, 1857.	Sept. 30, 1858.
Funded debt.	\$24,891,000 00	\$26,438,016 55
Bills payable.	1,982,482 42	732,257 86
Accounts payable, including past due coupons, less cash and cash items, and acc'ts receivable.....	342,934 34	678,678 39

Less, bonds in sinking fund 1,386,000 00 1,462,000 00

Total indebtedness, \$25,830,416 76 \$26,386,952 80

The acceptances endorsed by D. Drew, Esq., have been reduced from \$1,500,000 to \$314,233 46.

The earnest and repeated appeals made to you to extricate the Company from its embarrassments, resulted in securing to the Company only \$29,505 !! although \$2,000 of fourth mortgage bonds were offered for every \$1,000 advanced. This indifference to the welfare of the Company, on the part of those most directly interested, was most discouraging to the Directors and officers, and left them to struggle through the difficulties without other assistance than the subscriptions to the fourth mortgage bonds. My visit to England last winter secured subscriptions to the new loan of \$1,500,000, which, with those obtained here, have been of great advantage to the Company, by reducing the floating debt which pressed so heavily on its finances. Up to the 30th September last, only \$3,020,000 of the new loan had, as yet, been issued. It is really surprising that the unsecured bondholders have not availed themselves more promptly of the undoubted advantages offered them by the new loan. Out of \$10,600,000 unsecured bonds, in the hands of the public, \$3,000,000 were offered the privilege of conversion into fourth mortgage bonds, and \$3,000,000 into fifth mortgage bonds, on condition of paying \$3,000,000 in cash or indebtedness of the Company, in exchange for fourth mortgage bonds at par. The fourth mortgage bonds offer ample security in any event, for the entire issue of bonds under the four mortgages, is limited to \$19,000,000, the annual interest on which is so moderate in amount, that there can be no doubt of the ability of the Company to earn it under any possible circumstances.

The second mortgage bonds of this Company, amounting to \$4,000,000, mature on the 1st March next. In the present condition of the finances of the Company, it is out of the question to reimburse them on that day, but as these bonds are most amply secured, it is proposed to allow the holders to retain all their present rights, as in the case of any other real estate mortgage past due, and to continue to pay them the interest promptly as it matures, on the first days of March and September, until such time as means can be provided to reimburse them, which will be done at the earliest possible moment. This course will entail no sacrifice on the Company, or on the holders of these bonds, for the latter, in the present condition of the money markets of the world, would find it impossible to reinvest their capital, in securities at par, offering equal security and productiveness. The entire amount of the two first mortgages is only \$7,000,000, for which is pledged property, which has cost over \$38,000,000. It certainly cannot be the interest of any of the creditors of this Company to involve it in litigation, which thus far it has fortunately escaped, as this would at once reduce the market value of its securities, and eventually render many of them, as well as the stock, entirely worthless. A temporary advance to the Company, at the present moment, of five per cent. on your shares, would assure the prompt completion of the tunnel and docks at Jersey City, and probably add ten per cent. to the market value of the shares and bonds of the Company, as the facilities for the transport-

tion of merchandise and produce to and from the West, which these improvements will offer, would greatly increase the traffic of the Company and enable it to meet all its engagements. I cannot press too strongly on you the importance of promptly finishing these works. If they be allowed to linger in their present unfinished state, both yourself and the unsecured bondholders will be greatly and, possibly, irreparably injured. The Directors and officers of your Company will continue their efforts to extricate it from its embarrassments, but the success of their efforts, if unaided by you or other parties in interest, will depend upon circumstances beyond their control. With the improvements in Jersey City completed, and the road and equipment in proper condition, any ordinary year's traffic will enable the Company to meet all its engagements, and to take that prominence which the magnitude of the work and its geographical position clearly indicate as the future.

CHARLES MORAN, President.

New York, Dec. 30, 1858.

Transportation for the year ending September 30, 1858.

EARNINGS.	Total.
From freight	\$3,843,310 77
From passengers	1,182,258 27
From storage	1,929 34
From telegraph	9,645 77
From rents	15,851 55
From hire of cars	3,934 73
From mails	94,686 00
Total earnings	\$5,151,616 43
Expenses, including taxes ..	3,791,457 52
Net earnings	\$1,360,158 91

TRANSPORTATION EXPENSES.

Distribution of Account. Year end'g

	Sept. 30, 1858.
Office and Station Expenses:—	
Office expenses and stationery	\$41,866 12
Agents and clerks	146,600 83
Labor, loading and unloading	145,499 69
Cost of Running:—	
Porters, watchmen and switchmen	53,359 64
Wood and water station attendance	8,934 58
Fuel, first cost and labor	471,040 34
Passenger conductors, baggage and brakemen	67,149 29
Freight conductors and brakemen	113,233 40
Passenger enginemen and firemen	68,462 95
Freight do. do.	121,863 55
Oil and waste for passenger engine and tender	19,557 92
Do. for freight engine and tender	36,532 73
Do. for passenger and baggage cars	3,665 87
Do. for freight cars	24,026 28
General Expenses:—	
Loss and damage of goods and baggage	34,340 92
Damages for injuries to persons	33,975 72
Do. to property	3,104 23
General superintendence	69,051 92
Contingencies	107,363 52
Repairs of Engines and Cars:—	
Engines and tender, passenger	120,519 42
Do. freight	238,114 33
Passenger and baggage cars	140,771 02
Freight cars	330,351 25
Tools and machinery in shops	30,189 53
Incidental expenses about shops	30,328 55
Repairs of Track and Roadway:—	
Road-bed	81,491 27
Track	838,347 91
Fences, gates, etc.	16,707 87
Repairs of Structures:—	
Truss bridges	84,300 35
Passenger, wood and water stations	29,764 41
Engine and car house, machine and workshops	10,409 82
Rents (dwellings)	798 23
Incidental:—	
Superintendence and office expenses ..	822 50
Taxes	62,256 63
Contingencies	10,665 76

Miscellaneous:—

Ferry	103,115 35
Expenses of operating telegraph	44,749 74
Express expenses	48,525 23
Total	\$3,791,457 52
Comparative Statement of Balances of General Ledger, Sept. 30, 1857, and Sept. 30, 1858.	
CREDITS. Sept. 30, 1857. Sept. 30, 1858.	
Capital stock issued	\$11,000,000 00 \$11,000,000 00
Funded debt	24,891,000 00 26,438,016 55
Bills payable	1,982,482 42 732,257 86
Accounts payable	724,669 88 908,812 20
Profit and loss	483,316 16
Total	\$39,081,468 46 \$39,079,086 61
Increase. Decrease.	
Funded debt	\$1,547,016 55
Bills payable	\$1,250,224 56
Accounts payable ..	184,142 32
Profit and loss	483,316 16
Total	\$2,381 85
DEBITS. Sept. 30, 1857. Sept. 30, 1858.	
Construction	\$34,033,680 16 \$34,058,632 63
Union Railroad improvement	435,643 77 435,613 77
Cash & cash items	21,467 71 44,717 06
Materials	547,336 05 486,677 11
Fuel	572,371 70 317,920 88
Long Dock Co.	744,042 30 973,083 08
Other assets	372,773 07 324,360 11
Bills and accounts receivable	360,267 83 185,416 75
Discount on bonds, 1875	607,885 87 592,615 29
Sinking Fund	1,386,000 00 1,462,000 00
Profit and loss	198,019 93
Total	\$39,081,468 46 \$39,079,086 61
Increase. Decrease.	
Construction	\$24,952 47
Cash and cash items ..	23,249 35
Materials	\$60,658 94
Fuel	254,450 82
Long Dock Company ..	229,040 78
Other assets	48,412 96
Bills and accounts receivable	174,851 08
Discount on bonds, 1875	15,270 58
Sinking Fund	76,000 00
Profit and loss	198,019 96
Total	\$2,381 85
Balances of General Ledger, September 30, 1858.	
Construction	\$34,058,632 63
Union Railroad improvement	435,643 77
	\$34,494,276 40
Cash and cash items on hand	\$44,717 06
Materials on hand	486,677 11
Fuel on hand	317,920 88
	849,315 05
Owners of Lake Erie propellers	\$170,013 12
Owners of Lake Erie steamers	40,000 00
Rolling stock, etc., bought of Can. & Niagara Falls R.R. Co.	100,000 00
Real estate	4,496 32
Bonds Quincy & Toledo R. R.	500 00
Bonds Buffalo, Corning & New York R. R.	9,000 00
Bonds of the City of Toledo	100 00
Discount on bonds due 1875	592,615 29
Sinking Fund	1,462,000 00
Long Dock Company	973,083 08
Rolls and accounts receivable	185,667 42
Profit and loss	198,019 93
Total	\$39,079,086 61

Capital stock issued, including dividend No. 6	\$11,000,000 00
First mortgage bonds, due 1867	\$3,000,000 00
Second mortg. bonds, due 1859	4,000,000 00
Third mortg. bonds, due 1883	6,000,000 00
Fourth mortg. bonds, due 1880	3,020,511 55
Fifth mortg. bonds, due 1888	1,500 00
	16,022,011 55
Convertible bonds, due 1871	\$3,423,000 00
Do. due 1862	3,001,000 00
Sinking Fund bonds, due 1875	3,925,500 00
	10,349,500 00
Acceptances, due 1860	40,000 00
Seven per cent. certificates	26,505 00
Bills payable	732,257 86
Accounts payable	480,762 20
Unpaid interest on mortgage bonds ..	159,425 00
Unpaid interest on unsecured bonds ..	268,625 00
	1,707,575 06
Total	\$39,079,086 61

Terre Haute and Richmond Railroad.

We have received the tenth annual report of this company from which we learn that during the fiscal year ending November 30th, there were surrendered and converted into capital stock fifteen thousand of the company's seven per cent. bonds increasing the capital stock to \$1,375,450. The bonds outstanding are \$235,000. The aggregate of stocks and bonds is \$1,611,450.

The gross receipts from transportation for the year has been:

From Passengers	\$189,097.50
" Freight	164,514.53
" Mails	6,083.34
" Express	9,873.61
" Coal	9,490.00
" Miscellaneous	1,116.53
	\$380,274.60

And the expenditures were:

Train expenses	\$31,409.09
Fuel	19,110.44
Oil, waste, tallow, etc.	3,279.14
Repairs of road	44,066.80
" " buildings	3,203.32
" " engines and cars ..	42,593.58
" " fences	3,949.60
" " bldgs. culverts, etc ..	18,697.81
Depot expenses	15,044.92
Salaries of officers	5,300.00
Miscellaneous	7,171.04—198,825.74
	\$186,418.86

Profit for work done in machine shop for other roads

Net earnings

Less taxes, interest and dividends

Surplus earnings

The equipment of the road consists of 18 engines; 17 passenger, 8 baggage and express, and 290 freight, stock, coal, and gravel cars.

The average cost of engines per 100 miles run has been:

Repairs of locomotive	\$6.43
Oil, waste, tallow and packing yarn .....	.77
Fuel, (8,500 cords wood at \$2.20)	7.34
Wages of engineer, fireman and cleaner	6.34
	\$20.88

This road has done a profitable business during the past year notwithstanding the general depression, enabling the board to declare two dividends of 5 per cent. each, amounting in the aggregate to \$187,645.

The masonry of the bridges has been completed, and nearly the whole road laid with new ties and fresh ballasted.

Passengers to the number of 129,423 have been carried over the road, without injury to any one.

Although the season has been remarkable for freshets, not a bridge or culvert has been injured or a train delayed.

GENERAL STATEMENT.

Capital Stock	\$1,376,450 00
Bonds 7 per cent.	235,000 00
Dividends unpaid.	530 14
Dividends declared.	68,822 50
Surplus account.	166,187 34

\$1,846,989 98

Construction \$1,585,809 22

Union Depot and Track,

Ind. 25,640 78

\$1,611,450 00

Evansville and Crawfordsville R. R. stock	24,429 89
Atlantic and Mississippi R. R.	525 00
M. & Indianapolis R. R. Inc. Bonds.	1,600 00
Real Estate for wood	2,601 10
Material.	33,399 77
Fuel	18,000 00
Railroad Iron	5,400 00
Due for U. S. Mail	3,802 09
Bills receivable:	
Terre Haute and Alton Railroad.	63,859 82
Sundries	2,728 24
Treasurer	79,194 07

\$1,846,989 98

The following gentlemen have been elected directors of the road for the ensuing year:

E. J. PECK, *President and Superintendent.*

CHAS. WOOD, *Secretary.*

JOHN SCOTT, *Treasurer.*

Directors.—Chauncey Rose, James Farrington, Demas Deming, W. H. Thornburgh, E. J. Peck, A. McGregor, H. Ross, Chas. Wood, William K. Edwards.

Maryland Coal Trade.

We learn from the *Cumberland Civilian* that there was shipped from the coal region of Alleghany county, during the past year, by the several Companies, the following number of tons.

Cumberland Coal and Iron Company	74,060
Hoffman Mining Company	66,441
Etna Coal Company	16,071
Frostburg Coal Company	23,156
Borden Mining Company	75,573
Alleghany Coal Company	20,311
Daniel C. Bruce	1,312
George's Creek Company	32,336
Franklin Coal Company	84,222
Potomac Coal Company	13,393
Barton Coal Company	21,994
Swanton Coal Company	74
Piedmont Mining Company	21,804
American Company	129,082
Detmold	34,622
Hampshire Company	64,305
Midland Company	349

Total 642,725

Amount shipped for 1857 612,291

Increase in 1858 30,434

Of the above amounts 277,293 tons were from the Frostburg region, and 365,432 tons from the Western port region. The total shipments since the commencement of operations in 1842 reach 4,933,687 tons, of which 1,631,489 were from the

George's Creek Region; 1,871,963 from Brad-dock's Run Valley, and 1,540,184 from Jennings's Run Valley.

Journal of Railroad Law.

CONTRACTS.—AGENTS' AUTHORITY.

It is a general rule of law that one person cannot act at once as agent for two contracting parties in any matter requiring the exercise of judgment. Nor can he purchase for himself, while he sells as agent, nor purchase as agent while he sells for himself. Thus if he is agent for the sale of lands he cannot purchase them for himself, making the sale as agent. Thus a guardian cannot buy for his own use the lands of his minor ward, nor sell to himself as guardian lands belonging to himself. And it makes no difference that the transaction is entirely honest or even advantageous, that it is free from the least suspicion of fraud, that the price asked or paid is in all respects fair. If the party represented by the agent in such transaction objects, it is enough the bargain is at an end, the contract is no contract. The law in other words declares that it takes two persons to make a bargain and both must be fairly represented. They cannot be represented by the same person. The case of the New York Central Insurance Company *against* the National Protection Insurance Company is a curious illustration of this rule. In this case George F. Stevens was the local agent of the National Protection Insurance Company at Cherry Valley and was also the Secretary and a director and a member of the executive committee in the New York Central Insurance Company. In June, 1852, the directors of the latter company passed a resolution to confine their future business to farm property and detached and out-buildings, and directing the secretary to reinsure all remaining city risks, etc., as the executive committee might think advisable. Mr. Stevens thereupon wrote to the secretary of the National Protection Insurance Company the following note: "J. M. Wheeler, Esq., Dear Sir, I had occasion to use one of your policies yesterday, but owing to their being mislaid, whilst my office was being repaired, I was unable to find them. If you will send me some, I think I can give you quite a number of risks on property where our company have risks, and on re-insurance. Very respectfully, yours, G. F. Stevens." The secretary of the defendants thereupon forwarded to Stevens, by mail, twenty blank policies, signed by the President and Secretary, and requiring for their validity the countersignature of Stevens as agent. The secretary's letter inclosing them, directed that "in all policies of reinsurance" a particular clause should be inserted, which was accordingly inserted in the policy in question. When the blank policies were received, Stevens filled up and countersigned, as defendant's agent the one in suit, and placed it in the depository where the policies of the plaintiffs were kept.

The defendants among other reasons insisted they were not liable, for the reason that Stevens being the Secretary and a director of the plaintiffs, could not, as agent of defendants, make a contract between the two parties which would bind them. The judge overruled the objection and directed a verdict for the plaintiffs for \$2,000, and the interest.

Upon appeal to the Court of Appeals, however, this judgment was reversed upon the ground that

the contract being in effect made by Mr. Stevens as agent for the one company with Mr. Stevens as agent for the other was invalid. The following is all of the opinion relating to this question.

DENIO, C. J.—It has been settled by a long course of adjudications in the courts of equity, that a trustee or agent of one person cannot make a valid contract respecting the subject matter to which the trust or agency relates, where he has a personal interest. His constituent, it is said, is entitled to have all his skill and judgment employed in his service; but if he is himself the other party to the contract, the utmost which could be expected from a very honest man would be the ordinary fairness of an umpire. The English cases are for the most part collected in *Paley's Principal and Agent*, by Lloyd, '33, and the notes. The courts of this State have followed the principle of these cases with great constancy, and the rule may be considered perfectly well settled. (*Terrey vs. the Bank of Orleans*, 9 Paige, 663; *Van Epps vs. Van Epps*, *id.*, 237 *Hawley vs. Cramer*, 4 Cow., 736; *Bostwick vs. Atkins*, 3 Comst., 53.) It is not necessary for a party seeking to avoid a contract on this ground to show that an improper advantage has been gained over him. It is at his option to repudiate or to affirm the contract irrespective of any proof of actual fraud. The principle has been most frequently applied to executed contracts and to sales of land or goods, but in its nature it is equally applicable to executory agreements and to other subjects. The parties to the contracts in this case are both corporations, and must of course transact their business through the instrumentality of agents; and Mr. Stevens was the agent of both parties. The plaintiffs were entitled to all his skill and ability, and the defendants had the like claims upon him. Neither required the services of an indifferent person, whose object might be to secure equal advantages to both the contractors. No one will contend that he, as the defendants' agent, could have made a contract to insure himself; but his duty to the plaintiffs required that he should act in their behalf with all the sagacity and discretion which a fair man would have exerted in his own business. There was, therefore, a manifest inconsistency in his attempting to negotiate this insurance as the agent for the insurers and the assured. The precise case of one person assuming to act as the agent of both parties has been considered as within the rule. (*Copeland vs. Mercantile Insurance Co.*, 6 Pick., 198; *Story on Agency*, § 211, *Paley on Agency*, by Dunlap 33 and note [3]; *ex parte Bennett*, 10 Ves., 381.) It is unnecessary to go the length of saying that there was no contract, in strictness of law, though there are some cases which hold that where a bargain is made by a person representing both parties as the agent of each, it is simply a nullity for want of the *aggregation* which is necessary to the existence of a contract. (*Florence vs. Adams*, 2 Robinson's, 556; *Beal vs. McKinnan*, 6 Lon. R., 407.) It is enough for the present case to hold that this policy was made under circumstances which would enable the defendants to avoid it upon the principles of equity, and that it is sought to be enforced in a court where these principles are among the grounds of decision. The same question now presented lately arose upon a policy of insurance in the Supreme Court in the Fifth District, and

that court held the contract void.] (Utica Ins. Co., vs. Toledo Ins. Co., 17 Barb., 132.) The opinion by Mr. Justice Allen, contains a sound exposition of the law.

The letter of Mr. Stevens to the defendants' secretary did not disclose his connection with the plaintiff's company.

What is said as to "risks on property where our company have risks" would not necessarily or probably be understood to refer to a company of which the writer was an officer. The expression would naturally be regarded as having reference to an insurance company located in the village in which the writer resided. But if this were otherwise, the answer of the secretary did not authorize the policies which he sent to be issued to that or to any other company in particular, or in a case where it would not be lawful to use them. If it should be shown on a future trial that the officers of the defendant's company knew or had information of the fact that Mr. Stevens was the secretary of the plaintiffs, it will raise a different question from the one now discussed and elicited.

Steubenville and Indiana Rail Road.

The following gentlemen have been elected Directors for the ensuing year: Thos. L. Jewett, James Collier, James Turnbull, Wm. Kilgour, Jas. Parks, Joseph Means, Chancey Dewey, Wm. K. Johnson, Geo. W. Adams, Willis Robbins, Wm. B. Hubbard, Samuel T. Canby and Robert H. Nugen.

New York City Banks.

We give below a valuable compilation of the Bank movement of New York city for some years. The statement of January 1st, 1859, as compared with that of January 2d, 1858, shows changes as follows:

Loans & discounts	\$127,549,983 Inc.	\$29,034,336
Specie	27,129,725 Dec.	1,432,221
Net Deposits and circulation	98,538,281 Inc.	27,014,011
Average daily exchanges	20,606,551 Inc.	7,005,194

Jan. 2, 1858, the per centage of coin to net liability was	40
Jan. 1, 1859, the per centage of coin to net liability was	27½

Showing that the specie reserve has been reduced	12½
That net liability has been increased	37½

And a reduction comparative strength of position of	50
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The loans and discounts have been increased	29½
And the specie decreased	5

Loans and Discounts.

1855, Jan. 4,	\$82,244,706.	Aug. 18,	\$101,154,000
1856, " 5,	95,863,890.	" 1,	112,221,562
1857, " 3,	109,149,153.	" 8,	122,177,252
1858, " 2,	98,543,983.	Dec. 19,	127,055,010
Aug. 22,	124,341,827.		
Oct. 9,	128,599,249.		

Loans and Discounts.

At their maximum.	
1855,.... Aug. 18th—An increase of 23 per cent.	
1856,.... " 4th " 17	
1857,.... " 8th " 12	
1858,.... " 19th " 9	

Average increase after January, for four years, 20 per cent., which, if added to present loans and discounts—\$127,584,319 x \$25,516,864 equal \$153,101,183.

Net Deposit and Circulation.

1855, Jan. 4,	\$54,790,759.	July 14,	\$75,285,848
1856, Jan. 5,	56,223,983.	Aug. 4,	81,721,971
1857, Jan. 3,	72,279,942.	June 6,	78,071,662
1858, Jan. 2,	71,520,270.	Aug. 1,	98,554,238
Net deposits and circulation were increased			
1855.....	\$20,495,099	equal to	37½ per cent.
1856.....	15,497,888	" 28	" "
1857.....	5,791,720	" 8	" "
1858.....	27,029,968	" 37½	" "
Average 26 per cent.			

Specie.

1855, Jan. 4th	\$13,596,963.	Feb. 3d,	\$17,439,196
1856, Jan. 5th,	11,687,209.	June 23d,	17,871,955
1857, Jan. 3d,	11,172,244.	Dec. 19th,	27,957,326
1858, Jan. 2d,	28,561,946.	Aug. 1st,	35,712,107
Equal to			
1855, Specie incr'd until Feb. 3,	\$3,842,233	28	
1856, " " " June 23,	6,184,746	82	
1857, " " " Dec. 9	16,785,082	150	
1858, " " " Aug. 1,	7,150,161	25	
Average 64 per cent.			

Specie at its maximum. Decr'd from its max'm.

1855, Sept. 29,	\$9,919,124.....	43 per cent.
1856, Oct. 13,	10,382,751.....	42
1857, Oct. 17,	7,843,231.....	72
1858, Nov. 4,	26,039,277.....	27
Average 46 per cent.		

Bank Dividends.

The New Orleans Canal and Banking Co. have declared a semi-annual dividend of 5 per cent., payable Feb. 7, to New York stockholders at the office of M. Morgan & Sons, 37 William Street.

The Morris Canal and Banking Co., a semi-annual dividend of 5 per cent. upon the preferred stock; also 1½ per cent. upon the consolidated stock, payable Feb. 1st, at the office of the company, Jersey City; or at the office of E. W. Clark & Co., Philadelphia.

The Bank of the State of Missouri, a semi-annual dividend of 5 per cent., payable 20th inst., at the Bank of Commerce.

The Mercantile Bank, a dividend of 5 per cent., payable on the 15th inst.

The Williamsburg City Bank, a semi-annual dividend of 5 per cent., payable 10th inst.

The Bank of Kentucky, a dividend of 10 per cent., payable on demand at the Bank of America.

The Farmer's Bank of Kentucky, a dividend of 5 per cent., payable on demand at the Bank of America.

The Planter's Bank of Tennessee, a dividend of 6 per cent., payable at the Manhattan Bank.

The Butcher's and Drover's Bank, a dividend of 5 per cent., payable on the 15th inst.

The Southern Bank of New Orleans, a semi-annual dividend of 4 per cent., payable to northern stockholders on the 17th inst., at the Chemical Bank.

Interest on City, State, County, Railroad and Other Bonds.

The coupons of the first mortgage bonds of the New Haven and New London Railroad Company, due on the 10th day of September, 1857, will be paid at the office of the Company, in New Haven, on the 15th inst.

The interest on the stocks of the Corporation of the City of New York, due and payable February 1, 1859, will be paid on that day by A. V. Stout, Esq., Chamberlain of the city, at the Shoe and Leather Bank, corner of Broadway and Chambers Street.

The interest on the 6 per cent. Central Park Assessment Fund Stock of 1859, will be made up to

February 5, 1859, the time fixed by law for the redemption of said stock.

Insurance Dividends.

The Clinton Fire Ins. Co. have declared a semi-annual dividend of 5 per cent., payable on demand.

The Security Fire Ins. Co., a dividend of 7 per cent., payable on demand.

The Lafayette Fire Ins. Co., Brooklyn, a dividend of 7 per cent., payable on demand.

The Excelsior, a semi-annual dividend of 6 per cent., payable on demand.

The Phoenix Fire Ins. Co., a dividend of 9 per cent., payable on demand.

The Rutgers Fire Ins. Co., a dividend of 8 per cent., payable on demand.

The People's Fire Ins. Co., a semi-annual dividend of 6 per cent., payable on demand.

The New World Fire Ins. Co., a semi-annual dividend of 5 per cent., payable on demand.

The Continental Fire Ins. Co., a semi-annual dividend of 6 per cent., payable on the 17th inst.

The Arctic Fire Ins. Co., a semi-annual dividend of 8 per cent., payable on the 17th instant.

The Aetna Fire Ins. Co., a semi-annual dividend of 6 per cent., payable on the 15th instant.

The Brevoort Fire Ins. Co., a semi-annual dividend of 6 per cent., payable on the 12th instant.

The Commercial Fire Ins. Co., a semi-annual dividend of 10 per cent., payable on demand.

The Relief Fire Ins. Co., a semi-annual dividend of 6 per cent., payable on demand.

The Aetna Ins. Co. of Hartford, a semi-annual dividend of 10 per cent., payable on demand at the agency.

The Humboldt Fire Ins. Co., a semi-annual dividend of 5 per cent., payable on demand.

The Montauk Insurance Company of Brooklyn, a semi-annual dividend of 7 per cent., payable on demand.

Railroad Dividends.

The Cleveland, Columbus and Cincinnati Railroad Co. have declared a dividend of five per cent. for the six months ending Dec. 31, payable to the stockholders on and after the 1st of February next. Stockholders registered in New York will be paid at the Phenix Bank, and all others at the office of the Treasurer, in Cleveland.

The Connecticut River Railroad Co. have declared a dividend of 4 per cent. on the preferred stock, and 2 per cent. on the common stock, payable on the 1st of Feb. 1859, to holders of stock at the close of business on the 20th of January.

City Railroads.

We notice that in almost every prominent city of the country, city railroads have either been established or seriously proposed. They are in successful operation in Boston, New York, Philadelphia and Brooklyn. Philadelphia has now four distinct east and west lines, and three distinct north and south lines; making seven in all, besides four others chartered, but not yet agreed to by Councils. Bills have been reported in the City Councils of New Orleans to establish several through the prominent streets. The citizens of Camden, opposite Philadelphia, have also got up a number of projects of the kind, while in Baltimore, Cincinnati, St. Louis and Chicago, the subject is agitated with an earnestness that augurs well for its success.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,923,911	545,762	150,224	6	---
Androscoog & Kennebec	55	457,909	1,835,308	2,210,947	169,513	83,368	none	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	213,255	---	---	---
Portland, Saco & Portsmouth	51	1,396,400	---	1,396,400	1,369,373	263,717	120,900	6 94%
Boston, Concord & Montreal	93	1,056,048	1,104,586	2,160,634	824,977	324,767	174,025	6 10
Cheshire	61	1,056,048	899,813	1,955,861	355,829	113,077	---	---
Concord	55	1,500,000	8,242	1,412,676	317,050	125,664	6 49%	---
Northern, N. H.	82	3,068,400	406,285	3,068,400	355,800	186,196	4 46%	---
Concord & Passumpsic Riv.	90	1,000,000	800,000	1,784,146	177,588	78,401	none	---
Rutland & Burlington	117	2,233,376	4,138,765	4,584,008	332,113	41,668	---	---
Vermont and Canada	122	1,500,000	---	1,500,000	---	---	---	---
Vermont Central	122	5,000,000	5,270,299	10,270,299	840,204	127,389	---	---
Boston and Lowell	25	1,800,000	438,920	2,412,251	435,863	---	---	---
Boston and Maine	74	4,076,974	---	4,076,974	4,229,821	770,802	6 9 1/2%	---
Boston and Providence	43	3,100,000	239,720	3,339,455	554,176	245,134	6 1/4%	---
Boston and Worcester	44	4,500,000	599,974	4,844,779	1,018,149	388,513	6 9 1/2%	---
Cape Cod	47	681,690	291,007	1,031,625	122,960	39,899	4 49%	---
Connecticut River	50	1,591,110	275,772	1,801,244	267,710	65,096	8 65%	---
Eastern, Mass.	60	2,583,400	2,441,873	5,025,273	616,156	272,479	6 94%	---
Fitchburg	67	3,640,000	100,000	3,872,821	668,974	260,832	6 94%	---
N. Bedford and Taunton	21	600,000	---	600,000	641,686	108,225	---	---
Old Colony and Fall River	77	3,015,100	260,100	3,365,249	683,357	305,140	6 98%	---
Vermont and Mass.	69	2,232,441	1,019,148	3,241,976	240,133	42,267	13 1/2%	---
Western, Mass.	156	5,150,000	6,839,090	10,495,908	2,117,982	899,768	8 1/2%	---
Worcester and Nashua	43	1,141,000	205,668	1,351,271	216,888	82,720	4 47%	---
Providence and Worcester	46	1,510,020	300,000	1,781,048	344,773	165,044	7 8 1/4%	---
Hartford and N. Haven	72	2,356,000	944,000	3,329,602	769,065	304,835	10 1 1/2%	---
Hartford, Prov. and Fishkill	122	1,936,246	2,132,692	4,068,938	273,428	112,225	none	---
Housatonic	74	2,000,000	423,665	2,423,665	318,475	109,344	none	---
Naugatuck	67	1,031,800	624,244	1,656,044	237,416	114,237	---	---
N. York and N. Haven	62	2,990,836	2,323,240	5,314,076	1,157,055	254,699	40	---
N. Haven and N. London	60	738,258	761,492	1,499,750	88,007	30,818	none	---
N. London, W. & Palmer	66	510,700	1,052,000	1,603,300	120,671	51,644	none	---
Norwich and Worcester	66	2,122,300	724,183	2,846,483	325,417	44,547	30	---
Albany Northern	32	439,005	1,625,098	1,840,696	117,710	9,904	---	---
Black River and Utica	35	643,330	317,354	974,323	In progr.	---	---	---
Buffalo, Conn. and N. Y.	100	1,487,874	1,501,183	2,819,096	172,476	66,333	none	---
Buffalo and N. Y. City	92	798,459	2,537,849	3,401,868	288,392	31,896	none	---
Buffalo and St. Line	69	1,300,000	1,040,000	2,494,364	679,750	355,763	10	---
Canandaigua and Elmira	47	434,111	922,393	1,275,796	174,089	69,506	---	---
Canandaigua & Niagara Falls	98	1,316,000	2,279,834	3,495,832	---	---	---	---
Cayuga & Susquehanna	35	687,000	506,689	1,193,689	135,433	48,649	none	---
Hudson River	144	3,758,466	9,250,362	12,737,898	1,902,328	658,580	36 1/2%	---
Long Island	95	3,000,000	647,193	3,647,193	325,713	66,186	none	---
New York Central	586	24,182,400	14,402,635	38,585,035	6,025,413	3,041,120	8 1/2%	---
New York and Erie	404	11,000,000	28,081,468	39,081,468	6,742,007	1,464,032	none	---
New York and Harlem	138	5,717,100	4,822,498	8,758,203	1,040,393	324,891	13 1/2%	---
Northern, N. Y.	118	1,633,022	4,406,874	6,040,896	520,153	135,754	none	---
Oswego and Syracuse	35	306,130	213,025	519,155	149,373	78,764	8	---
Potsdam and Watertown	29	467,200	294,189	761,389	In progr.	---	---	---
Rensselaer & Saratoga	25	610,000	140,000	750,000	241,140	82,600	7	---
Saratoga and Whitehall	48	800,000	395,600	1,195,600	71,909	21,089	none	---
Syracuse & Binghamton	80	768,369	1,578,804	2,347,173	169,484	22,503	none	---
Troy and Boston	27	437,830	737,079	1,174,917	156,363	56,184	none	---
Watertown and Rome	97	1,500,000	700,979	2,200,979	440,290	162,037	3 1/2%	---
Belvidere Delaware	64	1,000,000	1,619,000	2,619,000	213,393	114,632	none	---
Quincy and Amboy	94	3,000,000	11,407,200	14,407,200	1,640,787	594,114	12	---
Quincy and Atlantic	60	4,483,000	1,590,854	6,073,854	1,177,889	464,642	none	---
New Jersey	30	3,485,000	738,344	4,223,344	911,617	334,951	10 1/2%	---
New Jersey Central	63	2,000,000	3,592,828	5,592,828	682,940	367,193	---	---
Morris and Essex	53	1,187,905	340,000	1,527,905	237,765	101,542	3 1/2%	---
Allegheny Valley	44	1,537,900	609,046	2,146,946	85,000	46,000	---	---
Catawba, W. & E.	63	1,700,000	1,940,000	3,640,000	219,253	52,450	---	---
Cumberland Valley	62	1,013,503	213,504	1,227,007	156,463	77,922	---	---
D. L. & W.	170	3,292,772	6,104,561	9,397,333	818,768	41,139	6 50%	---
Erie and North East	20	600,000	150,000	750,000	---	---	---	---
Philad. & Sunbury	33	600,000	1,200,000	1,800,000	89,535	53,335	---	---
Little Schuylkill	28	2,606,100	646,222	3,252,322	853,301	256,390	9	---
North Penn.	56	3,081,966	2,820,165	5,902,131	248,784	136,957	8 1/2%	---
Pennsylvania	266	13,206,625	16,890,624	29,097,249	4,855,070	1,854,927	8 1/2%	---
Phil. and Reading	90	1,275,641	4,423,600	5,699,241	3,065,622	1,683,776	10 5 1/2%	---
Phil. W. & Baltimore	98	6,800,000	2,673,450	9,473,450	1,143,853	378,576	4 36 1/2%	---
Phil. Germ. & Norristown	35	899,350	376,800	1,276,150	206,981	113,443	9	---
Pitts. & Connelleville	60	1,745,062	1,623,403	3,368,465	51,687	4,315	---	---
Pitts. & Steubenville	32	1,221,277	290,000	1,511,277	142,626	---	---	---
Sunbury and Erie	269	3,676,030	875,293	4,551,323	105,860	40,600	---	---
Williamsport and Elmira	78	1,500,000	1,990,000	3,490,000	274,654	167,458	9 1/2%	---
Baltimore and Ohio	382	13,118,902	10,896,804	24,015,706	3,856,486	1,325,237	56 1/2%	---
Washington Branch	41	1,656,000	25,000	1,681,000	369,229	124,981	6	---
Northern Central, Md.	84	2,260,000	5,411,318	7,671,318	781,688	283,284	---	---
North-Western Va.	165	468,308	5,719,229	6,187,537	284,000	000,000	---	---
Alexandria and Lynchburg	97	1,447,000	1,006,484	2,453,484	275,791	138,842	---	---
South Side	123	1,371,800	1,294,274	2,666,074	375,297	183,846	none	---
Virginia Central	175	3,122,968	1,835,170	4,958,138	653,832	295,778	none	---
Richmond and Tennessee	204	3,603,200	3,261,968	6,865,168	468,191	223,210	---	---
Richmond and Danville	140	1,977,359	625,467	2,602,826	441,918	265,336	---	---
Richmond & Petersburg	22	834,600	230,566	1,065,166	156,908	85,180	---	---
Rich'd, Fred. & Potomac	130	1,000,000	730,506	1,730,506	232,172	120,212	7	---
Petersburg and Roanoke	63	769,000	168,502	937,502	263,874	124,661	4	---
North Carolina	228	4,000,000	---	4,000,000	---	---	---	---
Wilmington & Manchester	171	1,235,838	1,215,969	2,451,807	462,578	240,938	none	---
Wilmington & Gaston	97	973,300	126,200	1,100,000	206,917	108,541	2 1/2%	---
Charlotte & S. Carol.	109	1,201,000	380,000	1,581,000	240,722	121,555	6	---
Greenville & Columbia	165	1,294,464	968,800	2,263,264	214,866	206,774	---	---
North-Eastern	102	896,650	1,814,990	2,711,640	99,404	38,272	---	---
South Carolina	203	4,179,205	3,815,525	7,994,730	1,449,803	740,335	9	---
Atlanta and La Grange	87	1,000,000	199,000	1,199,000	117,177	31,770	---	---
Georgia	211	4,166,000	478,898	4,644,898	1,088,672	325,171	7 1/2%	---
Georgia Central	191	3,725,910	191,767	3,917,677	1,122,646	583,310	10	---
Florida and Western	102	1,438,668	96,000	1,534,668	293,261	138,627	8	---
Montgomery & W. Point	116	1,414,924	992,884	2,407,808	390,834	116,171	90	---

NAME OF COMPANY.	Length of Road	Capital paid	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Brunswick and Florida, Ga.	30	161,887	483,645	645,532	In progr.	208,771	9	---
South. Western	143	1,399,100	441,292	1,840,392	805,214	298,771	2	---
Tennessee and Alabama	89	309,754	626,889	936,643	53,775	29,405	---	---
Tennessee and Mississ.	61	757,440	611,812	1,369,252	161,001	99,488	---	---
Memphis and Charleston	287	2,228,177	3,495,288	5,723,465	642,022	834,504	---	---
Mobile and Ohio.	305	6,784,849	2,066,459	10,701,428	554,382	278,428	---	---
Miss. Central	69	1,675,474	926,796	2,602,270	116,679	---	---	---
Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	264,256	150,789	---	---
N.O., Opelousas & G.W.	80	2,800,000	760,000	3,577,525	284,178	127,460	---	---
N. O. Jackson & G. N.	206	4,035,000	1,818,610	7,142,563	189,003	---	---	---
Vicksburg, Shreveport & Tex.	21	883,766	108,288	992,051	In progr.	104,992	none	---
East Tennessee and Ga.	111	1,192,974	1,735,669	2,708,428	227,365	104,992	---	---
East Tennessee and Va.	130	626,075	1,238,664	1,864,739	61,344	39,062	---	---
Nash. and Chattanooga	169	2,268,805	1,632,797	3,901,602	641,562	220,906	---	---
Covington & Lexington	98	1,354,850	3,065,917	4,420,767	426,405	220,906	---	---
Lexington and Frankfort	29	430,055	156,898	586,255	95,807	45,711	6	---
Lexington and Danville	13	694,444	71,000	765,500	In progr.	---	---	---
Louisville and Frankfort	65	741,039	625,210	1,366,295	245,750	109,059	6	---
Atlantic & Gt. Western	---	866,938	77,264	944,231	In progr.	---	---	---
Bellevue and Ind.	118	1,874,395	1,318,237	3,192,632	348,452	120,886	none	---
Clev., Col. and Cin.	141	4,748,321	90,400	4,762,320	1,149,741	511,740	9	96 1/2
Cleveland and Toledo	200	3,333,712	4,228,568	7,193,010	930,292	433,790	32 1/2	---
Clev. and Mahoning	65	---	---	1,920,958	In progr.	309,618	---	10
Clev. and Pittsburg	133	2,780,744	3,043,992	5,824,736	881,877	309,618	---	---
Clev., P. & Ashland	95	3,000,000	1,495,548	4,040,978	1,251,535	581,454	15	---
Cin., Hamilton & Dayton	60	2,166,800	1,628,092	3,130,316	487,421	260,763	---	48
Cin., Wilm. & Zanesville	131	2,421,176	3,782,040	6,696,210	225,500	30,288	---	---
Columbus and Xenia	55	1,490,450	149,000	1,632,476	403,212	181,688	10	---
Dayton, Xen. & Beire	63	437,838	422,658	860,496	In progr.	---	---	---
Dayton and Michigan	140	1,076,602	393,011	1,185,826	In progr.	---	---	---
Dayton and Western	35	310,000	700,491	1,035,173	125,940	65,253	---	---
Eaton and Hamilton	42	469,763	832,668	1,176,168	140,936	50,008	---	---
Little Miami	65	2,981,282	1,266,000	3,925,157	775,442	290,123	10	81
Sandusky, Dayton & Cin.	171	2,097,090	3,368,000	6,065,090	692,614	---	---	---
Central Ohio	138	1,627,937	6,224,656	6,496,822	570,093	164,697	none	---
Pittsb., Ft. Wayne & Chicago	123	6,247,400	9,822,650	14,279,704	1,646,359	677,787	---	20
Pittsb., Mayv. & Cin.	50	371,350	31,000	390,933	In progr.	---	---	---
Sand'y, Mansf. & Newk.	127	1,350,000	2,206,387	3,652,387	328,958	164,479	none	---
Scioto & Hocking Valley	58	403,976	509,050	888,858	In progr.	---	---	---
Spring Mt. Vernon & P.	113	1,000,000	950,000	2,194,000	In progr.	---	---	---
St. Wabash & St. Louis	242	2,968,100	7,577,500	10,542,600	Recently opened.	---	---	---
Cin., Log. and Chicago	255	4,196,697	1,006,126	2,080,433	In progr.	---	---	---
Evansville & Crawfordsv.	109	989,061	1,270,872	2,158,713	249,868	124,140	---	---
Ind. and Cincinnati	88	1,086,899	1,664,584	3,029,989	491,743	246,022	7	---
Indiana Central	68	612,350	1,261,179	1,909,911	368,189	204,685	---	---
Ind., Clev. & Pittsburg	83	834,791	1,071,684	1,826,425	253,19	86,248	none	---
Jeffersonville	74	1,014,282	694,000	1,839,676	222,737	94,318	---	---
Madison and Indianapolis	87	1,647,700	1,336,816	2,981,516	260,214	118,623	---	---
New Albany and Salem	288	2,535,121	6,281,948	7,029,949	645,827	871,402	none	---
Perry and Indianapolis	73	---	888,814	2,000,000	165,000	90,000	none	---
Terre Haute and Ind.	73	1,361,450	250,125	1,586,890	481,272	206,079	10	---
Chicago and Rock Island	182	6,248,000	1,734,318	6,028,272	1,886,196	850,639	---	60
Chicago, Burl. and Quincy	210	4,681,540	3,782,970	8,042,428	1,055,167	81,767	---	83
Chicago, St. Paul & F'd du Lac	178	2,300,000	1,326,000	3,625,000	In progr.	---	---	---
Palena and Chicago.	269	6,023,800	3,899,016	9,396,455	2,815,788	1,192,042	8	71 1/2
Illinois Central	704	6,656,438	20,811,922	23,437,689	293,066	666,972	---	71 1/2
Georgia and Opaowka	181	1,569,889	2,200,000	4,400,000	In progr.	---	---	---
Georgia & Miss. (Alt. Div.)	147	1,780,295	3,292,403	4,870,586	Recently opened.	---	---	---
Terre Haute, Alt. & St. Louis	203	3,011,166	8,925,927	8,729,784	823,767	247,757	---	---
Detroit and Milwaukee	185	838,000	1,128,964	1,968,968	Recently opened.	---	---	---
Rich. Central	282	6,067,840	8,386,639	12,847,232	2,743,768	764,995	8	61
Rich. South'n & N. Ind.	475	8,876,400	10,489,63	19,330,084	2,309,487	644,311	---	20 1/2
Green Bay, Mil. & Ch.	40	1,000,000	780,000	1,790,000	In progr.	---	---	10
Milwaukee and Miss.	235	3,440,673	4,100,583	8,051,266	882,818	372,691	---	12
Milwaukee & Water'n	12	354,861	132,000	614,238	In progr.	---	---	---
Milwaukee and Horicon	42	1,101,200	---	919,787	60,066	---	---	---
Milwaukee & La Crosse	200	7,643,974	8,314,734	15,980,703	407,197	203,284	---	1 1/2
Madison and Miss.	96	1,886,405	493,479	2,681,086	192,459	118,467	---	---
Ann Arbor & St. Josephs	131	1,664,773	6,863,000	6,533,229	In progr.	---	---	---
North Missouri	107	2,612,100	8,600,000	4,346,229	160,664	---	---	---
St. Louis and St. Joseph	163	3,319,837	8,307,720	10,466,894	663,347	313,297	---	---
St. Louis and Iron Mt.	55	1,847,358	547,419	8,042,860	Recently opened.	---	---	---
Stamans	49	743,900	---	6,664,852	1,805,819	648,133	12	117 1/2

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$388,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	92 1/2	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, Aug.	"	1859		
Central Ohio	1,250,000	1st mort. conv. east sec.	7	Div's	"	1861-64	60	70
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1865	50	55
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	82	88
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	72 1/2	75
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,500,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, Aug.	"	1861	94	96
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, Aug.	"	1860	65	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	62	55
Cleveland and Toledo	625,000	Do. convertible	7	Feb'y, Aug.	"	1863	77	82 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	60	
Do. do.	1,200,000	Do. convertible	7	April, October	"	1867	62 1/2	65
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	40	47 1/2
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	86 1/2	87
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	86 1/2	78
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1891	77	78
Fort Wayne and Chicago	1,200,000	Do. conv. till 1868	7	Jan'y, July	"	1873	98 1/2	99
Galena and Chicago	2,000,000	Do. convertible	7	Feb'y, Aug.	"	1863	90 1/2	90 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876		
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1863	87 1/2	93
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863		
Jeffersonville	800,000	Do. 2d sec. conv.	7	April, October	"	1873		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	65	82 1/2
Indianapolis & Cincinnati (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	75	82 1/2
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, Aug.	"	1865	73	76
Little Miami	1,500,000	Do. convert.	6	2 May, 2 Nov.	"	1883	81 1/2	82 1/2
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	93	99
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	92	94
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	70	80
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	70	77 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	75	78
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	8	May, Novemb.	"	1864-75		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, Aug.	"	1867		
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66		
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872		
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	101 1/2	102
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, Aug.	N.Y.	1875		
Scioto and Hocking Valley	800,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, Aug.	"	1862-72	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	89 1/2	89
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	95	97 1/2
Erie Railroad	8,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	88	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	76 1/2	78 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1880	62	63
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, Aug.	"	1875	41 1/2	42
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, Aug.	"	1871	41	47 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	41	41 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, Aug.	"	1860-70	103 1/2	104
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	94 1/2	95 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	75 1/2	76
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	89	89 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acres-priv. 7 shares	7	March, Sept.	"	1860	87 1/2	88
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	85 1/2	87
New York and Harlem	1,300,000	Do. do.	7	May, Novemb.	"	1861-72	94 1/2	95
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1866-60	93	95
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, Aug.	"	1861	85 1/2	87
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, Aug.	"	1868	74 1/2	76
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	90 1/2	90 1/2
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	16 June, 16 Dec	"	1864	101 1/2	102
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	115	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,300,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	3,459,000	Do. convertible	6	Jan'y, July	"	1870	82 1/2	83 1/2
Do. do.		Do. inconvertible	6	April, October	"	1866	73 1/2	73 1/2

CITY SECURITIES.	Int'at payable.	Off'd Asked.	CITY SECURITIES.	Int'at payable.	Off'd Asked.			
New York, 5 per ct. 1853-60	May, August, and November.	97	99	Milwaukee, 7 per ct. coup. X	Divers	50	70	
Do. 5 do. 1870-76		93	96	New Orleans, 6 per ct. cp. R.R. X	Do.	72	77 1/2	
Do. 6 do. 1883		103 1/2	103 1/2	N. Orleans, 5 per ct. cp. municip. X	Jan'y, July.	85	90	
Do. 5 do. 1880-98		90	94	Philadelphia, 6 per ct. 1876-98	Jan'y, July.	102 1/2	102 1/2	
Albany, 6 per ct. coup. 1871-81	X	105	105 1/2	Pittsburgh, 6 per ct. coup. X	Divers	62	65	
Albany, 6 per ct. coup.	X	Jan'y, July	56	70	Quincy, 8 per ct. coup. 1868	Jan'y, July	62 1/2	65
Baltimore, 6 per ct. coup.	X	Quarterly	97	99 1/2	Racine, 7 per ct. coup. 1873	10 Feb'y, Aug.	80	87
Boston, 6 per ct. coup.	X	April October	101	101	Rochester, 6 per cent. coup. X	Divers	90	97 1/2
Brooklyn, 6 per ct. coup. Long	X	Jan'y, July	101 1/2	102	St. Louis, 6 per ct. coup. Long	Do.	85 1/2	87
Cleveland, 7 per ct. cp. W.W. 1879	X	Do. do.	100	101	Do. do. Municipal	X	Do.	87 1/2
Cincinnati, 6 per ct. coup.	X	Divers	80	82 1/2	Sacramento, 10 p. ct. cp. 1862-74	Do.	37	45
Chicago, 6 per ct. coup. 1873-77	X	Jan'y, July	86 1/2	87 1/2	S. Francisco, 7 p. ct. cp. 1865, pay. N.Y.	X	May, Novemb.	60
Do. 7 per ct. coup. 1880	X	Jan'y, July	98	99	Do. 10 p. ct. cp. 1871	X	Do. do.	87
Detroit, 7 per ct. cp. W.W. 1873-78	X	Feb'y, Aug.	100	102	Do. 10 p. ct. pay. N.Y.	X	Jan'y, July	
Dubuque, 6 per ct. cp. Long	X	March, Sept.		100	Do. 6 per ct. pay. N.Y. 1876	X	Do. do.	56
Jersey City, 6 p. ct. cp. W.W. 1877	X	Jan'y, July	95	96	Wheeling, 6 per ct. coupon	X	Divers	60
Louisville, 6 per ct. cp. 1880-83	X	Divers	70	72 1/2	Do. 6 p. ct. cp. Mon. 1874	X	March, Sept.	81
Memphis, 6 per ct. coup. 1882	X	Jan'y, July	64	66	Zanesville, 7 do.	X	April, October	

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending January 3, 1882.

ROBDS.	Per cent. and Interest
Little Miami, 1st Mort.	68 1/2
Covington and Lexington, 1st Mortgage	68 1/2
Do. do. 2d do.	78 1/2
Do. do. 3d do.	68 1/2
Ohio & Miss., E. D. Construction	78 1/2
Cinc. Ham. and Dayton, 1st Mortgage	78 1/2
Do. do. 2d do.	78 1/2
Indianap. & Cincinnati, do. do.	78 1/2
STOCKS.	
Cincinnati, Hamilton & Dayton	62 1/2
Columbus and Xenia	80
Indianapolis & Cincinnati	80
Little Miami	80
Ohio and Mississippi (E. D.)	3

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending December 25th, were.....\$37,147 27
Week ending December 25, 1857 44,071 96

Decrease.....\$6,924 69
Total traffic from July 1st.....\$1,149,375 90
Same period last year 1,246,433 40

Decrease.....\$97,057 50
The earnings of the Harlem Railroad in December were:

1858.....\$92,100 32
1857..... 74,372 74

Increase.....\$17,727 58

The above result is after deducting all the amounts due connecting roads.

The December business of the Rock Island Road was as follows:

Passengers.....\$29,919 62
Freight..... 27,299 18
Mails, etc. 3,000 06

Total.....\$60,215 80
December, 1857..... 90,309 17

Decrease.....\$30,093 37

The earnings of the Cincinnati, Hamilton and Dayton railroad, for December, compare as follows:

1857.....\$42,291 40
1858..... 47,826 88

Increase.....\$5,535 48

The earnings of the Little Miami and Columbus and Xenia Railroad for December were:

1858.....\$94,670 91
1857..... 73,050 52

Increase.....\$21,620 29

The earnings of the Galena and Chicago Union Railroad Company for the month of December were:

1857. 1858. Decrease.
Freight.....\$42,159 71 \$49,602 18 *7,442 47
Passengers..... 35,642 38 28,641 77 7,000 61
Mails, etc..... 8,833 90 4,000 00 4,833 90

Totals.....\$86,635 99 \$82,243 95 \$4,392 04

Total corrected earnings for the previous month.....\$103,813 23

* Increase.

The following is a comparative statement of earnings for the month of December, 1857 and 1858, of the Buffalo and State Line Railroad:

1857. 1858. Decrease.
Passengers.....\$32,707 85 \$27,670 29 \$5,037 55
Freight..... 57,197 77 52,777 35 4,420 42
Other sources 1,150 00 1,174 20 *24 20
Totals.....\$91,055 61 \$81,621 84 \$9,433 77

* Increase.

The earnings of the Macon and Western Railroad in December were:

Passengers	\$14,037 89
Mail	866 45
Freight	22,762 25

Total	\$37,666 59
December, 1857	24,883 87

Increase

The receipts of the Michigan Southern Railroad for December were:

	1858.	1857.
Passengers	\$57,928 76	\$78,840 50
Freight	64,577 41	55,414 35
Mails	4,685 14	4,118 00
Miscellaneous, etc. ...	12,291 24	5,806 01

\$139,482 55 \$144,188 81

The receipts of the Hudson River Railroad for December were:

1858	\$197,980 14
1857	127,079 94

Increase

The following is a statement of the Pacific Railroad of Missouri for December:

Passengers	\$25,494 20
Freights	24,807 12
Mails	2,037 50

December, 1857	\$52,358 82
	44,473 88

Increase

The business of the Illinois Central Railroad for December, 1858, was:

Land Department.

Acres Construction Lands sold	2,146.68 for	\$25,927 97
Acres Interest Fund Lands sold	40.28 for	192 34
Acres Free Lands sold ...	273.30 for	3,673 16

Total sales during the month	2,460.26 for	\$29,794 47
To which add Town Lot sales		1,533 65

Total of all		\$31,328 12
Acres sold since 1st Jan'y, 1858.	52,387.62 for	\$701,155 81

Acres sold previously, 1,200,933.78 for	15,311,440 40
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Total

Construction Bonds canceled in December, 1858	\$14,500
Do. canceled previously	912,500

\$927,000

Free Land Bonds canceled in December, 1858	\$1,000
Do. canceled previously	122,000

123,000

Total Bonds canceled up to December 31, 1858	\$1,050,000
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Traffic Department.

Receipts from passengers	\$53,774 40
Do. freight	74,555 63
Do. mails	6,316 50
Do. rent of road	2,250 00
Do. other sources	3,243 48

Total receipts in December, 1858 ...	\$140,140 01
Do. do. 1857 ...	145,055 25

Total receipts since 1st Jan'y, 1858.	\$1,938,677 82
Total receipts in correspond'g period, of 1857	2,233,964 57

The earnings of the Chicago, Burlington and Quincy Railroad Company between Chicago and Burlington in December, 1858, were:—

Freight	\$53,073 55
Passengers	29,883 26
Mail and miscellaneous	1,821 83

Total

The earnings of the Quincy and Chicago Railroad Company between Galesburg and Quincy in December, 1858, were:—

Freight	\$14,896 45
Passengers	9,955 69
Mail and miscellaneous	858 33

Total

The traffic receipts on the Great Western railway of Canada for the week ending Dec. 31, was \$32,802 26; corresponding week of last year, \$39,385 71.

American Railroad Journal.

Saturday, January 15, 1859.

New York and Erie Railroad.

We have at length the Report (which we give elsewhere) of the President of this Company for the year ending Sept. 30, 1858. Notwithstanding the commercial disasters of the past year, the income of the road has suffered less than that of most of our leading lines; the receipts being \$5,151,616, against \$5,742,606 for 1857; showing a falling off of \$590,990. The loss on passengers was 343,516; on freight, \$205,476.

The total current expenses have been \$3,982,593. The net receipts consequently have been \$1,169,022. The charges upon the Company for interest and rent of leased roads have been \$1,860,041, showing a deficit for the year of \$691,017; which sum represents the increased liabilities of the Company over the past year. This is a gloomy picture. The only bright side presented, is the prospective completion of the Long Dock—an improvement which Mr. Moran assures the public, will enable the Company to earn a sum sufficient to meet all its engagements.

To complete the tunnel, and make the necessary additional improvements to render the Long Dock a convenient terminus of the road, will add at least \$1,000,000, in addition to the present indebtedness of the Company. Suppose the future charges for interest, &c., to be \$1,930,041. To meet this amount, the net earnings of the Company must be at least \$781,019 greater than the past year. In other words, the assuming for the past year, the road must increase its gross future, the ratio of net to gross earnings for earnings to \$8,457,616, or \$3,300,000 in excess of those of 1858—the net earnings being only about 23 per cent. of the gross earnings.

It is the excessive cost of working the road that is the most unfavorable feature in the future of the Road. Unless a very large reduction can be effected in expenses, we do not see how the Company is to be saved from bankruptcy.

But even assuming the Long Dock to be completed during the present year, it cannot come into use before 1860. There is no reason to suppose that the deficit for the present year will be less than for the last. In this way, nearly \$1,000,000 must be added to the Company's indebtedness, in addition to the cost of completing the improvements named. We anticipate a large in-

crease in the earnings of the road, but not till the commencement of 1860. But an annual increase of \$1,000,000 is all that could be expected under the most favorable circumstances. At this rate it would take several years before the road can be made to pay the interest on its indebtedness. We cannot regard Mr. Moran's report, therefore, in any other light than a virtual surrender of the road to the mortgage bondholders.

Perhaps it is well no longer to attempt to defer such an alternative. Certainly not if the operations of the road cannot be carried at a less than their present cost. But we believe the expenses are capable of being reduced to 60 per cent. of the gross earnings. Such a per centage for the past year would have produced \$2,061,000; a sum larger by \$200,000 than the demands upon the Company for the same period for interest, leases, etc., etc.

We see no reason why the Erie Railroad should not be operated as cheaply as the average of roads. Considering the length of its line, it has a remarkably fine one. It has a grand advantage in having cheap fuel. It has even at the present time a very large traffic, exceeding \$11,000 per mile. A considerable portion of its traffic is carried for long distances. The gross earnings of the New York Central for the past 6 years have been \$39,361,948—net, \$18,807,171, or 52 per cent. of the gross. The total earnings of the Massachusetts since 1835 have been \$100,115,489—net, \$41,463,640; showing a per centage of expenses of 57.6. A great number of the Massachusetts are short lines, with light traffic and large expenses. Their average gross earnings are \$6,617 per mile. Certainly the Erie Road, with receipts per mile nearly twice greater, ought to be operated at a similar ratio of net to gross earnings. As an average, it has more favorable grades and alignment. The drawbacks due to gauge should certainly be neutralized by the greater cheapness of the fuel used upon it. The Baltimore and Ohio Railroad, with the most unfavorable line of any great road in the world, with a very considerable portion of its income derived from the carriage of coal, at very low rates, has earned during the past six years \$21,749,916, at an expense of \$13,048,297, which is at the rate of 60 per cent. The Pennsylvania Central Railroad shows a more favorable result still.

Now we cannot see why the New York and Erie Railroad cannot be operated as cheaply upon the amount earned as the average of the New England roads, and as cheaply as the Pennsylvania, and Baltimore and Ohio, to say nothing of the New York Central, which has a more favorable line. If extraordinary expenses for two years past have been incurred to restore the road to a good condition, and have been greatly in excess of what will be required for the future, the fact should have been stated. If, on the other hand, Mr. Moran has achieved his best results, then we must say that they are far below what are possible on other roads, and what are yet possible on the Erie. We believe the expenses can be brought down to 65 per cent. of the earnings, which would produce, with the present receipts, a sum sufficient to meet all the current liabilities of the Company.

We are the more free to discuss the present management of this road for the reason that Mr. Moran signalized his taking charge of it, by introducing into its management certain principles and

maxims which, to his mind, possess peculiar value, and by assuming before the public the championship of extraordinary reforms in railway affairs. His ideas have been carried out to the letter in conducting the road of which he has charge. The degree of success he achieves may, consequently, be taken as a test of the correctness of his views. A favorite maxim with Mr. Moran is that obligations between the employer and employed are to be determined by the rule of exact equivalents to be specified in the contract between them, and that nothing outside the contract is to be taken into account. For example:—A workman in the employ of the company, stationed at Jersey City, and wishing to spend the Sabbath with his family at Goshen, asks permission to ride home on some one of the company's trains free of fare. To this Mr. Moran replies, "I have paid you your wages, according to agreement. You have no further claims upon the company. If you find it convenient to ride on our trains, you must pay the regular fare. I cannot recognize any other relations than those prescribed in the contract between us." The workman may not have a ready answer to this, but he feels that to deny him the privilege of jumping on to a freight train and riding home without charge, especially as his carriage does not add perceptibly to the cost of running it, is a mean and selfish act. It at once places him in hostile relations to the company. The mental operation that goes on in his mind, perhaps almost unconsciously to himself, is something like this. "Very well! If such be the relations between us, we will see who will make the most money out of it." He pays his fare, but for ever after takes very good care, either by indifference or direct negligence, that the company shall lose many times the amount that he pays them. In vulgar parlance, "the road may go to the devil for ought he cares." Unless it were a part of his prescribed duties, he would not raise his finger to save a locomotive from being precipitated down an embankment, or from being destroyed by a collision. As the company recognizes no obligations not specified in the contract, he recognizes none. He becomes a mere eye-servant seeking to get the largest amount of compensation for the least amount of service rendered. In other words the relations established are purely *selfish*. The fallacy in Mr. Moran's maxim consists in regarding man as a mere machine, out of which all the qualities necessary to a good servant can be enforced by the mere payment of wages. But duties cannot always be prescribed, and the most valuable are often voluntary ones, which an extraordinary emergency calls forth. For a company to cut itself off from such, is to suffer a loss greater often than the value of those rendered. Every one knows that services rendered as a mere equivalent to wages are not worth having. There are none genuine and valuable that do not spring from motives infinitely higher than the pay stipulated to be received. Every person employed on a rail road, to do his full duty, must have as his sole aim the good of the company. He must always be intelligent, always vigilant, and ready to perform any act calculated to promote its advantage, whether coming within the sphere of his prescribed duties or not. But how are such high qualities to be created and kept bright by constant exercise? They do not spring naturally out of a body of men left to

themselves, nor are they brought out by the mere reception of wages. They are qualities that respond to similar qualities first displayed by their leader. If he is not fitted to inspire them they will never be found to exist among his dependents. Imagine the leader of an army to say to his soldiers, "I have hired you to fight for me. When the battle is over, and you are paid, we are square with each other." Such orations as these never led to a victory. On the other hand, the display of great moral qualities, and the recognition of higher relations than those based upon selfishness, have often led whole armies to seek certain destruction as testimonials of respect and affection for beloved leaders, or for a principle. No road is well officered unless a similar principle actuates every person employed. We fear it does not exist in the Erie Road, nor do we think it will grow out of the relations at present established between the Company and its employees. That it does not exist, to our mind accounts for the excessive cost of operating the road, and which consumes nearly four-fifths of all earned. Maxims are very excellent things, but great disasters often result from their rigid application, without reference to the circumstances of each case. Mr. Moran says to his men—I do not want your good will; I want your services. The result in the Erie Rail Road seems likely to show how much services without good will are worth.

To Manufacturers of Hydraulic Cement.

Attention is invited to the advertisement of CHARLES B. FISK, Esq., Chief Engineer of the Covington and Ohio Rail Road, to be found in another column, inviting proposals for the manufacture of 150,000 bushels of Hydraulic Cement, to be used in the masonry now under contract on the line of the road. The time for receiving proposals is limited to the 14th prox. The office of the Engineer is at Covington, Alleghany Co., Va.

Orange and Alexandria Railroad.

The Annual Report of this Company for the fiscal year ending Sept. 30th, and which was presented at a meeting of the stockholders, held Oct. 20th, last, has been received. From this Report we learn that the receipts during the year have been—

From passengers.....	\$128,390 19
" freight	90,627 66
" Manassas Gap R. R. Co.....	24,374 58
" mails	15,482 94
	<hr/>
	\$258,875 37

And the expenses were:

For transportation	\$27,079 68
" maintenance of road...	27,638 22
" " motive power	29,763 41
" " cars	7,330 98
" salaries, taxes, losses,	
etc.....	15,090 62
	<hr/>
	106,902 91

Net earnings.....\$151,972 46
—or 59 per cent. of the gross earnings.

In December, 1857, this Company were induced to relinquish their contract with the Post Office Department for the carriage of the great southern mail between Washington and Richmond. This, together with the refusal of the Va. Central Co. to adopt a through ticket, the withdrawal of the night train, and the unusual freedom of the Potomac River from ice during the winter, which deprived the Company of the usual large receipts

derived from transporting passengers at that season, all conspired to reduce the gross earnings of the road, which were \$14,382 55 less than the preceding year; notwithstanding which, the net earnings, consequent upon the greatly reduced expenses for working the road, were \$17,855 15 more.

The receipts from freight show a steady increase over those of the previous year; the net earnings from that source alone, yielding a profit of more than six per cent. upon the cost of the road and its equipment, notwithstanding the short crops and the general depression of the agricultural interests. At the same time the excellent condition of the road and machinery has been maintained, and the trains run with regularity and safety.

A contract has been made for the construction and operation of a line of telegraph along the whole road. This will soon be completed to Gordonsville, its present terminus, to be ultimately extended to Lynchburg, when the road shall have been completed to that point.

In May last, an arrangement was effected, by which an exclusive through ticket was formed between this Company and the Virginia Central, Richmond and Danville, South Side, Virginia and Tennessee, East Tennessee and Virginia, East Tennessee and Georgia, Memphis and Charleston, Mississippi Central, and New Orleans and Jackson Companies for the travel passing over their respective lines to the Northern cities. This arrangement, which went into operation in July last, has already resulted favorably to this Company. Still greater benefit is anticipated from this travel upon the completion of the road to Lynchburg.

The receipts of the Company from all sources from commencement, as per annexed general statement, have been \$5,115,250 34; and the disbursements, \$5,015,646 16. The receipts for the past fiscal year have been \$1,281,465 84; and the expenditures, \$1,178,361 66.

During the year the Company have paid \$254,188 02 of their indebtedness on account of road as far as Gordonsville; their bills payable and unsettled accounts still amount to \$76,683 38—toward the liquidation of which, they have the following, a portion of which may be classed as unavailable:

Due on stock subscribed by individuals..	\$7,039 90
" " State of Va..	12,184 72
" freight and other bills	13,502 06
Stock of Company subject to redemption..	13,715 00
Stock held by Company	55,950 00
Materials at shops	15,645 43
Cash in banks	14,758 75
	<hr/>
	\$132,795 86

The whole funded debt of the Company is as follows:

1st Mortgage Bonds on the Road to Gordonsville.....	\$400,000 00
B'ds for wharf property in Alexandria	10,000 00
And the further permanent debt of mortgage bonds, issued on whole road, and sold on account of Lynchburg Extension	987,500 00
And do. of additional lien of 8 per cent. bonds	83,000 00
	<hr/>

Whole funded debt existing on 30th Sept., 1858.....\$1,480,500 00

The equipment of the road consists of 12 engines; 10 passenger, 5 mail and baggage, 87 freight, and 9 ballast cars. Two new passenger cars were purchased during the year,

the payment of interest on the Canal Debt, there would be a deficiency of \$365,466 33. If the General Fund debt should be included, there would be a deficiency of \$712,710 74, to be provided for in some other manner. From a statement made to me by the Auditor of the Canal Department, it appears there have been drafts made by the Canal Commissioners, up to the 30th Sept., 1858, for \$1,330,033 30, beyond the ability of Treasury; none of which have been paid; and that the amount of these drafts will, in the opinion of the Auditor, by the 1st January, 1859, reach \$1,700,000. From another source, the estimate for the same period, and for the same object, is \$2,000,000. To meet the claims upon the Treasury, actual and estimated, which relate to the Canals alone, the following sums will be required:

To pay outstanding drafts for work done on the Canals, and awards for land damages, (partly estimated).....	\$1,700,000
For one year's interest on the debt of \$12,000,000, contracted under section 3, of article 7, of the Constitution....	710,000
For the principal and interest on the temporary loan of \$200,000, due 1st July, 1860.....	220,000
Estimated amount required, under the act Chapter 263, of the Laws of 1858, to pay interest on drafts and awards, the principal of which was liquidated at the Department, prior to April 10, 1858.....	25,000
Total.....	\$2,655,000

equivalent to a State tax of nearly two mills on the dollar of the valuations of 1857.

The above estimate of \$2,655,000 does not include all the damages for land taken for the construction and enlargement of the Canal, which, it is supposed will require \$1,000,000 additional; and that \$500,000 will be required to pay the fifteen per cent. reserved out of estimates of work done under contract.

If these figures prove to be correct, obligations to the amount of upwards of \$4,000 already exist against the State for the Canals alone, (without any estimate for work yet to be performed in the completion thereof) a large part of which obligations have been created regardless of that part of the Constitution which provides that "no debt shall be hereafter contracted, by or on behalf of this State, unless such debt shall be authorized by a law for some single work or object, to be distinctly specified therein, and such law shall impose and provide for the collection of a direct annual tax, to pay, and sufficient to pay, the interest on such debt as it falls due, and also to pay and discharge the principal of such debt within eighteen years from the time of contracting thereof."

Thus, without the power to create a debt, unless first submitted to the people, a debt has been created for Canal purposes, without the means of payment in the Treasury, or at the command of those who made it; and it requires your early and deliberate consideration as to the measures necessary, and proper to be adopted, to save unimpaired the public faith; for under no circumstances will the State of New York ever refuse to acknowledge and pay, any and all just claims that exist against her, or that may have been contracted by any of her authorized agents. I regret the necessity for this exhibition of the financial affairs of the State, wherein is shown a floating indebtedness of such magnitude; but justice to a Legislature that will be expected to provide for its extinguishment, requires that it should be stated.

From information derived from the State officers, I am led to believe that \$1,000,000 for the Erie Canal; \$600,000 for the Oswego; \$200,000 for the Cayuga and Seneca; and \$300,000 for the other Canals, would essentially complete our system of Canal Enlargement, except for a portion of the Erie, where remain what are called wall benches, on which the slope or protection wall is built to secure the inside bank of the Canal. The removal of these has been recommended in former

official reports, but it will not be necessary for the immediate purposes of navigation.

I am also informed that very essential advantages can be attained by deepening the whole of the channel of the Erie Canal to seven feet, and by leaving the width of the small portion yet remaining to be widened at 45 feet.

The cost of this partial enlargement is estimated for the Erie Canal at \$300,000, in which would be included \$25,000 for deepening the present channel through the Cayuga marshes. The further sum of \$150,000 would deepen the Oswego Canal to 6 feet. Both these sums can be expended before the opening of navigation in the ensuing spring.

The receipts on account of the General Fund during the year exceeded the payments from the fund \$393,241 94
From which deduct the deficiency in the revenue, as stated for the previous year 84,702 59

And it leaves an apparent balance in the treasury of \$308,539 35

But as a large portion of the appropriations of 1857 remained unpaid on the 20th September last, there was an actual deficiency in the revenue to meet the demands upon it of \$460,000.

The General Fund no longer receives contributions, as formerly, from the "Surplus Revenues" of the Canals, and its permanent revenue is very inconsiderable, viz, for the year ending September 30th, 1857:

Auction Duty	\$132,220 22
Salt Duty	53,476 91
Fees of the Secretary's office	2,739 52
Do. Comptroller's office	2,612 11
Do. Clerk of the Court of Appeals.....	506 93
Peddlers' Licenses	1,000 00

Total, as shown by Comptroller's Report..... \$192,615 49

This fund has, for several years, been supplied by means of a direct tax, and such tax will again become necessary in order to pay the deficiency which now exists, of \$460,000; and also to make the usual appropriations for the next fiscal year for the expenses of Government, and for other purposes, in pursuance of article 7, section 8 of the Constitution, and the existing laws. It is to be borne in mind that any law which may be passed, imposing such tax, should embrace whatever other appropriations the Legislature, in its wisdom, may make during the present session.

These and all like appropriations, if made, are to be paid from the General Fund, the State tax to supply which, has for the last ten years produced the following amounts:—

1848, $\frac{1}{2}$ mill	\$325,638 72
1849, $\frac{1}{2}$ "	334,555 96
1850, $\frac{1}{2}$ "	364,003 75
1851, $\frac{1}{2}$ "	578,546 88
1852, $\frac{1}{4}$ "	292,641 69
1853, 1 "	1,285,124 88
1854, $\frac{3}{4}$ "	1,020,926 49
1855, $1\frac{1}{4}$ "	1,751,717 78
1856, 1 "	1,430,000 02
1857, $1\frac{1}{4}$ "	1,789,875 22

The deficiency in the General Fund, the large "floating debt" of the Canal Department, for the payment of which the State must provide, the necessary funds required for the completion of the Canals, which you are prohibited by the Constitution from borrowing, except under circumstances that at best can be made to apply but to a portion of the aggregate amount, will indicate the necessity for economy and retrenchment, as well as for refusing appropriations to new objects and purposes, however meritorious. It is much the duty and interest of Governments, as of individuals, when burthened with obligations, to study and practise economy. With resources to justify our munificence, we might properly respond to the various enterprises and the numerous appeals that will claim your consideration; but when the

means required to promote general or individual interests can only be obtained by a resort to taxation, we shall best discharge our duties by refusing to increase the public burthens. Indeed I cannot forbear to express the opinion, that until the canals are completed, and the present floating indebtedness is paid, it is just and expedient to confine appropriations to the simplest and most economical necessities of Government.

There is a deficiency in the General Fund Debt Sinking Fund to pay the interest upon that part of the State debt chargeable upon it, of \$488,674 47, which it also becomes necessary to provide for.

The amount of capital of the School Fund is \$2,551,260 52, which shows an increase during the year of \$24,868 28.

The capital of the Literature Fund amounts to \$269,952 12. The amount received for revenue is \$16,411 01; which is annually to be distributed to Academies, and used for the purchase of text books, maps and globes, and philosophical and chemical apparatus, for Academies.

The capital of the United States Deposit Fund, being the amount received from the United States, is \$4,014,520 71. The amount received for revenue is \$248,767 52; which is also appropriated for the annual support of academies, common schools, the State Normal School, the instruction of Teachers' classes in academies, and for Teachers' Institutes.

Foreign Commerce of New York.

The following is a statement of the foreign imports entered at New York during the past four years:

1855.....	\$157,860,238	1857.....	\$230,618,120
1856.....	243,556,649	1858.....	152,867,067

The cash duties received during the same periods, were as follows:

1855.....	\$34,387,307.99	1857.....	\$35,639,074.88
1856.....	45,519,270.18	1858.....	27,476,731.06

The exports from New York to foreign ports, during the same years, were as follows:

1855.....	\$99,972,300	1857.....	\$117,724,329
1856.....	120,886,296	1858.....	85,639,543

The following table shows the exports of specie and bullion:

1855.....	\$27,635,740	1857.....	\$44,360,174
1856.....	37,218,766	1858.....	26,001,431

The Imports, it will be seen, show a decrease in round numbers of \$78,090,000, of which \$10,000,000 is in specie. The Exports in the meantime have declined \$32,000,000 of which \$18,000,000 is in specie. The aggregate of Domestic Produce exported is only \$8,000,000 behind 1857.

Property in Indiana.

A report submitted to the Indiana Legislature by the House Committee of Ways and Means, shows that the value of all the taxable property of the State is \$458,000,000—an increase since 1845, of \$199,062,707. Much of this increase is attributed to the various railroads of the State, which cost only about \$30,000,000.

Pacific Railroad.

The bill which was introduced by Mr. Curtis, in the House of Representatives, to secure the construction of a central Pacific railroad, provides for branches from two points on the navigable waters of the Mississippi river; one opposite to Iowa, and the other opposite to Missouri; the two branches to converge and unite within two hundred miles of the Missouri river, and thence run to the navigable waters of the Sacramento. The usual appropriations of the alternate sections within six miles are to be made, and Government is to appropriate the contractors twelve thousand dollars a mile, to be reimbursed to the Government in transportation of mails and military stores. The construction to be offered by the President to the best bidder, as proposed by Senator Gwin's bill.

This plan starts at the outer rim of our present railroad connections, and terminates on the navigable waters in the centre of California population.

It is claimed that it would be equally convenient to the North and South; and for our connections with all our Pacific Territories. It would follow the emigrant route up the Platte, through Utah, and be about sixteen or eighteen hundred miles long.

Finances of Michigan.

EXTRACTS FROM THE GOVERNOR'S MESSAGE.

The receipts into the State Treasury during the fiscal year, ending November 30th, 1858, were as follows:

Balance of cash in Treasury, Dec. 1, 1857 \$158,642 70

General Fund.

From delinquent taxes.....\$226,392 19
" specific taxes..... 166,261 44
" other sources..... 8,002 72
" new bonds 266,000 00
666,656 35

Internal Improvement Fund.

From sale of lands and U. S. 5 per cts. 5,297 23

Trust Funds.

From sales of University,
Primary and Normal
School lands\$22,573 91
From Swamp lands 62,897 67
" Asylum lands and in-
terest 2,933 11
" State Building lands, 1,069 32
89,474 01

For interest on part paid
University land certi-
ficates\$19,221 45

Interest on part paid Pri-
mary School land certi-
ficates 68,467 64

Int't on part paid Normal
School land certificates.. 3,042 14

Int't on part paid Swamp
land certificates..... 4,614 06
95,345 29

From Sault Ste. Marie Canal tolls.. 8,947 42

Total\$1,024,363 05

EXPENDITURES.

General Fund.

For expenses of sales re-
funded to counties, re-
demption refunded, etc..\$112,873 08

For salaries, expenses &
appropriations 176,235 51

For taking up and cancel-
ing b's, (University)... 99,000 00

For payment of interest
on State indebtedness.. 9,510 00
\$397,618 59

Internal Improvement Fund.

For payment of interest
on State indebtedness..\$122,559 60

For payment of bonds,
treasury notes, out-
standing warrants and
exchange 5,649 33

For payment of D. & P.
R. R. bonds 97,000 00
225,208 93

Trust Funds.

For support of University..\$35,425 01

For Primary School Ap-
portionment 107,569 89

For Asylum appropriations 59,500 00

For expenses of Normal
School 6,998 49
209,493 39

For expenses of Swamp land
sales\$14,030 49

For erroneous sales of land
and interest refunded,
and expenses of advertis-
ing and appraising for-
feited lands 1,624 45
15,654 94

M. C. R. R. deposits refunded..... 40 00

Balance cash on hand Nov. 30, 1858.. 176,347 20

Total\$1,024,883 05

The aggregate of receipts and expenditures is largely increased by including bonds to the amount of \$266,000, which have been issued in conformity to the law of January 30th, 1858, all but \$50,000 of which were to redeem the outstanding bonds of the State, which fell due on the 1st of July last, and on the 1st of January instant.

The conditions of the law for the issue of these bonds have been faithfully complied with, and bonds to the amount of \$196,000 have been redeemed and cancelled, and provision made for the redemption of \$20,000 which fell due on the 1st of January instant. It is gratifying, also, to be able to state that the credit of the State is in a high condition; and that while the bonds of the States of Virginia, Tennessee, Missouri, and several other States, were below par, we were able to negotiate these bonds at a premium.

The interest on the University and School lands constitute no part of the revenue of the State, but the Treasury is simply made the agent of their receipt and disbursement.

The State indebtedness, for which bonds have been issued, are as follows:

Penitentiary Bonds, due Jan. 1, 1859 \$20,000 00
Penitentiary Bonds due in 1860..... 40,000 00
Internal Improvement Warrant Bonds 50 00
Full Paid Five Million Loan Bonds,
due January, 1863..... 177,000 00
Adjusted Bonds due January, 1863.. 1,726,685 00
The part paid Five Million Loan Bonds
when funded will amount to..... 104,142 60
Outstanding Int. Imp. Warrants..... 3,752 07
Few Bonds issued in July last, due
1878..... 266,000 00

Total\$2,337,629 67

The average amount of cash in the Treasury for the four years next preceding December 1st, 1854, was \$285,536 06

The amount of interest received for the use of the same was..... 1,553 86

The average amount of cash in the Treasury for the four years next preceding December 1st, 1858, was 309,858 27

The amount of interest received for the use of the same was..... 67,465 25

No provision was ever made previous to 1855, to prevent the constant increase of the public debt, by reason of the accumulated interest on the unadjusted portion of the five million dollar loan, and although there was an average in the Treasury of \$285,000, yet the interest upon that loan unpaid was yearly increasing the principal of our public debt, and it had reached the sum of \$965,650 83.

The following is a statement of interest annually accruing on the "unrecognised" (part paid) 5,000,000 loan bonds, by reason of the accumulation of interest and its incorporation into the Adjusted Bonds.

The amount issued May, 1838, known as "Unrecognised Bonds," is \$3,813,000, on which the State received only \$955,960 24: the annual interest on this amount would be \$57,357 00

But the Adjusted Bonds, when all the part paid bonds outstanding are called in, will amount to \$1,721,611 09, upon which amount interest will amount to..... 115,207 05

An excess over the former amount, of interest upon the interest, incorporated into the Adjusted Bonds—viz., interest on \$965,650 83..... \$57,939 65

The Legislature of 1855 passed an act requiring these part paid bonds to be surrendered for adjustment or that the interest should stop. It will be perceived that most of them have been returned, and new bonds at the adjusted rate have been issued in their stead. At that time the public debt had reached its maximum, and from that period the surplus moneys on hand in the Treasury, have been applied to its reduction.

The total amount of State debt on the 1st of December, 1850, was...\$2,488,498 66
On the 1st of December, 1854, it was. 2,531,545 70
It had therefore increased in the four years next preceding my administration..... 43,047 04
Total State indebtedness, December, 1, 1854..... 2,531,545 70
Total State indebtedness, November 30, 1858..... 2,337,629 67
From which is to be deducted bonds redeemed 1st January instant.... 20,000 00

Total\$2,317,629 67
Diminution in four years..... 213,916 03

About eighty-five thousand dollars was levied the last year for the support of the State government, by a direct tax. This is at the rate of 48-100ths of a mill upon the dollar of valuation, and about ten or twelve cents to the persons of our population:

The number of children taught in our common schools the last year, was 173,559; 2,323 male teachers were employed, and 4,893 females—and the total amount of teachers' wages was \$443,118 71; the amount of public money disbursed was \$107,395 12; the whole amount raised by tax upon property in the districts was \$316,558 26; the number of volumes in the township libraries was 168,977. The number of acres of swamp lands sold the past year, has been ninety-seven thousand six hundred and twenty, and brought \$122,287—of which \$67,511 78 have been received in cash.

The State Prison appropriations for the last two years, were \$32,000, which has been faithfully and judiciously expended.

Bank of England.

The return from the Bank of England for the the week ending the 22d December, gives the following results, when compared with the previous week:

Public deposits..£9,660,818 Increase...£134,047
Other deposits..13,149,007 Increase... 542,876
Rest..... 3,105,199 Increase... 4,755
Gov't Securities..10,808,591 Unchanged..
Other Securities..16,404,120 Increase... 595,617
Notes unempl'd..13,242,060 Increase... 135,845

The amount of notes in circulation is £19,705,390, being a decrease of £40,265; and the stock of bullion in both departments is £19,148,997, showing an increase of £124,628, when compared with the preceding return.

Bank Statements.

The following is a comparative statement of the New York Banks for the weeks ending—

	Jan'y 1st.	Jan'y 8th.
Loans	\$127,684,319	\$128,538,642
Specie	27,129,725	28,399,818
Circulation	7,854,090	7,930,292
Deposits	90,684,191	92,826,622

The following is a comparative statement of the Philadelphia Banks for the weeks ending—

	Jan'y 3rd.	Jan'y 10th.
Loans	\$26,451,057	\$26,395,860
Specie	6,063,356	6,067,222
Circulation	2,741,754	2,854,398
Deposits	17,049,005	17,133,607

The following is a comparative statement of the Boston Banks for the weeks ending—

	Jan'y 3rd.	Jan'y 10th.
Loans	\$60,069,500	\$60,320,000
Specie	8,540,000	8,295,400
Circulation	6,545,000	7,016,000
Deposits	22,337,800	21,515,500

The following is a comparative statement of the New Orleans Banks for the weeks ending—

	Dec. 25th.	Jan'y 1st.
Loans	\$19,440,302	\$20,587,467
Specie	16,253,971	15,948,189
Circulation	9,094,189	9,581,814
Deposits	21,882,593	24,972,662

The Bank movement in the four principal cities of the Union, as compiled from the above, is as follows:

	LOANS.	SPECIM. CIRCULAT'N.	DEPOSITS.
N.Y., Jan. 8.	\$124,533,642	\$92,825,622	\$28,392,818
Boston, " 10.	61,322,000	21,615,500	8,235,400
Philad., " 10.	26,395,860	17,138,037	6,067,222
N.Orl., " 1.	20,587,467	21,972,662	15,918,189
Total.....	\$235,841,969	156,553,391	\$58,710,629
Last week....	235,545,179	156,532,594	57,992,052
			26,233,033

Southern Pacific Railroad.

At a meeting of the Directors of the San Diego and Gila Southern Pacific Railroad Company, held in San Diego, Cal., on the 25th November last, the following gentlemen were elected officers for the ensuing year:

President.—O. S. WITHERBY.

Vice President.—W. C. FERRELL.

Treasurer.—D. B. KURTZ.

Secretary.—GEO. P. TEBBETTS.

WILEY & HALSTED,

351 BROADWAY,

ARE SOLE AGENTS FOR THE SALE OF
COLBURN & HOLLEY'S
EUROPEAN & AMERICAN RAILWAYS,
1 vol. Folio, with 200 illustrations on 51 engraved plates, 14x10 inches in the highest style of lithography.

Price in full cloth, \$10.00.

Containing the latest information as to the

Financial and Mechanical Working
OF EUROPEAN RAILWAYS,
And is expressly devoted to
STATISTICAL DETAILS

Of their Costs, Characteristics, Loads, Speeds, Receipts, Expenses, etc., also to their

PERMANENT WAY,

Including detailed descriptions of the Construction and Character of their Earthwork, Drainage, Ballast, Sleepers, —wood and iron, and preservation of timber by all standard processes. Rails—quality, shape and manufacture. Rail Joints and Fastenings. Also to their

Raw-Coal-Burning Locomotives,

Including Treatises on English and American Coal, the Combination or Coal. History of Coal-Burning Boilers, Descriptions of all standard Coal Burning Boilers, etc.

Specific and full information is given as to the best plans of Earthwork and Drainage, Preservation of Timber, Shape and Manufacture of Iron, Form of Rail Joint, Coal Burning Boiler.

* * Copies will be sent promptly by Express on the receipt of the price.

From the *New York Evening Post*, September 30.

SUCCESS OF AN AMERICAN BOOK IN ENGLAND.

We notice that the *London Herald, Standard, Telegraph, Observer, Engineer, Mechanics' Magazine, Mining Journal, Builder*, etc., speak in the most flattering terms of the accuracy and trustworthiness of Messrs. COLBURN & HOLLEY'S new work on European and American Railways, to which frequent allusion has been made in this column.

They also recommended a London edition of the work not only as a valuable addition to engineering literature, but as a reliable collection of facts in regard to American Railway management.

TO MANUFACTURERS OF CEMENT.

OFFICE OF THE COMMISSIONER OF THE C. & O. R. R.,
Corning, Allegany County, Va., Jan'y 3rd, 1859.
PROPOSALS will be received, at this office, until the 14th of February, 1859, inclusive,—to manufacture one hundred and fifty thousand bushels of hydraulic cement, within a distance of five miles of this place for use in the masonry now under contract on the line of the C. & O. R. R. and Ohio Railroad.
Further information may be had by persons desirous of offering proposals, on application at this office on and after the 21st inst.

By order of the Board of Public Works,
CHARLES R. FISK,
Chief Engineer.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, January 1, 1859.

Railroad Iron.

500 TONS 56 lbs. and 1,500 tons 60 lbs. best Welsh make, Erie pattern, now in port, for sale.
T. A. HOWLAND & CO.,
54 William st., New York.

FINANCIAL.

G. M. TRACY & CO.,
STOCKS, BONDS, ETC.
LOANS NEGOTIATED.

No. 49 EXCHANGE PLACE,
NEW YORK.

A. H. DYETT,
STOCK AND BOND BROKER,
No. 43 EXCHANGE PLACE,
NEW YORK.

MORSE & CO.,
BANKERS AND DEALERS in Stocks, Bonds, Exchange and Commercial Paper, on commission, No. 49 Wall street, and 41 William street, NEW YORK.
Orders for the purchase and sale of Stocks and Bonds, at the Brokers' Board, by letter or otherwise, promptly executed.
Cash advanced on sound salable securities.

REFERS TO
G. VAN BAUR & CO., N. Y. CONTINENTAL B'K. N. Y.

CHAS. A. FISHER,
Late of the firm of FISHER, DENNY & CO.,
No. 18 Exchange Place.
STOCKS and Bonds bought and sold on commission. Loans negotiated.

PETERS, CAMPBELL & CO.,
BANKERS AND DEALERS IN
DOMESTIC EXCHANGE AND BANK NOTES,
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SPECIAL ATTENTION GIVEN TO
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IN ALL PARTS OF THE UNITED STATES.

PETERS, SPENCE & CO., Lynchburg, Va.
D. T. C. PETERS, } DAVID R. SPENCE,
N. H. CAMPBELL, } DEXTER OTEY.

REFERS TO
JAS. T. SOUTER, Esq., Pres't B'k Republic, { New York City
American Exchange Bank,
Banks and Bankers, Richmond and Lynchburg, Va.

KETCHAM & WILLIAMS,
STOCK BROKERS,
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Stocks and Bonds bought and sold on Commission, and Loans negotiated.

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BANKERS,
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CIRCULAR NOTES AND LETTERS OF CREDIT,
For travelers, available in all the principal cities of the world.
ALSO, MERCANTILE CREDITS,
For use in EUROPE, CHINA, etc.

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By **SIMEON DRAPER,**
Office, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES
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STOCKS and BONDS bought and sold at private sale.
Sale every day at 12½ o'clock. See Catalogue.

H MEIGS, Jr. & SMITH,
BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)
STOCKS and BONDS Bought and Sold on Commission.
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH,
New York, May 11, 1858.

R. H. RICKARD,
MINING AGENT & STOCK BROKER,
Office No. 21 Nassau st., NEW YORK.

BUYS and sells MINING SHARES, MINES and MINERAL LANDS on commission, will examine Mines and Mineral Lands in any part of the United States, and report on their value, etc., etc.
REFERENCES:—P. ChoctEAU, Jr., & Co., New York and St. Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A. Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., Frost & Forrest, Com. Mer's N.Y., John F. Butterworth, Esq., N.Y., C. O. Williams & Co., Detroit, Mich., Capt. D. Tyler, Norwalk, Conn., Rittenhouse, Fant & Co., Bankers, Washington, D. C.
Particular attention given to Lake Superior business.

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AUCTIONEERS AND REAL ESTATE BROKERS,
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Under Messrs. DUNCAN, SHERMAN & Co.
SOLOMON DINGEE,
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NEW YORK.
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REFERENCES.
Citizens' Bank, N.Y. Hon. E. D. Campbell, Lt. Gov., Wis.
Messrs. Thompson Bros., " Hon. Judge Lvd. La Crosse, " Wis.
Bankers, " " Hon. M. Levy, Banker, " Minn.
Messrs. Sewell, Ferris & Co., " Hon. Franklin Steele, Minn.
Geo. P. Rogers, Esq., " A. W. A. Saunders, Bankers, Mt. Pleasant, Iowa.
A. Gridley, President McLean Co. Bank, Illinois.

NEW HAVEN ARMS CO.,
MANUFACTURERS OF THE CELEBRATED
VOLCANIC
REPEATING FIRE ARMS,
COMPRISING
RIFLES, CARBINES AND PISTOLS,
WITH AMMUNITION WARRANTED WATER PROOF,
NEW HAVEN, CONN.

Depot for Sales, 267 BROADWAY, NEW YORK.
JOSEPH MERWIN, Agent.

T. A. HOWLAND & CO.,
BROKERS IN
RAILROAD IRON

AND
EQUIPMENTS,
54 WILLIAM ST., NEW YORK.
ARE prepared to furnish either Foreign or American Rails, also Equipments of every kind desired, on the most favorable terms.

RAILROAD IRON.
THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of
RAILROAD EQUIPMENTS
upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.
WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.
6m35
NORRIS & BROTHER,
BALTIMORE.
And 17 Nassau st., NEW YORK

WATER WORKS.
THE undersigned, many years Engineer of the Water Power Works at Fairmount, as well as of the several Steam Works supplying the City of Philadelphia with water, may be consulted upon the location, complete design, construction, and management of water-works of all kinds for the supply of cities, towns, etc., etc. Address
FREDERIC GRAFF,
Consulting Engineer, 1337 Arch street
PHILADELPHIA.

3m42
Notice to Contractors.

PROPOSALS will be received by the STATE ISLAND RAILROAD COMPANY until the 1st day of February, 1859, for the completion of the Grading, Bridging and Masonry with partial equipment of furniture for said Road. The Rails, Chairs and Spikes will be furnished by the Company.
Previous to the letting all necessary information may be obtained as to the amount of work yet to be done, by addressing
J. DEWITT, MONTFORT, Sec'y, 52 Warren st.
New York, December 27, 1858.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnetic Ores from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per lineal yard, viz:—25, 30, 35, 40, 45, 50, 60, 62, and 75 lbs.

Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.

Address J. H. SCRANTON, President,

or THEO. STURGES, Treasurer,
46 Exchange Place,
New York

40-7

THE ROUGH AND READY ROLLING MILLS OF DANVILLE, PA.,

ARE prepared to fill orders for RAILS of the best quality at the market price.

T. A. HOWLAND & CO., Agents,
54 William st., NEW YORK.

RAILROAD IRON. THE RENSSLAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

BUSSING, CROCKER & DODGE,
32 CHEST ST.

IRON BOILER FLUES.

Lap-Welded Boiler Flues,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.
Warehouse—209 South Third st.,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
Agents for the United States,
12 SOUTH CHARLES STREET,
BALTIMORE.

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And 17 NASSAU STREET, NEW YORK.

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA. IRON AND STEEL

IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
OUT NAILS and SPIKES, FIG IRON, &c.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854.

1733

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation.

February, 1854.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address:

N. WILKINSON, Secy,
WHEELING, VA.

817

RAILROAD IRON.
CONTRACTS FOR RAILS,
AT A FIXED PRICE OR ON COMMISSION,
DELIVERED AT AN ENGLISH PORT,
Or at a Port in United States,
WILL BE MADE BY THE UNDERSIGNED,
THEODORE DEHON,
10 Wall st., near Broadway, New York.
500 tons T rails on hand 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

The undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES, ARE PREPARED TO CONTRACT FOR DELIVERY On board ship at Liverpool, or Welsh port.
G. CONGREVE & SON,
13 CHEST ST., N. Y.

RAILROAD IRON.

The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER Free on Board at Shipping Ports in England, or At Ports of Discharge in the United States, RAILS OF SUPERIOR QUALITY, And of Weight or Pattern as may be required.
VOSE, LIVINGSTON & CO.,
New York. Aug. 1, 1855. 9 South William Street.

RAILROAD IRON.

The Subscribers, Agents for the Manufacturers, ARE PREPARED TO CONTRACT FOR THE DELIVERY OF RAILROAD IRON AT ANY PORT in the United States or Canada, or at a shipping port in Wales.
WAINWRIGHT & TAPPAN,
Boston, June, 1851. 29 Central Wharf.

RAILROAD IRON AND COMMON BARS.

THE UNDERSIGNED,
Sole Agents to Messrs. GUEST & CO.,
The Proprietors of the Downside Iron Works,
Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAHIN, 70 Broad st.

To Railroad Companies, MACHINISTS & OTHERS.

BEST quality COP WASTE, constantly on hand and for sale by

M. K. JESUP & CO.,
No. 44 Exchange Place,
New York

4017

RAILROAD IRON. WOOD, MORRELL & CO., Cambria Iron Company,

Having leased the extensive Works of the

Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,


ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

Philadelphia Office, } North Penna. R. R. Building,
No. 407 Walnut st.

STEEL, FILES, &c. R. GROVES & SONS, SHEFFIELD, ENGLAND,

MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.

A stock of the above goods constantly on hand.

CORPORATE MARK  **USE**

CHAS. CONGREVE & SON, Agents,
13 Cliff street, N. Y.

Patents for Inventions.

T. D. STETSON, Agent for procuring patents, No. 5 Tryon T. Row, (near City Hall). A circular with full information sent free by mail.
American correspondent *Prac. Mechanics' Jour.* from 1844.

REMOVAL.

W. D. STARLING, Metal Broker and Rail Inspector, from Lawrence Pountney Lane, to the Vestry House, Lawrence, Pountney Hill, LONDON, 1857.

TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:—
The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater,
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.
The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.
Reference is made to the officers of all the railroads in the vicinity of Cincinnati.
Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati, Ohio.

Railroad Iron.

2,000 TONS of Erie Pattern, Crawshaya make, on sale. Apply to

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JAMES TINKER,
54 Exchange Place.

CAUTION.

AS there are numerous imitations of our FRANGIPANNI, purchasers are requested to see that the names of PIESSE and LUBIN are impressed upon the Bottles.



Sold by all Fashionable Perfumers and Druggists in the World.
WHOLESALE AGENT FOR THE UNITED STATES:
Mr. JONAS PHILLIPS, 87 Pearl st., New York.

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RHINELANDER, BOORMAN & CO.,
 RAILWAY AGENTS
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COMMISSION MERCHANTS,
 SUPPLY ALL MATERIAL AND ARTICLES USED IN THE
CONSTRUCTION AND OPERATING OF RAILWAYS.
 BANK OF COMMERCE BUILDING, NEW YORK.

REFER TO
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 James Boorman, Esq., *Messrs. Stillman, Allen & Co.*
 Messrs. Cooper & Hewitt, *Messrs. Duncan, Sherman & Co.*

RAILROAD SUPPLIES.
WILLIAMS & PAGE,
 No. 44 Water, between Congress and Kilby Streets,
Boston, Mass.

Iron Rails, Chairs, & Spikes,
FREIGHT AND COAL CARS,
 (on hand or made at short notice.)

Wheels and Axles of all kinds,
LOWMOOR, AMES, BOWLING, AND NASHUA TIRES,
IRON AND STEEL,
 Of all kinds for Shops and Tracks.

Car Trimmings, Paints, Oil, Varnish, Car and Switch
 Locks, Ventilators, Lanterns, Head-Lights, Gauges, Rubber
 Springs, Chairs, Hose and Belting, Ash, Pine and other Timber,
 and ALL MATERIALS USED in Equipment and Repairs of
 Railroads, Engines and Cars, at lowest prices.

THOS. S. WILLIAMS, **PHILIP S. PAGE,**
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REFERENCES.
 JAMES HAYWARD, President, *PHILIPS, DODGE & Co., N.Y.*
 Boston and Maine R. R. *COOPER, HEWITT & Co., do.*
 Capt. Wm. H. Swift, Boston. *RENEVE, BUCK & Co., Phila.*
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A. S. & A. G. WHITON
 72 FINE ST., NEW YORK,
 DEALERS IN

RAILROAD IRON,
CHAIRS AND SPIKES,
LOCOMOTIVES,
PASSENGER AND FREIGHT CARS.

MANUFACTURERS' AGENTS
 FOR Seller's Iron Turn Tables, Dimpfel's Patent Blower,
 Gardiner's Volute Car Springs and

RAILWAY SUPPLIES GENERALLY.
 ALSO
NEGOTIATORS OF SECURITIES.

OLD STAND.
RAILROAD AND CAR FINDINGS.
A. BRIDGES & CO.,
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WILL continue the Railroad and Car Furnishing business,
 and deal in Locomotive and Hand Lanterns, Enamelled
 Road Lamps, Brass and Silver Trimmings, Cotton Lark for Car
 Covers, Portable Forges and Jack Screws, Bolts, Nuts and
 Washers, Ship and Bridge Bolts, and Iron Forgings of almost
 every description, etc., etc., at the OLD STAND,
 64 COURTLAND ST., NEW YORK.

Orders for the purchase of goods on commission, aside
 from our regular business, respectfully solicited.

ALBERT BRIDGES, { Of the late firm of
JOEL C. LANE. { Bridges & Bro.

SAWYER, TINKER & CO.,
 MANUFACTURERS OF
COTTON DUCK,
 For Car Roofing, of all widths, up to 140 in.
PATENT COTTON BELTING, cost about one-third of Leather.
 36 BEEKMAN ST., NEW YORK.

S. B. BOWLES,
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 (Between PLATT and MAIDEN LANE.)
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GEO. M. FREEMAN,
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PRATT & FREEMAN,
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Railroad Materials, Locomotive and Car Findings,
 MACHINERY AND MACHINISTS' TOOLS,
 MINERS' TOOLS, ETC.

✓ COTTON WASTE. ✓
 WHITE AND YELLOW CAR GREASE,
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 Baggage Checks, Barrows, etc., etc.,

RAILROAD LANTERNS, SIGNAL LIGHTS,
 STEAM GAUGES, COCKS AND WHISTLES,
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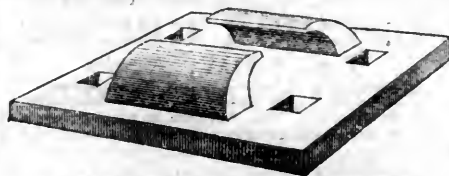
LANTERNS OF ALL DESCRIPTIONS,
 ENGINE, STATION, AND SIGNAL BELLS,
 ✓ Superior Car Upholstery, etc. ✓

AGENCY OF THE KEROSENE OIL COMPANY.
 ✓ Orders solicited, promptly filled, and forwarded with
 despatch and care at the manufacturers' lowest prices.

H. H. GOODMAN & CO.,
 No. 7 WALL ST., NEW YORK,
 Dealers in Railway, City, County, and State
BONDS,
 RAILS, LOCOMOTIVES, &c.

We have on hand and for sale, of County Bonds—

Hardin County (Ky.), 5 per cts. Davidson City (Tenn.), 5 per cts.
 Carter, Bath, and Montgomery (Ky.), 6 per cts. Iowa County (Wis.), 5 per cts.
 Mineral Point do. do. do.
 Also a variety of CITY, COUNTY, and RAILWAY
 SECURITIES in smaller lots.
 April 30th, 1884.



JACOB ROWE,
 GENERAL COMMISSION MERCHANT,
 Nos. 6 & 8 Broadway, and 8 Beaver St.
 ORDERS received for all sizes: MERCHANT, BAR and
 RAILROAD IRON, AMERICAN and SCOTCH
 PIG IRON, SUPERIOR WROUGHT IRON RAILROAD
 CHAIRS, SPIKES, CAR WHEELS, NAILS, ETC., ETC.
OFFICE, 8 BROADWAY.
 Corner Beaver st., opposite the Bowling Green, NEW YORK.

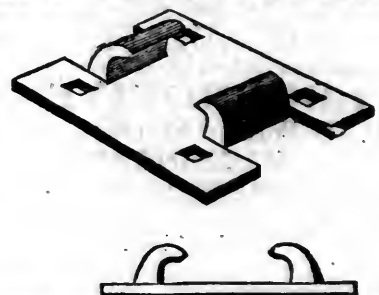
REFERS TO
 Messrs. Cooper & Hewitt, Messrs. Stillman, Allen & Co.
 Messrs. Win. Ockhout & Bro., Peter Cooper, Esq.
 Messrs. Marshall Lefferts & Bro., James L. Jackson, Esq.

CINCINNATI STOCK EXCHANGE.
KIRK & CHEEVER,
 Stock Brokers and Railroad Agents,
 No. 83 WEST THIRD STREET,
CINCINNATI, OHIO.

Railroad Stocks, Bonds, &c., bought and sold on commission
 Regular sales at public auction at the MERCHANTS' EXCHANGE.

MORRIS K. JESUP, JOHN KENNEDY, GILBEAD A. SMITH.
M. K. JESUP & CO.,
 RAILWAY AGENTS AND BANKERS,
 44 EXCHANGE PLACE,
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 AGENTS FOR THE SALE OF
 FOREIGN AND AMERICAN RAILROAD IRON
 AND ALL MATERIALS NECESSARY FOR THE
 Construction, Equipment & Operating of Railways.
 RAILWAY AND OTHER SECURITIES
 BOUGHT AND SOLD
 Either privately or at the Board of Brokers.

NEW YORK
RAILROAD CHAIR WORKS.
J. B. GREEN & CO., Proprietors.
 SUCCESSORS TO THE
 New York Wrought Iron Railroad Chair Company.
 Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the
 Patent Rights owned by the late New York Wrought
 Iron Railroad Chair Company, and also the entire machinery
 for manufacturing their improved Wrought Iron Railroad
 Chair, we are now fully prepared to receive and fill all orders
 from responsible parties, to any extent, with promptness and
 dispatch.

The thickness of the lips of our Chair increases through the
 bend, where the greatest strength is required, and diminishes
 towards the edge; so that a less weight of metal may be used,
 and a strength acquired equal, if not superior, to that of a
 heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought
 Iron Chair now in market, to our works for a supply; believ-
 ing they combine qualities superior to any others now manu-
 factured.

The Chairs weigh from seven and a-half to fifteen pounds,
 according to the thickness of the Iron and size of the Chair.
 To enable us to give you a perfect fit, it will be necessary al-
 ways to send a section of the Rail. We cannot undertake to
 make Chairs without a proper pattern, as it is impossible to
 make a perfect fitting Chair from a drawing.

Our manufacture of Chairs are used on a large number of
 Roads, of which the following list comprises some of them, viz

Galena and Chicago Union Railroad Company,
 North Carolina Railroad Company,
 New Jersey Central Railroad Company,
 Panama Railroad Company,
 Buffalo and State Line Railroad Company,
 New York and New Haven Railroad Company.

Messrs. M. K. JESUP & CO., 44 Exchange
 Place, New York, are the only parties authorized to act
 as our Agents.

THE ROGERS
Locomotive & Machine
WORKS,

SUCCESSORS TO
ROGERS, KETCHUM & GROSVENOR,
PATERSON, N. J.,

HAVING extensive facilities, are now prepared to furnish
 promptly, of the best and most improved description, either
 COAL or WOOD BURNING

LOCOMOTIVE ENGINES
 AND OTHER VARIETIES OF
RAILROAD MACHINERY.

J. S. ROGERS, Pres't, { Paterson, N. J.
 WM. S. HUDSON, Sup't, {
 M. K. JESUP, Vice Pres't.
 L. P. STARR, Sec'y and Treas'r,
 44 Exchange Place, New York

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

HAVING large facilities, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and dispatch.

BRASS AND IRON CASTINGS; LOCOMOTIVE TYRES welded and blocked to exact sizes, and every thing connected with the building or repairing of Locomotives furnished on short notice.

These Works being located on the New York Central Railroad, near the centre of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

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RICHARD NORRIS & SON,

LOCOMOTIVE STEAM ENGINE BUILDERS,

SEVENTEENTH STREET, ABOVE CALLOWHILL,

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ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

LOCOMOTIVES, RAILWAY TOOLS AND MACHINERY.

MANUFACTURE to order, Locomotives of any Arrangement, Weight or Capacity. In Design, Material and Workmanship, the Locomotives produced at these Works, are equal to, and not excelled by any.

Locomotive Engines.

DANFORTH, COOK & CO.,
PATERSON, N. J.,

HAVING erected an extensive Shop, with the most approved Machinery and Tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various Tools suitable for running Repair Shops.

The business of Machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1749

UNION WORKS, BALTIMORE.

POOLE & HUNT,

Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TYRES, equal to any produced in the country.

WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for expressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description. SHATTING, PULLIES and HANGERS.

WEST POINT FOUNDRY.

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Manufacturer of Marine and Stationary

ENGINES,

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CASTINGS & FORGINGS OF ALL KINDS

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MACHINERY OIL.

REFINED NEAT'S FOOT OIL

WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all kinds of machinery use.

PETER COOPER,
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New York.

IMPROVED PATENT METALLIC OIL,

MANUFACTURED UNDER THE PATENT OF

J. & W. W. CUMBERLAND,

And under the personal Superintendence of the Inventor.

THE NEW YORK CUMBERLAND METALLIC OIL WORKS,

FOOT OF 24th STREET, EAST RIVER.

OFFICE, 205 BROADWAY,
NEW YORK.

WE respectfully call the attention of those interested in the running of

RAILROADS, STEAMSHIPS,

Machine Shops, Factories,

and Machinery of all kinds, to the valuable qualities of our OIL.

1. It is entirely free from Gum, cools heated journals quicker than water, and keeps them cool by its superior anti-friction properties.

2. By its use less motive power is required than in using any other oil yet known. It will move machinery with very perceptible less motive power than Sperm Oil.

3. The same quantity will last at least 33½ per cent. longer than Sperm, or any other Oil, and the quality is always strictly uniform in its season. We make Summer and Winter Oil.

4. Having largely increased the capacity of our works, we have been enabled to reduce the prices below those of last year; and it is our intention to keep it at all times below the price of Sperm.

The prejudice existing against Oils has very properly grown up, and we are fully aware of the deceptions which have been and still are practised by unscrupulous persons; but we are prepared to substantiate all the foregoing statements relative to the superiority of our Oils, at

OUR OFFICE, 205 BROADWAY,
by large numbers of certificates of the best managed lines of Railroads, Steamships, Machine Shops, & Factories in this country, testifying to its value as being greatly superior to any other. Most of the certificates being of prominent Companies, it is probable that more or less of them will be known to all. We have also the MEDALS and DIPLOMAS awarded to us by the AMERICAN INSTITUTE.

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SUPERIOR GREASE, TALLOW, AND BURNING OIL.

The BURNING OIL will burn in any lamp that will burn Sperm, lasting longer, and burning without smell or smoke.

We manufacture an

OIL EXPRESSLY FOR SEWING MACHINES, GREATLY SUPERIOR TO ANY OTHER, AND WITH LESS SMELL.

Several have attempted to imitate our Oil, calling it "METALLIC OIL," as well as giving it a similar appearance; and we would CAUTION buyers against them, and advise them to see that our brand—

"NEW YORK CUMBERLAND METALLIC OIL WORKS, FOOT OF EAST 24th ST."

with the names of the inventors and kind of Oil, is upon every package, however small.

Address,—

N. Y. C. METALLIC OIL WORKS,
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NEW YORK.

6m37

THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON.)

108, 110, 112, 114, 116 and 118 CHIT ST.,

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1st. Its first cost is vastly less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

Also,—

J. C. HULL & SONS' REFINED BURNING OIL.

Buyers are requested to give this OIL a trial, as it is believed that it will be found the

CHEAPEST, CLEANEST AND BEST OIL FOR BURNING,

(all things considered), in the market.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

TAW & BEERS,

DEALERS IN

Sperm, Whale and Elephant Oils,
Adamantine Car and other Candles,

AND MANUFACTURERS OF

TAW'S LUBRICATING GREASE

FOR RAILROAD CARS AND HEAVY MACHINERY.

THIS celebrated GREASE has been in use upwards of Ten years; and is in the opinion of FORTY RAILROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or description of machinery.

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18 SOUTH WATER ST.
Philadelphia.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR
RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Sperm Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or Europe.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 4.]

SATURDAY, JANUARY 22, 1859.

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MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, January 22, 1859.

Blue Ridge Railroad (S. C.).

The annual meeting of the stockholders of the Blue Ridge Railroad Company was held in Charleston on the 10th November ult., and the usual reports of the President, Chief Engineer and Treasurer presented.

The financial condition of this Company is not such as to augur the speedy completion of the great work undertaken, and the President says emphatically that it "must be completed, as a State enterprise or it cannot be completed at all. The cost is too great for individual enterprise."

This road is one of immense importance to the State and especially to Charleston. It extends the great line now completed from the seaboard to Anderson northwest to Knoxville, where it will connect with the lines, projected to and from Cincinnati, and when open to freights and passengers will not only greatly abridge the line of travel, but will supply to the whole State of South Carolina an access to the wheat and bacon regions of the great West to which the present route is chiefly by way of Baltimore. The demand for State aid

is, therefore, not unreasonable, and it is to be hoped that the present legislature will see fit to place the whole line under construction at the earliest possible period.

By the route as surveyed, Charleston will be nearer to Knoxville than Richmond 46 miles, and than Savannah 96 miles; and when the Hiwassee Railroad from Clayton to Cleveland is completed that seaport will be nearer to Chattanooga, Nashville and Memphis, than Richmond 163 miles, and than Savannah 25 miles. Railroads are finished from Covington on the Ohio opposite Cincinnati to Danville, Ky. The Kentucky and Tennessee railroad is a direct extension of the Blue Ridge railroad to Danville and thence to Cincinnati.

The distance from Charleston to Cincinnati by the usual route of carriage is 1,413 miles. The additional carriage by railroad to the interior towns must be added. By the Blue Ridge railroad Charleston is distant 410 miles from Knoxville by way of the projected Newmarket and Hamburg railroad, and 450 miles over the present line via Columbia. The distance between Anderson and Knoxville is 195 miles. Thus the completion of this road and its connections would revolutionize the course of commerce, affording the whole State, beginning in its north-west corner and proceeding centrally to the seaboard, the greatest facilities. Supplies from Cincinnati now reach Charleston as above stated by a route of 1,413 miles, and Anderson by a route of 1,668 miles. The projected route would bring supplies from Cincinnati to Anderson over a line of about 520 miles, and to Charleston of about 780 miles. These are matters which the State should at once remedy, and the only way in which this can be effectually done is, to construct this road with the utmost energy and heartiness of co-operation with the company.

The Treasurer's accounts exhibit the particulars of the receipts and payments to the 1st November, 1858. From these it appears that there has been received on account of capital—

Subscription of Charleston	\$786,750 00
Do. State of S. Carolina ..	800,000 00
Individual subscriptions	38,771 30
From Pendleton R. Co.	62,055 69

Total receipts

Total receipts	\$1,687,576 99
Assets on hand—	

Cash balance	\$8,877 59
City 6 per cent. stock	70,076 50
Notes receivable	36,000 00
Advances to contractors	13,892 73

\$128,846 82

The total cost and charges of every kind to the 15th November, 1858, are stated as follows:

Construction	\$2,126,539 32
Payable in mortg. bonds of the Company	\$217,577 50
Do. of Knox county	52,071 00
Do. in Co.'s stock	176,867 05

446,515 55

Cash reserved on contracts	\$1,680,023 77
	53,844 27

Total cash payments	\$1,626,179 50
Due to contractors for amounts reserved as security	\$53,844 27
Bills payable	40,000 00

93,844 27

Total cash payments and liabilities. \$1,720,023 77

The resources of the Company for the further prosecution of the work in cash and bonds consist as follow :

Balance of subscription of city of Charleston	\$262,250 00
Balance of State subscription (since paid)	200,000 00
Bal. of indiv. subscription in S. C.	239,928 70
Do. do. Ga.	3,600 00
Do. do. N. C.	55,400 00
Bal. of county and indiv. subs. in Tenn.	184,000 00

Total cash

Bonds guaranteed by State of South Carolina on certain conditions	\$1,000,000
Bonds of Tennessee for iron and bridges	640,000

1,640,000 00

Bal. of 1st mortg. bonds of Comp'y ..

Total resources

Col. Gwynn's estimate of the cost of the road from Anderson to Knoxville, 195 miles, is	\$7,575,677 00
Cost of workshops, engine and car sheds	150,000 00
Cost of equipment	966,000 00

Total estimated cost

Total estimated cost	\$8,691,677 00
The equipment estimated for, are 50 loco-	

tives, \$500,000; 600 burden cars, \$360,000; 30 coaches, \$75,000; baggage and mail cars, \$16,000; and 50 gravel cars, \$15,000.

The present condition of the work is exhibited in the report of the Chief Engineer. The road between Anderson and Pendleton, 13 miles, was completed in April last, and has since been in successful operation, being worked by the Greenville and Columbia Company. The Blue Ridge Company, however, are about to run their own cars, and have already on hand 2 first-class locomotives; 14 platform, 10 gravel, and 2 other cars; and 1 coach, 4 box, and 4 platform cars have been ordered. Col. Gwynn says:

Although the track has been laid and the cars are running, the road cannot be pronounced finished in a permanent manner between Anderson and Pendleton. The trains pass on the trestle bridge over Twenty-Six Mile Creek, which I stated in my report of 1856 would be built as well to hasten the arrival of the cars at Pendleton as to afford the means of transporting stone for the masonry, and aiding, by serving as false works, in raising the wood and iron work of the superstructure of the permanent bridge.

The masonry is now in rapid progress, and will be completed early next summer, when the superstructure will be put on. Prior to this period the embankment will be brought up to the masonry at Twenty-Six Mile Creek, and a few feet of trestle work adjoining the masonry of the permanent bridge over Twenty-Three Mile Creek, (built for the passage of a common road underneath,) will be filled in. The road between Anderson and Pendleton will then be finished, presenting in all its parts the permanence, durability and characteristics of a "first-class road"—such as the Blue Ridge Railroad is designed to be from one end to the other.

I have now to enumerate the sections, bridge masonry and tunnels west of Pendleton heretofore referred to as the important works which have been prosecuted during the past year. Those in South Carolina commence with the embankment in Seneca Bottom, four miles from Pendleton, and the masonry for the bridge over Seneca River. Both of these works will be completed in the course of 12 months. The masonry for the bridge over Cane Creek will be completed in six months. A heavy section of grading commencing at Frick's Meeting House, 23½ miles from Pendleton, will be completed in eighteen months, and earlier if desired.

The Saddle Tunnel, 27½ miles from Pendleton, (616 feet in length,) will be completed in sixteen months. At the west end 124 feet of heading have been driven, and 99 feet excavated to the full section, and the east end will be commenced in a few days.

The Middle Tunnel, 38½ miles from Pendleton, is 365 feet in length. The heading has been driven entirely through, and it will be completed in about four months.

A section of heavy grading about three-quarters of a mile in length, just west of this tunnel, will be completed in sixteen months.

The Stump House Tunnel is 29½ miles from Pendleton, and 5,863 feet in length. Every contrivance that ingenuity could devise has been put in requisition to lessen manual labor and further the progress of the work. Seven steam engines are employed; three in raising material, three in ventilating through the shaft, and one at the western portal, which drives in fresh air, and frees the tunnel from the water that follows the excavation made down the grade from the western end. The only impediment in the regular and uniform use of the work, has been caused by the inability of the contractors to keep at all times a full force. The population of the tunnel is now 1,232 souls; and the work may be completed in 23 months.

The masonry for the bridge over Chauga Creek, 32, 1-5 miles from Pendleton, will be completed letwve months. The masonry for the bridge

over Chatuga River, which divides South Carolina from Georgia, and is 39 miles from Pendleton, will be completed in the course of two years.

The works in Georgia commenced with the Dick's Creek Tunnel, 41¾ miles from Pendleton. This tunnel is 2,421 feet in length. There have been excavated 225 feet, to the full section, and 20 feet of heading. The work will be completed before the track reaches it. The War-woman Tunnel, 46½ miles from Pendleton, is 1,945 feet in length: 470 feet have been excavated to the full section, and 75 feet of heading. It will be completed in about two years. The heavy embankment known as the Whitmire Fill, near Clayton, and 49 miles from Pendleton, will require full two years for its completion. This is the last of the heavy works under contract in Georgia; there are, in addition, several small culverts in progress of construction.

In South Carolina, three-fourths of the grading, one-third of the tunnel excavation, three-fourths of the square drain masonry, and one-fourth of the bridge masonry, have been done, and one-fourth of the track laid. There has also been laid a track to Hayne's Quarry, 1½ miles long.

In Georgia seven-seventeenths of the grading, one-seventh of the tunnel excavation, two-thirds of the square drain masonry, and two-thirds of the bridge masonry, have been done.

The length of the road in South Carolina and Georgia is only 30 per cent. of the entire length, and its cost will be 58 per cent. of the whole cost of the road.

I laid before the Board in June last, a tabular statement, setting forth the amount of grading to be done on every section, together with the quantity of masonry for each bridge, and the time required for the completion of each section and bridge. If the works therein enumerated, which, with the works now in progress, comprise all that remains to be done, preparatory to the laying the track, are put under contract in January next, the road may be completed in a year and a half to Walhalla, in three years to the Locust Stake, and in four years to Knoxville.

The grading and bridge masonry between Knoxville and Maryville, a distance of sixteen miles, will be completed by the 1st of January, with the exception of the grading of sections 3, 4 and 5, and the masonry for the bridges over the Holston and Little Rivers and for the bridge over Pistol Creek. These works are all in progress and will no doubt be completed next year. The distance between Knoxville and Maryville is thirty per cent. of the length of the road in Tennessee, and the cost of the grading and masonry, as originally estimated, was forty-one per cent. of the entire cost, according to the original estimate, in that State.

The project of "connecting Charleston by railroad with Louisville and Cincinnati," which will be accomplished by the Blue Ridge Railroad, appears from the public acts, resolutions, surveys, and reports in reference to the subject, to have been for the last twenty-three years an object of the unceasing regard and earnest solicitude of the Legislature and people of this State. It is deemed superfluous to insist in detail upon the weighty political, commercial and local considerations which ought to influence the public councils of the State in giving every practicable facility and granting aid to the accomplishment of this great internal improvement. Those details may be found in part in the proceedings of the great conventions held in Cincinnati and in Knoxville, in the communications of the late Hon. John C. Calhoun, in the speeches and reports of the late Gov. Hayne, Col. Blanding and Capt. Black, of South Carolina, the late Dr. Daniel Drake and Gov. Vance of Ohio, and the late Gen. James Taylor, of Kentucky; in the writings of Judge Hall, of Cincinnati; the letters of Prof. Edward D. Mansfield, of Cincinnati, and in the speeches of Col. Memminger in the Legislature of South Carolina, before the legislative bodies of North Carolina, Tennessee, and Kentucky, to all of which the Board are respectfully referred.

These gentlemen, notwithstanding the many

rival schemes which have been gotten up and the powerful inducements to turn their regards to other projects, perhaps equally advantageous to some of them, have never abandoned the opinion advanced by them, that "the grand iron highway from Cincinnati to Charleston is one of the most important enterprises which could engage the attention of the commercial public."

Central Railroad and Banking Company of Georgia.

We have received the twenty-fourth annual report of this Company for the fiscal year ending November 30th, 1858; during which time the receipts were—

From Freight	\$1,066,620 70
" Passengers	228,216 88
" Mails	30,799 98
" Passenger trains and express freight	28,084 44
Total	\$1,353,722 00

And the expenses were:

Transportation	\$264,381 28
Maintenance of cars	41,480 82
Motive power	55,904 82
Repairs of road	166,694 12
Incidental expenses	12,665 34
	541,126 38
	\$812,595 62
Less extraordinary expenses	56,980 70

Leaving as net earnings

The cash payments into bank were:	
From earnings of the road during the year	\$1,254,555 05
From do. of previous year	61,295 69
	\$1,318,850 74
The earnings of the bank were	55,889 29

Total road and bank

	\$1,374,740 03
—which has been disposed of as follows:	
Ordinary road expenses	\$541,126 38
Extraordinary do.	56,980 70
Bank expenses, int., etc.	24,300 52
Dividend 5 per ct., June last	199,744 00
Carried to reserve June last	93,435 65
Dividend 5 per ct., Nov. 30th	199,851 00
	1,115,438 25

Leaving to be carried to reserve fund, \$259,301 78—subject however to the payment of \$28,000 rent of line from Gordon to Eatonton on the 1st of April next, and to such losses and depreciation of assets as may occur.

Of the earnings for the year, there were uncollected \$99,166 95.

The following is a comparison of the gross and net earnings and ordinary expenditures of the last with those of the preceding year:

	1857.	1858.
Gross earnings	\$1,122,644 85	\$1,353,722 00
Ordinary expenses	580,334 63	541,126 38

Net earnings

—showing an increase in gross earnings over those of the preceding year of \$542,310 22; an increase in net earnings of \$270,285 40, and at the same time a diminution in ordinary expenditures of \$39,208 28.

The extraordinary expenses during the past year were, for land, \$3,400; for Macon depot, \$21,050 07; for Savannah depot, \$11,103 77; for new rails, \$21,426 86.

The road is 191 miles in length.

The number of miles run by passenger trains were 310,000; by freight and other trains, 404,787.

The number of cords of wood used 9,951—being an average consumption of one cord to 72 miles run.

The gross earnings per mile of road were \$5,911 44; ordinary expenses, \$2,363; net earnings, \$3,548 44.

The equipment of the road consists of 52 engines; 20 passenger, 5 baggage, 3 mail, 387 box freight, 236 platform freight and 10 stock cars—all of which are in excellent order. There have been built during the year in the Company's shops, 1 passenger, 12 box and 29 platform freight cars; 6 box, 1 stock, 7 freight cars have been condemned—making an increase over the previous year of 28 cars.

The following are some of the items charged to ordinary expenses:

Passenger Trains.		Freight Trains.	
Labor	\$55,637 22	\$135,111 09	
Oil and tallow	3,956 71	10,390 93	
Fuel	7,644 91	17,896 73	
Labor.		Material.	
Maintenance of engines ..	\$42,047 60	\$13,857 22	
Do. freight cars, 15,501 57		13,158 71	
Do. passenger " 6,972 93		5,847 61	
Repairs of road:—			
Labor	\$67,876 34	Buildings	\$11,940 99
Material ...	83,992 11	Bridges	2,884 68

The Seven per cent. Bonds of the Company outstanding fall due as follows:

To fall due January 2, 1859	\$27,500
Do. July 11, 1859	9,000
Do. November 1, 1859	15,000
Do. December 1, 1859	700
Do. January 1, 1860	500
Do. April 1, 1860	800
Do. August 1, 1860	1,200
Do. October 1, 1860	800
Do. November 1, 1860	600
Do. February 2, 1862	94,500
Do. April 1, 1863	7,500
Past due December 1, 1857	500
Eight per cent. Bonds, past due and not yet presented	167

\$158,767

The contingent liabilities of the company are: As endorser of the bonds of the South-western Company

Do. of the Muscogee Company, secured by a mortgage of their road

\$375,000

There is no doubt that these bonds will be paid as they fall due.

The company has old rails on hand in the yard at Savannah; which have been replaced by new ones, of the value of \$28,000.

Three hundred tons of rails have been ordered from the Lackawanna Iron Company. It is expected that during the current year the 1,000 tons of old rails on hand will be re-rolled at the new excellent rolling mill at Atlanta, and that there will be taken up and re-rolled during this year about 500 tons more. The cost of re-rolling the 1,500 tons, and of transporting the same to and from the mill, will be \$48,000, or \$32 per ton. The cost of the 300 tons new rails will be \$10,200. The cash expenditure for rails, during the current year, will, therefore, be \$64,200; and the number of miles of road re-laid, in the course of the year, will be 25. After this year no more iron will be purchased, and it is believed that it will not be

necessary to take up and re-roll over 1,875 tons of rails, at an annual expense of \$60,000, to keep up the road.

The present crop of cotton being unusually large, it may be expected that the up business of the road, in the coming Spring, will be greater than ever before. The future is uncertain; but the Board cannot doubt that the revenue of the Company will continue ample enough to pay ten per cent. per annum on its stock, to pay its small funded debt, and to build and finish all the warehouses on the line, the town passenger house and bridge over the canal, and all other work necessary to be done.

GENERAL STATEMENT.

Railroad and all its appurtenances..	\$3,750,000 00
Notes and bills discounted and bills receivable..	\$653,939 81
Due by other Banks and Companies.....	271,815 65
Real estate	33,450 38
Due by agents	46,563 20
Specie, viz:	
coin	\$231,325 74
Not's of oth'r	
Banks	8,203 00
	239,528 74
	1,245,297 78
Bonds of other Comp's..	\$54,711 25
Stocks do.	594,992 53
	649,703 78
	\$5,645,001 56
Railroad capital	\$3,750,000 00
Bank capital.....	\$250,000 00
Circulation	242,789 00
Unclaimed dividends ..	24,755 40
Dividends declared this day	199,851 00
Deposits	135,459 95
Suspense account.....	4,340 26
Due to other Banks and Companies.....	238,400 13
	1,095,595 74
Bonds bearing 7 per ct. interest	\$158,767 00
Reserved Fund.....	640,638 82
	799,405 82
	\$5,645,001 56

The officers of the Company are:

R. R. CUYLER, *President.*

GEO. W. ADAMS, *Sup't.*

GEO. A. CUYLER, *Cashier.*

The following gentlemen were elected directors at a meeting of the stockholders held on the 3rd inst.:

J. W. Anderson, Andrew Low, Thomas Purse, John R. Wilder, John B. Galie, F. G. Dana, W. B. Fleming, Daniel H. Baldwin.

The Tobacco Trade of Virginia.

We have received a valuable statement, prepared by the Richmond *Whig*, regarding the tobacco trade of Virginia for the year, to October 1, 1858.

We have not space to give the statement entire, and can only notice the general results arrived at. The establishment of a Tobacco Exchange at Richmond has been attended with favorable results, and aided the compiler in arranging statistics regarding the trade. The inspections in Richmond for the year ending September 30, last, amounted to 44,616 hhds.—showing an increase over the previous year of 14,082 hhds. At Petersburg, the inspections amounted, for the year, to 15,154 against 12,917 on the previous year. At Lynchburg they amounted to 8,783 against 5,784 in 1857. The inspections, however, at this town differed from others. All loose tobacco of the weight of

500 lbs. was counted as a hoghead, and all under that weight as half a hoghead. This rule would give double the above quantity. But the compiler, arranging the figures by the Richmond standard, has reduced the figures to the amount above stated.

The following table gives the total inspections in Virginia for a series of years:—

	1854.	1855.	1856.	1857.	1858.
Richmond ..	23,739	29,458	36,696	30,534	44,616
Petersburg ..	10,219	13,343	15,677	12,927	15,154
Lynchburg ..	9,607	9,511	8,652	5,754	7,175
Clarksville ..	2,683	3,122	2,126	1,612	1,746
Farmville ...	1,464	3,214	2,108	2,035	2,412
Tye River ...	150	227	41	45	....
Danville ....	...	...	20	3	....

Total, hhds. 47,862 57,872 65,320 52,910 71,103

Increase over last season, 18,193 hhds.

Much tobacco is received by the towns in a loose state—that is, placed loose in boxes, crates or bales. A good deal of this is repacked into hogheads of the usual weight; but a larger portion is purchased by manufacturers and worked up by them. The whole of this received at the principal point of inspection was estimated at 22,169,426 lbs., or at about 15,981 hhds. The statement also gives the stock on hand on the 1st of October in this country and in the principal ports of Europe, which space prevents our making use of.

The following is a carefully prepared comparative statement of the exports of tobacco from Richmond direct to foreign ports during each of the last four years ending September 30:—

	1857-'8.	1856-'7.	1855-'6.	1854-'5.
Antwerp	1,847	...	...	...
Bordeaux	1,145	1,556	511	1,457
Bremen	4,685	3,360	4,218	2,857
Bristol	937	538	487	421
Dublin	521	...	...	...
Genoa	240	700	466	...
Glasgow .....	...	...	...	307
Havre	2,785	2,162	1,852	3,021
Leith .....	...	...	304	...
Liverpool	5,832	4,253	3,963	3,972
London	1,901	1,722	2,117	1,649
Marseilles	693	550	730	1,149
Porto Rico .....	...	6	2	...
Rotterdam	581	...	822	478
Venice	5,962	5,296	3,266	3,245
Total	27,129	20,143	18,758	18,556

The value of the tobacco and stems exported from Richmond for the past four years is recorded at the Custom House in that city as follows:—

Quarters ending, 1854-'5.	1855-'6.	1856-'7.	1857-'8.
Dec. 31..	\$579,048	\$221,478	\$808,358
Mar. 31..	43,571	26,010	279,537
June 30..	411,347	851,612	764,682
Sept. 30..	1,896,842	2,256,413	2,649,305
Total ..	\$2,931,408	2,855,508	4,496,882

The exports of leaf tobacco and stems coastwise, by steamers, during the past twelve months, were as follows:—

October	364	April	839
November	190	May	656
December	108	June	807
January	148	July	498
February	663	August	811
March	672	September	763

To New York, 2,222 hhds.; to Philadelphia, 151 hhds.; to Baltimore, 4,144 hhds. Total, 6,517 hhds.

The shipments of stems, included in the above, were as follows:—

To New York—In May, 6 hhds., and in August, 1 hhd. Total, 7 hhds.

To Philadelphia—In October, 9 hhds.; April, 1 hhd.; May, 6 hhds.; June, 6 hhds.; July, 2 hhds.; August, 12 hhds. Total, 36 hhds.

The total receipts by canal and railroads at Richmond for the past year amounted to 51,869

bbls., against 38,718 for the previous year, showing a net increase of 13,150.

The shipments from Virginia and portions of North Carolina of manufactured tobacco, the past year, amounted to 370,000 packages, of 100 lbs., in about the following proportions:—

New York 165,000	Philadelphia... 30,000
Baltimore 75,000	New Orleans... 25,000
Boston 40,000	Cincinnati... 25,000

The stocks remaining in agents' hands on the 30th September, 1858, were estimated to be as follows:—

New York, pkgs. 29,000	New Orleans.... 9,000
Baltimore 12,500	Cincinnati..... 7,500
Boston 10,000	
Philadelphia.... 9,000	Total stock.. 77,000

Railroads in Missouri.

We give the following extracts from the late message of the Governor of Missouri, in reference to the railroads of that State.

The annexed tabular exhibit shows the amount of aid authorized thus far, the amount of bonds issued, and the remainder due the several companies thus assisted:

COMPANIES.	Amount loaned.	Amount issued.	Amount due.
Pacific R. R.	7,500,000	6,780,000	220,000
Do. S. W. Branch..	4,500,000	1,400,000	3,100,000
Hannibal and St. Joseph	3,000,000	3,000,000	.....
North Missouri..	5,500,000	4,350,000	1,150,000
Iron Mountain ..	3,600,000	3,276,000	324,000
Cairo and Fulton..	650,000	250,000	400,000
Platte Country ...	700,000	.....	700,000
Totals	\$24,950,000	19,056,000	5,894,000

The Pacific Railroad Company will be entitled, by virtue of the aid already authorized, to only two hundred and twenty additional bonds, which, if its construction goes forward as it should, will soon be exhausted. To complete the road to Kansas city, further aid will be needed, and it is hoped that it will not be withheld. The early completion of this road will add immensely to its business and profits, making the one hundred and sixty-three miles already in operation much more productive than it now is, while the portion yet to be built, and upon which more or less work has already been done, will be less expensive, and yield a much larger per cent. upon the capital invested. No time should be lost in pushing the work forward.

The South-West Branch of the Pacific Road has over three million dollars of the aid authorized in reserve. Only about twenty miles of this road, from the main stem, are yet completed, and about forty miles in progress of construction. It is due to the South-West portion of the State, that this road should be vigorously pushed forward with the least possible delay.

The Hannibal and St. Joseph Railroad has exhausted the aid granted. This Company will require no farther aid from the State. The road will be completed and in running order, through its entire length, early in the spring. The temporary structures which have been the subject of comment, are being replaced by substantial masonry, and the higher grades complained of are being reduced. This, in order that the Company may obtain full possession of its lands, is obviously its interest to do with as little delay as possible.

The North Missouri Railroad is now completed to Allen, in Randolph county, 150 miles from St. Louis, and the trains are running to that point. The unfinished distance, 18 miles, to its intersection with the Hannibal and St. Joseph Railroad, is graded, the cross-ties, rails, chairs and spikes purchased and paid for, and nothing remains to be done but to lay down the iron, which can be done in about twenty working days, the additional cost of constructing the road to that point being estimated at \$41,000. This Company has failed to pay the interest on its bonds, due on the 1st inst.

The Iron Mountain Road has an unexpended balance of 324,000 dollars, which under the restriction imposed by the amendatory Act, approved Nov. 19th, 1857, cannot be issued before March 1st, 1859. That road is completed to Pilot Knob—over eighty miles from St. Louis—and has been in operation since April 12th; but owing to the general prostration of business, and the consequently limited demand for the great staples of the region it penetrates, not more than half the business has been done upon it was justly anticipated. The result of these causes is an outstanding debt for construction, and the Company will fail to pay the interest due on the 1st of January on the bonds issued in its favor. But it is stated by its officers that the bonds now withheld, will, when issued, enable the Company to pay the debt due for construction, and thus relieve it from its embarrassment, and that it will soon then be able to reimburse the amount to be paid by the State.

The Cairo and Fulton Railroad Company, as you will learn from the Board of Public Works, is in excellent financial condition. The length of that road in this State is about 77 miles. The means of the Company consist of over 570,500 acres of land, valued at not less than \$5 per acre; individual subscription amounting to \$842,775, and State aid to the amount of \$650,000. The proceeds of these lands, when they are brought into market, will, it is believed, defray the entire cost of the road. No fears need be entertained in regard to the payment, by this company, of the interest accruing on the bonds issued by the State, or of their ultimate redemption. The company has authorized the issue of land bonds amounting to \$1,600,000, bearing seven per cent. interest, payable in 1882, the payment of which is secured by a deed of trust on its lands. On December 1st, \$70,000 of the State bonds issued to the company were on hand, and an unexpended balance of over 26,000 dollars of the proceeds of the bonds already sold. At the same period the company had expended from its resources other than State bonds, about 267,000 dollars. Twenty-five miles of the route are under contract, and the way cleared out. Upon the first thirteen miles, from Bird's Point, opposite Cairo, to Charleston, a very heavy work, composed of high embankments, pile bridging and trestle work, the rails are being laid, and the road is expected to be completed that distance the first week in January.

The Platte County Railroad Company, although it has commenced the work, has yet received none of the bonds authorized in behalf of that enterprise.

In view of the failures on the part of the Iron Mountain and North Missouri Railroad Companies to meet the interest on the State bonds, in accordance with the conditions upon which they were issued, a question at once arises in regard to the disposition that shall be made of said roads. Under existing laws, the Governor is authorized, in case any railroad company to which State bonds have been issued, makes default of the payment of principal or interest thereon, to sell the road and its appurtenances at public auction, to the highest bidder, upon notice being given as required by law; and he may, at such sale, buy in said road for the State. The Governor entertains serious doubts, however, whether the best interests of the State will be subserved by taking possession of the roads, now, it is thought, only temporarily defaulting. As suggested, the Iron Mountain Road will likely soon be able to reinstate itself; and when the North Missouri road is completed to the junction, it cannot fail to become a paying road, running as it does through a most fertile country, the resources of which are in the course of rapid development. Besides doing a large freight business, it must necessarily become one of the favorite routes of travel to North-west Missouri, Western Iowa, Northern Kansas, Nebraska and the great plains of the West; and when extended to the Iowa line, which should be done without delay, and connected with the railroads of Iowa and Minnesota, the extent of its business cannot well be estimated.

The subscribers to the private stock in our

roads, are among our most public spirited citizens; and nothing short of a manifest necessity in protecting the public interest, should induce the State to sacrifice their interests. Besides operating as a great hardship upon them, it would serve to deter others from adventures of that sort, and thus to repress the energies of a most enterprising and useful class, who are indispensable to our prosperity. Besides, if they were now put up to the highest bidder, they would necessarily be sold at a ruinous sacrifice—a greater sacrifice than would be necessary after our resources are more generally developed, and the roads doing a larger and more profitable business. It is of the highest importance to the welfare of the State, that our great trunk roads should be completed at the earliest day practicable. When they are finished, others tributary to them will be built in every part of the State, by private enterprise, as they have been in other States, and thus every neighborhood in Missouri will be brought into immediate proximity to the great marts of commerce.

Instead of now taking full possession of, or selling the defaulting roads, he suggests that, having taken such steps as will assure the State of the faithful application of the receipts of the companies to their legitimate purposes, and that every practicable economy is observed in their operations, they should be allowed to go on until at least a fair opportunity has been offered them to test their ability to pay, after having gotten fairly into operation to important points, and are unembarrassed by a debt incurred in their construction.

The Iron Mountain Road is now completed to the point whence it will derive the largest amount of its freight business, which must henceforth rapidly increase. And the North Missouri Road, when completed to the junction, will be in a condition to command a large business; and a trifling expenditure and a few days' labor will accomplish this.

By a little indulgence to these companies the State will incur no serious risk. It has, and will continue to hold, the first lien upon the roads and their appurtenances—a lien not only upon the proceeds of the sales of its own bonds, but upon the proceeds of all the city, county and private subscriptions; and the State, by its increase of revenue, gets all the incidental advantages accruing from their construction.

California Industry.

Although a young State, a variety of industrial pursuits have been developed to a remarkable extent in California. Indeed, but few of the older States surpass her in some respects. According to an address recently delivered before the Mechanics' Institute at San Francisco, there have been enclosed in California since 1850, for agricultural purposes, upwards of a half of a million acres; and there have been erected 135 flouring mills, at a cost of two and a half millions of dollars; also, 175 saw mills, worth \$2,600,000, which are now not only supplying the home demand, but exporting \$300,000 worth of lumber annually. Within the same period there have been constructed 4,400 miles of canals and flumes for mining operations, at a cost of more than \$12,000,000, exclusive of eight hundred miles in course of completion. In addition to these, there have been erected 150 quarts mills, the machinery of which is valued at \$2,000,000, besides numerous extensive and valuable works, such as sugar refineries, metallurgical works, tanderies, (of which there are twenty, of a capacity sufficient to supply the State,) breweries, paper mills, cordage manufactories, iron foundries and machine shops, adapted to the construction of every conceivable description of machinery, from the most delicate mathematical instrument to the most powerful steam engine, and of a capacity sufficient to supply the entire wants of the Pacific coast. These improvements, together with others, have, during the last nine years, increased the taxal property of the State from comparatively nothing to the enormous value of \$160,000,000.—*Boston Journal.*

Tonnage of the United States.

The following statements will show the changes in the tonnage of the United States for the year ending June 30, 1858.

Tonnage June 30, 1857.....Tons, 4,940,843
Built, registered, enrolled and licensed during the year 271,900

Total 5,212,743
Sold to foreigners 26,304
Condemned 16,037
Lost at sea 63,462
Losses in former years 57,132
..... 162,935

Total tonnage July 1st, 1858.....5,049,808
Increase during the year 108,965

Built during the last year:

Ships and barquesNo. 122
Brigs 46
Schooners 431
Sloops and smaller craft.....400
Steamers 226

Total number built.....1,225

Number and tonnage of vessels built in the United States during the last 15 years:

Year ending June 30.	No. of vessels.	Tons and 95ths.
1844.....	766	103,537 29
1845.....	1,038	146,018 02
1846.....	1,420	188,203 93
1847.....	1,598	243,732 67
1848.....	1,851	318,075 54
1849.....	1,547	256,577 47
1850.....	1,360	272,218 54
1851.....	1,367	298,203 60
1852.....	1,444	351,493 41
1853.....	1,710	425,572 49
1854.....	1,774	535,616 01
1855.....	2,034	583,450 04
1856.....	1,703	469,393 73
1857.....	1,434	378,804 70
1858.....	1,225	242,286 69

The tonnage owned in the United States on the 30th June, 1858, was employed as follows:

In the foreign trade:— Tons and 95ths.
Permanent registered tonnage1,869,719 49
Temporary do. 630,022 30

Total in the foreign trade.....2,499,741 79
Permanent enrolled tonnage.....2,495,999 83
Temporary do. 6,086 18

Total enrolled tonnage.....2,502,086 06
Licensed under 20 tons 47,980 45

Total U. S. tonnage.....5,049,808 35

Of the enrolled and licensed tonnage there were employed:

In the Coasting trade2,361,695 72
In the cod fishery 110,896 44
In the mackerel fishery 29,593 80

..... 2,502,086 06

Employed in steam navigation:—

Registered tonnage78,027 11
Enrolled tonnage651,363 30

Total tonnage employed in steam navigation729,390 41

Dayton and Greenville Railroad.

The following gentlemen were elected directors of this company on the 2d inst.:

Peter Odin, Thomas Parrott, H. C. Stimson, David Studybaker, John Wharry, Adam Speice, Wm. L. Darrow, John H. Achey, Herman Gebhart, James McDaniel, E. F. Drake, F. DePeyster and James Thomson.

The Board was organized by the appointment of H. C. Stimson, President and Superintendent; Herman Gebhart, Vice President and Treasurer, and John L. Miller, Secretary.

Journal of Railroad Law.**USURY.—FOREIGN CORPORATIONS.**

By the act of 1850, an amendment to the usury laws was passed in this State, providing that "No corporation shall hereafter interpose the defense of usury in any action." The question has been raised whether this applied to foreign corporations; and it is a question of some importance and interest. The following decision of the Court of Appeals of this State, settles the question. The action was brought by the Southern Life Insurance and Trust Co., of Florida, against Messrs. Packer & Prentice, to recover certain securities, on the ground that they had been given to secure usurious loans. Judgment was rendered for the defendants, and the plaintiffs appealed. The following is the opinion of the Court upon this branch of the case:

PRATT, J.—Upon the question whether the act was designed to apply to foreign corporations, made parties to suits in the courts of this State, it may be suggested, in the first place, that the terms of the act are general: "No corporation shall hereafter interpose the defence of usury in any action." There is nothing in the words of the act itself which would indicate an intention on the part of the legislature to limit its effect to domestic corporations.

In the second place, no sufficient considerations of local or state policy have been suggested, from which we would be authorized to infer a motive, on the part of the legislature, to restrict the operations of the act to domestic corporations. So far as the working of this partial repeal of the usury laws may be allowed to throw any light upon the question, it has been anything but favorable to this idea. Although, in some instances, works of public improvement have been advanced by a resort, on the part of corporations, to the borrowing of money at ruinous rates under the protection of this act, yet it is very questionable whether the benefits have not been, in most cases, more than balanced by the loss which the public, as creditors and stockholders, have suffered by the bankruptcy and ruin which have uniformly overtaken the companies resorting to such methods of raising the means to carry on the undertakings for which they were organized. It is difficult, therefore, to find from the practical workings of the act, I think, any motive on the part of the legislature, for restricting its application to domestic corporations. It is much more probable that the act grew out of considerations connected with the principles upon which the usury laws themselves are based, than from any consideration of local benefit to be realized from freedom, on the part of corporations, to borrow money at any rate of interest. These laws were originally based upon the assumption that the needy borrower was in some degree in the hands of the lender. Government has therefore assumed that it was a duty incumbent upon it to protect the former against the rapacity of the latter by adequate pains and penalties. In regard to natural persons, subject to the contingencies of business, often with little or no capital to start with, these considerations might apply with great force, but in regard to corporations organized for the purpose of concentrating in one undertaking the contributions of a large number of individuals, until the aggregate shall amount to the capital supposed to be requisite for

the successful prosecution of such undertaking, the legislature may well have assumed that no such protection was necessary; that if corporations thus organized became borrowers, it would not be from necessity, but voluntarily, to enable them to repay the necessary interest without loss or sacrifice. Upon the whole, I think no sufficient reason has been adduced to justify this court in holding that the act was designed to be partial in its effect, applicable to corporations of this State only, and not to those of foreign States. The judgment of the Supreme Court should therefore be affirmed.

Lake Superior Copper Mines.

PRODUCT FOR 1858.

Est. pr.

Tons. lb. Tons. c'tage.

PORTAGE LAKE DISTRICT.

Pewabic Mine.....	401	..	50
Quincy Mine.....	353	..	50
Isle Royal Mine.....	279	..	76
Huron Mine.....	40	..	75
Franklin Mine.....	109—	..	1,182 50

KEWEENAW POINT DISTRICT.

Cliff Mine.....	1,596	..	70
Central Mine.....	151	..	75
North-west Mine.....	130	..	75
Phenix Mine.....	40	..	75
North American.....	30	..	75

Maurice & Co. (Fr.)

Clark Mine.....	19	..	70
Connecticut Mine...	15	..	70
Copper Falls Mine...	229	..	80

Several small mines

—aggregate.....	20—	..	2,221 70
-----------------	-----	----	----------

ONTONAGON DISTRICT.

Minnesota Mine....	1,912	..	70
Rockland Mine....	230	..	70
Norwich Mine.....	41	..	70
Nebraska Mine.....	16	..	65
National Mine.....	190	..	65
Adventure Mine.....	87	..	70
Ridge Mine.....	69	..	65
Olgima Mine.....	36	..	60
Toltec Mine.....	31	..	60
Mass. Mine.....	27	..	60
Evergreen Bluff Mine	5	..	60
Aztec Mine.....	4	..	60
Victoria Mine.....	6	..	60
Merryweather Mine..	2	..	60
Superior Mine.....	..	1,720	60
Flint Steel.....	..	1,200—2,657	60

Total, tons.....6,059

Average per centage.....63

The Great Eight Wheel Car Suit—The Patent Defeated.

The case of Ross Winans against the New York and Erie Railroad Company for a patent covering the eight-wheel cars, which was tried two years ago before Judge N. K. Hall, in the Circuit Court of the United States at a term held at Canandaigua, in which a judgment was rendered against Winans by a jury, under the ruling of the Court, and then appealed by him, was on Monday, the 10th inst., decided against Winans in the Supreme Court of the United States. The highest judicial tribunal affirmed the judgment of the Circuit Court. Thus ends one of the most important patent cases that was ever tried in this country, involving as it did, in its issue, millions of dollars, and affecting directly every railroad company in the United States.

This decision establishes the fact that Gridley Bryant, formerly Superintendent of the Quincy Railroad, Boston, and now of Scituate, Mass., and Horatio Allen, formerly Chief Engineer of the South Carolina Railroad, and now of the Novelty Works, New York, were the first originators of the eight-wheel cars, now exclusively used on the railroads in this country, and destroys the only eight-wheel patent ever granted for originating the eight-wheel car—the one to Ross Winans, of Baltimore.—*Albany Argus.*

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY	Length Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY	Length Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	140	2,494,900	3,482,000	6,923,911	515,762	150,221	6	---	Brunswick and Florida, Ga.	30	151,887	463,648	538,649	In progr.	---	---	---	---
Androscog. & Kennebec	56	457,909	1,835,309	2,210,947	159,513	83,368	---	---	South. Western	143	1,399,100	441,292	2,265,323	385,214	208,771	9	---	---
Kennebec & Portland	72	1,107,525	1,763,738	2,871,263	213,255	---	---	---	Tennessee and Alabama	30	309,754	626,889	679,008	53,778	29,406	---	---	---
Port. Saco. & Portland	51	1,396,400	---	1,396,378	253,717	120,909	6	94	Tennessee and Mississ.	61	757,540	611,812	1,161,152	181,001	99,788	---	---	---
Boston, Concord & Montreal	93	---	1,104,586	2,844,977	324,767	174,025	---	---	Memphis and Charleston	267	2,228,177	3,496,288	6,672,470	642,022	354,604	---	---	---
Cheshire	54	---	899,313	3,179,687	355,629	113,077	---	---	Mobile and Ohio	305	6,784,839	2,068,459	10,701,428	651,882	278,428	---	---	---
Concord	85	1,500,000	8,242	1,412,676	817,086	125,064	6	49	Miss. Central	59	1,676,474	920,796	2,603,098	115,679	---	---	---	---
Northern, N. H.	82	3,083,400	406,295	3,088,400	365,800	185,906	4	46	Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	284,256	150,749	---	---	---
Concord & Passumpsic Riv.	90	1,000,000	800,000	1,784,147	177,588	76,401	---	---	N. O. Opelousas & G. W.	80	2,800,000	750,000	3,877,525	284,178	127,460	---	---	---
Rutland & Burlington	117	2,233,376	4,168,765	4,584,008	332,115	41,688	---	---	N. O. Jackson & G. N.	200	4,035,000	1,618,810	7,142,563	189,003	---	---	---	---
Vermont and Canada	47	1,350,000	---	1,380,695	---	---	---	---	Vicksburg, Shreveport & Tex.	21	883,760	109,265	992,061	In progr.	---	---	---	---
Vermont Central	122	5,000,000	5,278,299	8,402,055	705,835	127,389	---	---	East Tennessee and Ga.	111	1,192,974	1,735,669	2,703,429	227,363	104,992	---	---	---
Boston and Lowell	22	1,830,000	438,920	2,412,251	435,863	171,382	6	91	East Tennessee and Va.	130	626,075	1,728,684	3,208,138	61,314	39,002	---	---	---
Boston and Maine	74	4,078,974	---	4,229,481	770,402	305,507	6	94	Nash. and Chattanooga	159	2,263,905	1,632,793	3,896,703	641,552	219,265	---	---	---
Boston and Providence	43	3,160,000	239,730	3,534,458	594,176	245,141	6	94	Ovington & Lexington	98	1,344,850	3,065,917	4,061,604	426,408	230,906	---	---	---
Boston and Worcester	44	4,600,000	599,974	4,847,779	1,019,149	385,613	6	95	Lexington and Frankfort	29	430,055	1,658,929	---	95,807	46,719	6	---	---
Cape Cod	47	681,690	291,007	1,031,625	122,960	39,890	---	---	Lexington and Danville	13	694,444	71,000	765,500	In progr.	---	---	---	---
Connecticut River	50	1,591,110	275,772	1,801,244	267,710	65,098	3	65	Louisville and Frankfort	65	741,039	623,216	1,502,095	246,750	109,059	6	---	---
Eastern, Mass.	60	2,583,400	2,441,873	5,082,607	616,156	272,479	---	---	Atlantic & Gt. Western	---	869,399	77,294	613,231	In progr.	---	---	---	---
Fitchburg	67	3,640,000	100,000	3,872,821	608,974	250,833	6	94	Bellefontaine and Ind.	118	1,874,395	1,316,237	2,998,392	348,359	120,886	---	---	---
N. Bedford and Taunton	21	600,000	---	641,586	168,925	27,827	6	---	Clev., Col. and Cin.	141	4,748,212	90,400	4,762,307	1,149,741	514,740	9	95	---
Old Coffey and Fall River	77	3,015,100	260,100	3,362,940	683,357	305,140	6	98	Cleveland and Toledo	200	3,333,712	4,225,556	7,193,010	930,292	433,790	---	---	32
Vermont and Mass.	69	2,232,641	1,019,148	3,241,976	240,133	64,267	---	13	Clev. and Mahoning	65	---	1,920,953	---	---	---	---	---	---
Western, Mass.	156	5,150,000	5,839,090	10,495,905	2,117,888	898,763	8	105	Clev. and Pittsburg	133	2,780,741	3,043,992	6,537,466	681,877	309,518	---	---	10
Worcester and Nashua	46	1,411,000	205,565	1,361,271	216,888	82,720	4	47	Clev. P. & Ashland	95	3,000,000	1,495,548	4,040,978	1,251,534	581,454	15	---	---
Providence and Worcester	43	1,610,000	330,000	1,781,048	344,773	155,044	7	82	Cin. Hamilton & Dayton	60	2,155,800	1,526,092	3,130,316	487,421	200,763	---	---	48
Hartford and N. Haven	72	2,350,000	944,000	3,329,602	769,066	340,835	10	1	Cin. Wm. & Zanesville	131	2,421,178	8,782,040	6,696,210	225,506	30,288	---	---	---
Hartford, Prov. and Fishkill	122	1,936,246	2,132,642	4,205,946	271,428	112,325	---	---	Columbus and Xenia	55	1,490,450	149,000	1,532,475	403,212	181,688	10	---	---
Housatonic	37	2,000,000	423,893	2,423,947	138,475	109,344	---	---	Dayton, Xen. & Beire	62	437,838	422,658	860,496	In progr.	---	---	---	---
Saugatuck	57	1,031,900	624,244	1,680,723	237,410	114,237	---	---	Dayton and Michigan	140	1,076,602	393,011	1,186,826	In progr.	---	---	---	---
N. York and N. Haven	62	2,980,836	2,323,210	5,293,232	1,157,055	254,560	3	40	Dayton and Western	35	310,000	700,481	1,035,173	125,940	63,258	---	---	---
N. Haven and N. London	50	734,258	761,462	1,450,318	88,007	30,318	---	---	Naton and Hamilton	42	409,762	832,608	1,178,167	140,936	50,008	---	---	---
N. London, W. & Palmer	66	610,000	1,062,000	1,603,230	120,571	61,544	---	---	Little Miami	65	2,981,282	1,266,000	3,925,157	77,442	290,123	10	81	---
Norwich and Worcester	98	2,122,300	724,183	2,698,871	265,417	44,547	---	30	Sandusky, Dayton & Cin.	171	2,097,090	3,368,000	6,065,090	682,614	---	---	---	---
Albany Northern	32	439,005	1,625,098	1,340,696	117,718	9,904	---	---	Central Ohio	128	1,427,907	6,224,050	4,068,824	570,092	164,677	---	---	---
Black River and Utica	35	643,300	317,654	974,323	In progr.	---	---	---	Pittab. Ft. Wayne & Chicago	123	6,247,404	9,822,550	14,279,704	1,646,359	677,787	---	---	20
Buffalo, Corn. and N. Y.	100	1,487,871	1,501,183	2,819,096	172,476	66,333	---	---	Pittab. Mayv. & Cin.	50	371,350	31,000	390,933	In progr.	---	---	---	---
Buffalo and N. Y. City	92	798,439	2,587,849	3,401,865	288,392	31,898	---	---	San'y. Man. & Newk.	127	1,350,000	2,206,357	3,552,357	328,958	164,479	---	---	---
Buffalo and St. Line	69	1,300,000	1,040,000	2,494,364	679,790	355,763	10	---	Seloto & Hocking Valley	66	403,975	509,050	888,858	In progr.	---	---	---	---
Buffalo and Elmira	47	434,111	922,393	1,275,796	174,089	69,506	---	---	Spring, Mt. Vernon & P.	118	1,000,000	950,000	2,194,000	In progr.	---	---	---	---
Canandaigua & Niagara F's	98	1,315,000	2,279,854	3,495,832	---	---	---	---	Tol. Wabash & St. Louis	242	2,965,100	7,577,500	10,542,600	Recently opened.	---	---	---	---
Canandaigua & Saratoga	36	687,000	506,689	1,187,502	135,423	48,449	---	---	Cin., Log. & Chicago	255	4,196,679	1,006,125	2,080,432	In progr.	---	---	---	---
Cayuga & Saratoga	144	3,758,466	9,250,362	12,737,898	1,902,838	688,380	---	36	Evansville & Crawfordsv.	109	996,061	1,270,872	2,168,713	249,868	124,140	---	---	---
Hudson River	96	3,000,000	647,193	2,555,986	325,111	56,186	---	11	Ind. and Cincinnati	88	1,686,890	1,564,584	3,029,989	491,743	245,622	7	---	---
Long Island	556	24,182,400	14,402,635	30,732,518	6,524,413	3,041,120	8	85	Indiana Central	66	612,350	1,261,179	1,909,911	368,189	204,685	---	---	---
New York Central	404	11,717,100	28,041,405	44,669,324	7,422,607	1,454,032	---	---	Ind., Clev. & Pittsburg	83	895,791	1,071,694	1,826,425	263,191	85,248	---	---	---
New York and Erie	135	6,117,100	4,822,498	8,758,203	1,040,393	324,891	---	16	Jeffersonville	77	1,014,262	694,000	1,839,576	222,737	94,318	---	---	---
New York and Harlem	118	1,833,022	4,406,874	6,470,714	620,153	135,754	---	1	Madison and Indianapolis	61	1,647,700	1,336,816	2,941,516	260,214	118,028	---	---	---
Northern, N. Y.	36	306,130	213,025	762,039	149,373	78,764	---	---	New Albany and Salem	258	2,535,121	5,281,848	7,029,491	645,827	371,402	---	---	---
Oswego and Syracuse	29	467,200	294,189	749,683	In progr.	---	---	---	Peru and Indianapolis	73	---	568,814	2,000,000	150,000	90,000	---	---	---
Pottsdam and Watertown	25	610,000	140,000	896,423	241,146	82,600	---	---	Terre Haute and Ind.	73	1,361,450	250,135	1,555,909	481,272	206,079	---	---	---
Lenox and Saratoga	48	500,000	395,000	719,000	21,089	---	---	---	Chicago and Rock Is'd	182	6,248,000	1,734,318	6,028,272	1,886,196	850,039	---	---	60
Saratoga and Bingham	80	768,589	1,678,804	2,272,777	159,484	22,503	---	---	Chicago, Burl. and Quincy	210	4,631,540	3,852,970	8,042,429	1,505,167	81,767	---	---	63
Syracuse and Boston	27	437,830	737,079	1,109,222	156,363	56,184	---	---	Chgo. St. Paul & P'd du Lac	178	2,300,000	1,326,000	3,625,000	In progr.	---	---	---	---
Truy and Boston	97	1,500,000	700,979	2,200,500	400,163	162,037	3	63	Galea and Chicago	259	6,024,800	8,899,015	9,395,455	2,315,786	1,192,042	8	71	---
Watertown and Rome	64	1,000,000	1,819,000	2,844,000	213,393	114,631	---	---	Illinois Central	704	6,564,485	20,811,002	25,437,669	293,965	566,972	---	---	71
Belvidere Delaware	64	3,000,000	1,140,200	8,794,096	1,040,787	604,114	12	117	Peoria and Oquawka	151	1,569,899	2,200,000	6,400,000	In progr.	---	---	---	---
Osborne and Amboy	60	3,485,000	1,550,584	1,738,117	117,389	45,542	---	---	Ohio & Miss. (Wst. Div.)	147	1,780,295	3,292,403	4,870,566	Recently opened.	---	---	---	---
London and Atlantic	30	3,185,000	788,844	3,680,017	911,611	534,951	10	129	Terre Haute, Alt. & St. Louis	208	3,011,150	9,925,927	8,724,764	823,767	247,757	---	---	---
New Jersey Central	63	2,000,000	3,592,826	6,621,829	682,940	367,193	---	---	Detroit and Milwaukee	185	838,000	1,123,964	1,966,969	Recently opened.	---	---	---	---
Morris and Essex	53	1,157,805	340,000	1,684,127	237,768	101,542	3	---	Mich. Central	252	6,057,840	8,666,639	12,847,238	2,349,758	764,916	8	61	---
Allegheny Valley	44	1,574,900	609,046	1,700,000	85,000	46,000	---	---	Mich. South'n & N. Ind.	475	8,876,400	10,359,619	19,336,044	2,309,437	644,511	---	---	20
Omberland Valley	52	1,018,100	213,509	1,226,675	156,463	77,92	---	---	Green Bay, Ml. & Ch.	40	1,000,000	780,000	1,780,000	---	---	---	---	10</

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	92½	96
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	86	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1865	55	
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	82	88
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	72½	75
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,800,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, August	"	1861	94	96
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	65	75
Do. do.	1,200,000	Do. on branches	7	March, Sept.	"	1873	62	55
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August	"	1863	77	82½
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72		60
Do. do.	1,200,000	Do. convertible	7	April, October	"	1862-72		60
Covington and Lexington	400,000	Do. do.	6	March, Sept.	"	1867	62½	65
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	March, Sept.	"	1883	40	47½
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1875	86½	87
Fort Wayne and Chicago	1,200,000	Do. conv. till 1863	7	Jan'y, July	"	1861	77	78
Gaiana and Chicago	2,000,000	Do. convertible	7	Feb'y, August	"	1873	62	72½
Do. do.	2,000,000	2d mortgage, do.	7	Feb'y, August	"	1863	98½	99
Great Western (Illinois)	1,000,000	1st mortgage, do.	7	Jan'y, Novemb.	"	1875	90½	90½
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	10	April, October	"	1868	87½	93
Indiana Central	300,000	Do. 2d sec. inconv.	8	April, Oct. 10 Oc.	"	1863		
Indianapolis and Bellefontaine	600,000	Do. convertible	7	May, Novemb.	"	1873		85
Indianapolis & Cin'ti (for Lawb. & U. M.)	450,000	Do. do.	7	Jan'y, July	"	1860-61	65	82½
La Crosse and Milwaukee	500,000	Do. conv. till 1867	7	March, Sept.	"	1866	75	82½
Lake Erie, Wabash, and St. Louis	8,400,000	1st mort. 1st sec. conv. till 1864	8	Jan'y, Novemb.	"	1874	75	85
Little Miami	1,500,000	1st mortgage, conv. till 1869	7	Feb'y, August	"	1865	81½	82½
Michigan Central	1,000,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	81½	89
Do. do.	600,000	No mortgage, convertible	8	April, October	Bost.	1869	92	94
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1867	8	March, Sept.	"	1869	70	80
Do. do.	650,000	Do. 2d do. 1868	8	Jan'y, July	N.Y.	1863	70	77½
Do. do.	1,250,000	Do. 3d do. 1860	8	April, October	"	1867	75	78
New Albany and Salem	600,000	Do. 1st section	10	June, Decemb.	"	1868-62		90
Do. do.	2,325,000	Do. oth. sec. conv. till 1868	8	May, Novemb.	"	1864-75		75
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		85
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		75
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66		60
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872		101½
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	101½	102
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875		75
Staubsville and Indiana	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Terre Haute and Indianapolis	1,500,000	Do. convertible	7	Jan'y, July	"	1868		
Terre Haute and Alton	600,000	Do. do.	7	March, Sept.	"	1866		
Do. do.	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	88½	89
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	96	97½
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	85	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	88	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	76	78½
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1869	62	63
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	41	42
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	41	41½
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	41	41½
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	103½	104
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	94½	95½
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	75½	76
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	89	89½
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shar's	7	March, Sept.	"	1860	87½	88
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	85½	87
New York and Harlem	1,200,000	Do. do.	7	May, Novemb.	"	1861-72	94½	95
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	93	95
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	85½	87
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	74½	76
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	90½	90½
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	101½	102
Panama, 1st issue	900,000	Convertible till 1866	7	Jan'y, July	"	1866	115	
Do. 2d do.	1,478,000	Do. till 1866	7	Jan'y, July	"	1866	90	91
Reading	1,300,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	82½	83½
Do. do.	3,469,000	Do. convertible	6	Jan'y, July	"	1870	73½	73½

CITY SECURITIES.		Int't payable.	Off'd Ask'd	CITY SECURITIES.		Int't payable.	Off'd Ask'd
New York, 5 per ct. ....1868-60	{ May, 97 August, 93 November, 103½ February, 105 January, 55 Quarterly, 101 April October, 101½ January, 100 Divers, 80 January, 56½ January, 98 February, 100 March, Sept., 100 January, 99 Divers, 70 January, 64	97	99	Milwaukee, 7 per ct coup. X	Divers	50	70
Do. 6 do. ....1870-75		93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	72	77½
Do. 6 do. ....1883		103½	103½	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	85	90
Do. 5 do. ....1890-93		90	94	Philadelphia, 6 per ct. ....1876-98	Jan'y, July	102½	102½
Albany, 6 per ct. cp. ....1871-81 X	Feb'y, August,	105	105	Pittsburgh, 6 per ct. coup. X	Divers	52	55
Albany, 6 per ct. coup. ....X	Jan'y, July	55	70	Quincy, 8 per ct. coup. ....1868 X	Jan'y, July	62½	65
Baltimore, 6 per ct. ....1879-90	Quarterly	97	99	Racine, 7 per ct. coup. ....1873 X	10 Feb'y, Aug	80	87½
Boston, 5 per ct. coup. ....X	April October	101	101½	Rochester, 6 per cent. coup. ....X	Divers	90	97½
Brooklyn, 6 per ct. ....1870-75 X	Jan'y, July	101½	102	St. Louis, 6 per ct. coup. Long X	Do.	85½	87
Clev'Pd, 7 per ct. cp. W.W. 1879 X	Do.	100	101	Do. do. Municipal X	Do.	87½	90
Cincinnati, 6 per ct. coup. ....X	Divers	80	92½	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	37	45
Chicago, 6 per ct. coup. ....1873-77 X	Jan'y, July	56½	7½	S. Francisco, 7 p. cp. 1865, pay. N.Y. X	May, Novemb.	60	70
Do. 7 per ct. coup. ....1880 X	Jan'y, July	98	99	Do. 10 p. ct. cp. ....1871 X	Do. do.	67	90
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August	100	103	Do. 10 do. pay. N.Y. X	Jan'y, July	68	70
Dubuque, 8 per ct. cp. ....Long X	March, Sept.	100	100	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	68	80
Jersey City, 6 p. ct. cp. W.W. 1877 X	Jan'y, July	99	99	Wabash, 6 per ct. coup. ....X	Divers	50	50
Louisville, 6 per ct. cp. ....1880-83 X	Divers	70	72½	Do. 6 p. ct. cp. Mun. ....1874 X	March, Sept.	81½	81½
Memphis, 6 per ct. coup. ....1882 X	Jan'y, July	64	65	Zanesville, 7 do. ....1877 X	April, October	81½	81½

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending January 11, 1859.

ROADS.	Per cent.	and int.
Little Miami, 1st Mort.	68	51
Covington and Lexington, 1st Mortgage	68	55
Do. do. 2d do.	5	40
Do. do. 3d do.	6	30
Ohio & Miss., E. D., Construction	78	20
Cinc. Ham. and Dayton, 1st Mortgage	78	90
Do. do. 2d do.	78	75
Indianap. & Cincinnati, do. do.	78	72½

STOCKS.

Cincinnati, Hamilton & Dayton	53
Columbus and Xenia	50
Indianapolis & Cincinnati	60
Little Miami	51
Ohio and Mississippi (E. D.)	3½

Extract from Marie & Kanz's Money Circular for the European Steamer of Jan. 19th.

[TRANSLATED.]

NEW YORK, Tuesday, Jan. 18th, 1859.

Since our advices of the 4th inst., we have had a slightly increased activity in the Stock market. But the general public, with a few exceptions, operate with great caution. The fluctuations for the fortnight have been very irregular. The result of the movement being a slight decline on several of the leading State Stocks, and a moderate advance on most Railway Stocks and Bonds. State Stocks are doubtless affected by the approaching award on the 24th inst., of \$10,000,000 of the Government Loan. The heaviest decline has been on the various Erie Securities, and on Reading shares; the chief advance on the shares of Stonington and Harlem Preferred, and on Harlem and New York Central Bonds. The Money market remains in about the same state as at the date of our last Circular.

In the leading branches of trade there is a general expectation of a considerable increase of business as compared with the movement of last Spring.

Our last advices from Europe are to the 1st inst., per Niagara, received on the 14th.

STATE STOCKS—Some descriptions are lower, some firmer, with a fair amount of sales. Virginias have improved $\frac{1}{2}$ per cent. Missouri has declined $\frac{1}{4}$; Tennessee $\frac{3}{8}$; California 7s 1¼ per cent higher, North Carolina, $\frac{1}{2}$, Ohio 6s, 1860, sales at 101½; 102; do. 1886, 107; Indiana 5s, 92½; Louisiana 95½; New York 6s, 1873, at 115, United States 5s, 1874, sales at 104½; the previous price.

CITY AND COUNTY BONDS—With the exception of one or two Securities, transactions have been unimportant. Some \$20,000 St. Louis City Bonds have changed hands at former prices, and about \$100,000 Brooklyn City 6s, Water Loan, at 1½ per cent advance. Memphis City 6s, guaranteed by the State, have also improved 2 per cent. There have also been small sales of Louisville, San Francisco 10s, and Albany 6s without change of prices.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of January 19th.

[TRANSLATED.]

NEW YORK, Tuesday, Jan. 18th, 1859.

Our last advices are dated 4th inst. During a few subsequent days, our Stock Market improved, and quotations for all descriptions of securities slightly advanced. This upward movement was followed by a partial reaction on the speculative shares, and at the close, the market for these is still weak, owing to rumors that the harmony between the great lines of railway is likely to be disturbed. The annual report of the Erie Railroad has somewhat disappointed expectations, and has caused a serious decline upon the shares and unsecured bonds of the Company. The political questions now agitated at Washington and in Europe are watched with much interest, but do not at present exert any visible influence on the movements of our Stock Exchange. State Stocks—Missouri 6s have declined $\frac{1}{2}$; Tennessee 6s, $\frac{3}{8}$; Virginia 6s have advanced $\frac{3}{4}$; Louisiana 6s, 1; California 7s, 4; and Indiana 5s, 4½ per cent. Sales of Ohio 6s, 1886, at 107, and of New York 6s, 1883, at 115. The new Government Loan is steady, at 104½. City and County Bonds—Transactions have been on a moderate scale, and con-

financed principally to Cincinnati 6s, Cleveland 6s, Chicago 6s, Detroit 7s, all issued for water purposes, Memphis guaranteed 6s, Chicago Sewerage 7s, Louisville 6s, and St. Louis 6s. Railroad issues, all at well sustained prices. Sales of St. Louis County 6s at 75½ to 76, and of Ross County (Ohio) 7s at 87½. Railroad bonds are generally higher, with the exception of the Erie issues. Illinois Central Construction 7s have advanced 1½; do. Freeland, 2½; Harlem 1st mortgage, 3½; Harlem second mortgage, 4; Galena and Chicago, second mortgage, ½; Michigan Central 8s, ½ per cent. Erie, second mortgage, have declined 1½; Erie, third mortgage, ½; Erie, fourth mortgage, 2, and the convertibles 2 to 4 per cent. Sales of Cleveland, Painesville and Ashtabula 7s, at 97½, and of Little Miami 6s at 81½. Railroad shares, market irregular. New York Central have advanced ½; Galena and Chicago ½; Chicago and Rock Island 1½; Illinois Central 1½, and Michigan Central ½ per cent. Erics have declined 2½; Reading, 2½, and Panama ½ per cent. Money is still superabundant; rates have not changed since our last, but are firm. Loans on call 3½ to 5; Indorsed paper 4½ to 7 per cent. Exchange on Europe—The supply and demand have both been moderate, and rates have been steady. The principal sales of sterling have been at 109¼ to 109½, and of Francs at 5.16½ to 5.15.

American Railroad Journal.

Saturday, January 22, 1859.

New Sleeping Car.

We have examined a full-sized model of a sleeping car contrived by Mr. Nathan Thompson of Brooklyn, which seems far to exceed, in simplicity of arrangement, ease of conversion, and cheapness of construction, any other car of the kind yet produced.

In Mr. Thompson's car there are two passage ways, one on each side. A car, say 48 feet long, is divided into eight compartments of six feet each. In the day car the passengers sit back to back, looking toward the sides. The seats themselves are upon a platform raised about ten inches from the floor of the car. Each compartment is calculated for eight passengers, four on a side. On a level with the day seats are two side seats, which can be used at all times, and which turn up on hinges when not in use. The day car seat resembles a sofa, with stuffed cushion and back. To convert it into a night car, the back of the seat is easily raised, and laid flat upon supports, and forms one of the night berths. The seat forms another. Under the seat is another. This is of double width, and contains an extra mattress, with which a fourth bed may be made up on the raised platform. Above the upper berth is a rack for baggage, or for small children when asleep.

For a day car, Mr. Thompson's arrangement seems to be much preferable to the ordinary one. The change required to convert it into a night car is not the work of a minute. If two of the party occupying one compartment wish to retire to their berths, two convenient seats remain for the use of the others. The berths are wide, and can be made perfectly comfortable. The fastidious traveler can, if he choose, take along with him a pillow, or other bed clothing. By means of sliding doors, the whole can be converted into eight distinct apartments, each of which can be taken by parties or individuals.

An advantage appears to be gained in Mr. Thompson's car, by placing the load in the centre of it. By carrying a truss through the car from

end to end, it can be made much stronger than the form at present in use. Mr. Thompson's car is now on exhibition at the St. Nicholas Hotel, in this city, where it can be seen by railroad men, to whose attention we commend it.

Central Railroad Co. of New Jersey.

The following is a comparison of the receipts, expenses and net earnings of the nine months ending December 31st, 1858, with the same months of 1857:

	Receipts.	Expenses.	Net earnings.
1858....	\$669,479 87	\$266,881 91	\$402,597 96
1857....	515,486 54	247,016 20	268,470 34
Increase.	\$153,993 33	\$19,865 71	\$134,127 62
	or 30 per ct.	or 8 per ct.	or 50 per ct.
The following disposition has been made of the net earnings.....\$402,597 96			
Paid Interest on \$3,000,000			
Bonds, 9 months.....\$157,500 00			
Do. Incomes, Notes, &c.. 32,746 32			
Paid Loss in redeeming			
\$200,000 Income B'ds. 14,650 00			
Paid extra cost of boat.. 5,448 12			
Paid Taxes to State..... 23,841 34			
			234,195 78

Balance, (equal to 8½ per cent. on

Stock \$2,000,000).....\$168,402 18

Of this balance there has been applied to the redemption of \$200,000 Income bonds, (\$164,650, less \$14,650 loss in redeeming,) \$150,000; expended on permanent accounts, \$7,514 48; and the remainder, \$10,887 70, is cash on hand or accounts payable.

JOHN T. JOHNSON, President.

Savannah, Albany and Gulf Railroad.

At an election held on the 4th inst., at the office of the company, in Savannah, for a Board of Directors to manage the affairs of the Savannah, Albany and Gulf Railroad Company, the following gentlemen were duly elected: J. P. Screven, J. Stoddard, Wm. Duncan, H. D. Weed, S. Cohen, R. D. Arnold, F. S. Bartow, Charles Green, H. Roberts, J. W. Anderson, S. Elliot, C. A. L. Lamar, John Boston.

At a subsequent meeting of the Board, Hon. J. P. Screven was unanimously re-elected President.

Lehigh Coal and Navigation Company.

OTIS AMMIDON, who died recently in Philadelphia, at the ripe age of 86, had filled the office of Treasurer to the Lehigh Coal and Navigation Company for thirty-one years. The vacancy created by his decease has been filled by the appointment of EDWIN WALTER, who for nearly thirty-seven years has been Secretary of the same Company. In him the offices of Secretary and Treasurer are now united.

Toltec Mining Company.

The annual meeting of this corporation was held in Boston on the 12th, at which the annual report was read. The assets of the Company are \$66,014 62; excess of assets over liabilities, \$61,428 07; available assets over liabilities, \$13,038 07. The Directors in their report state that the mine is in good condition and well worked, and in time a rich harvest is expected. The following officers were chosen: Directors—Henry Crocker, Francis Howe, W. T. Thatcher, Aaron Hobart, W. H. Chessman, Henry Buyzo and L. W. Clark. At a subsequent meeting of the Directors, Mr. Henry Crocker was chosen President and L. W. Clark, Secretary.

London Correspondence.

26, THROMMORTON STREET, }
LONDON, December 24th, 1858. }

To the Editor of the AM. RAILROAD JOURNAL.

The "Arago's" letters and papers were delivered this morning. The dates are to the 11th inst., and many will note with pleasure the marked improvement in Erie '75 and '71 bonds. The better traffic of the line has doubtless had its effect, but it is to be hoped the improving management of the Company has its influence also. The number of persons in this country who have invested in Erie bonds is very great, and the success of that line would do much to revive confidence in American railway securities. A judicious, bold and comprehensive course of policy can command it. Free passes and other little indulgences, if not very much abused, may be indulged in with impunity; but any neglect in developing a profitable traffic, or a recurrence of an expensive competition cannot fail to be ruinous to the road. You have most forcibly shown the necessity of furnishing the shareholders with such information as may enable them to form some opinion of the value of their property, and of the services of their President; and we trust you will soon have a general statement of the road for the past year, the earnings from "local" and "through" freight and passengers, and the cost of carrying each. You claim for America a better system in the management of its railways than you found existing in this country. Here the directors render comprehensive statements of the working of their line every six months. In this particular, at least, your Presidents of railways would do well to copy more extensively. The New York Central shareholders have had a committee of enquiry into the accounts and transactions of that road; and although such committees too frequently foreshadow an increase of capital in some form or other, they do much good, for their mild censure indicates an unnecessary expenditure, which is subsequently avoided. This committee reports the road in good working order, and as being well made; and although the wooden bridges will have to be replaced by stone, the road is evidently capable of receiving an increased traffic without much additional outlay. Can so favorable a report be made of the Erie? If it can, why is it that a committee has not been appointed to examine the road? March will soon arrive, when the second mortgage bonds will be due. Their price, 11th Dec., was 87½. If the President is so assured that the line is in efficient order, and that the Company does not require capital for any other than ordinary outlay, it is more than probable that as favorable a report of his road as that made by the committee of the New York Central, would relieve him of all anxiety as to the bonds due the 1st March next, but which at present must sadly perplex him.

At this season of the year business is in a great measure suspended, and until Tuesday, the Stock Exchange is closed. Since my last, the prices of railway securities have improved; large speculative purchases have been made. The public has not yet encouraged the market, and when buyers do come in, prices will advance, from a scarcity of stock. East Indian and Australian guaranteed railways must absorb a vast amount of money, for they are favorably regarded. United States Stocks continue in demand, and there is a fair enquiry for sound American railway bonds. United States

[illegible]

The following table will show the total annual amount received per ton, of coal transported over the Reading Road, of 95 miles during the past ten years; the rate per ton per mile; the cost per ton over the whole road; the cost per ton per mile; the cost per ton of transportation expenses over the whole road, and the cost per mile of transportation expenses:

YEAR.	Rec'd (in cents) per ton over whole road.	Received per ton per mile.	Cost of transportation per ton over road.	Cost per ton per mile.	Transp. exp. per ton over rd, exclusive of repairs of track.	Transp't'n expenses per ton per mile.
1848....	112-27	1-18	63-57	6-70	45-50	4-79
1849....	150-25	1-58	64-15	6-76	43-62	4-59
1850....	153-29	1-61	62-11	6-54	40-69	4-28
1851....	122-33	1-28	54-48	6-53	38-54	4-05
1852....	130-27	1-36	54-64	6-75	35-36	3-72
1853....	142-50	1-50	53-56	6-63	35-07	3-70
1854....	163-63	1-72	59-36	6-23	41-06	4-31
1855....	165-54	1-74	54-38	6-72	33-61	3-53
1856....	155-22	1-63	57-77	6-08	35-21	3-70
1857....	141-13	1-48	60-43	6-46	36-03	3-80

To the cost of transportation should be added the renewal fund, obtained by setting apart three cents per hundred tons carried one mile. Since 1849 the annual receipts to this fund have been as follows:

1849	\$74,704	1853	\$106,979
1850	89,132	1854	129,988
1851	116,531	1855	149,842
1852	111,151	1856	144,663
		1857	120,608
	\$391,518		
	652,080		\$652,080

Total....\$1,043,598

With the above additions, the cost of transporting coal over this road has undoubtedly been ascertained with great accuracy. The road and quipment is maintained in first rate order. The figures given will serve as a convenient standard by which to refer the earnings and cost of operating other roads.

Hampshire and Hampden Railroad.

The Hampshire and Hampden Railroad has been lately transferred to the control of Joseph E. Sheffield, of New Haven, as security for a debt of \$103,014 due him from the Company. In relation to the matter the Springfield Republican says:

The entire management and control are given up to Mr. Sheffield, with liberty to re-mortgage or re-lease. He is to apply the earnings to the expenses of running, and such repairs and improvements as he deems desirable, next to paying the interest on the bonds to the amount of \$200,000 which are secured by a prior mortgage on the road, and then to paying the interest and principal of his claim. However fortunate the road may be in its business, (within possible limits,) these objects will fully absorb the profits of the road, and probably more than absorb them; so that stockholders may safely resign all expectation or hope of any return, principal or interest, on their investment. The amount of the stock paid in is \$292,650.

Indiana Central Railroad.

The following gentlemen have been elected directors of this company for the ensuing year:

John S. Newman, Samuel Hannah, Charles Parry, W. S. T. Morton, Jos. W. Jackson, Williams Petty, David Commans, John T. White. John S. Newman was elected President, and Samuel Hannah Secretary and Treasurer.

Bank of England.

The return from the Bank of England for the week ending the 29th December, gives the following results, when compared with the previous week:

Public deposits.	£9,806,029	Increase....	£145,211
Other deposits.	12,903,618	Decrease...	245,389
Rest.....	3,115,077	Increase...	10,878

On the other side of the account:

Gov't Securities.	10,808,591	Unchanged..	
Other Securities.	16,950,158	Increase...	456,033
Notes unempl'd.	12,744,955	Decrease...	497,095

The amount of notes in circulation is £20,110,350, being an increase of £404,360; and the stock of bullion in both departments is £18,967,100, showing a decrease of £181,897, when compared with the preceding return.

Chester Valley Rail Road.

At the annual meeting of the stockholders of this Company, held in Philadelphia on the 10th inst., the following gentlemen were elected Directors for the ensuing year:

President.—JOHN F. GILPIN.

Directors.—Geo. W. Carpenter, Wm. H. Holstein, Samuel Hart, Coffin Colket, Stephen Coulter, Joseph W. Ryers, and L. E. Corson.

Milwaukee and Horicon Railroad.

At a meeting of the holders of the first mortgage bonds of this Company, held in this city on the 12th inst., to consider what action should be taken in consequence of the failure of the Company to pay the coupons on the bonds, resolutions were passed, requesting the Trustee named in the mortgage to "proceed immediately to take possession of the said road, and all the property comprehended in the said mortgage, and to advertise and sell the same according to the provisions of said mortgage,

Provided, however, That if the said coupons and the expenses incurred in pursuance of these resolutions shall be paid to the said Trustee within thirty days from the first day of January, instant, then the said Trustee shall discontinue proceedings, and relinquish the said road and property to the Company."

The Hoosic Tunnel.

The railroad tunnel which is now being bored through the Hoosic Mountain in Massachusetts—one of the highest elevations of the *Green Mountain range*—is a work of great importance. When completed, the length of the tunnel will be four miles of solid rock excavation. Gangs of men are now at work on each side of the mountain, the drifts have been carried to a distance of 2,400 feet, and the work is progressing at the rate of about 300 feet per month. The State of Massachusetts granted a loan of two millions of dollars for this undertaking, and the first instalment of \$100,000 has already been paid; the rest becoming due as the work progresses. The line of railway, of which the tunnel is to form a part, is now finished from Boston to Greenfield—105 miles—on the east side; and the portion on the west side—49 miles—between Troy and North Adams, is to be opened about Christmas. There will then be a space of 30 miles, including the tunnel, to be completed to establish a continuous line of 164 miles between Troy and Boston. This enterprise, when accomplished, will reduce the railroad distance from Troy to Greenfield 65 miles, also the summit level 700 feet, and the gradients from 81 to 30 feet, at the same time obliterating several miles of curvature. It also shortens the route and reduces the gradients and curvature between Troy and Lowell, Nashua, Lawrence, Boston, Salem and Newburyport, and the cost of transportation will be one-third less between these places.—*Scientific American*.

Trade of the Tide-Water Canal.

It appears from a tabular statement that, during the year 1858, 5,513 boats descended this canal, of which 2,332 were towed to Baltimore, and 2,181 to Philadelphia. Our city seems to be gradually gaining on Philadelphia in the aggregate of trade brought down by this canal. From 1849 to 1856, with the exception of one year, 1854, a larger number of boats went to Philadelphia, but for the last two years the balance has been in favor of Baltimore. From 1849 to 1858, inclusive, 49,416 boats were towed from the canal to the two cities, of which 26,735 went to Philadelphia, and 22,681 to Baltimore.—*Balt. American*.

Illinois Two Mill Tax.

The proceeds of the two mill tax in the State Treasury, subject to payment on the principal of the State debt, under the provisions of the State constitution, on the 1st, amounted to \$766,629 48

Amount of stocks presented 31,979 48

Balance of fund in Treasury \$784,650 00

The flourishing condition of our State, and the consequent high credit of her securities in the money markets of the world, accounts for this. Illinois securities command a premium, hence holders do not respond to her calls to pay creditors. The proper disposition of the large and increasing fund produced by the two mill tax, should receive the most serious consideration of the Legislature, now in session. Under the constitutional provision it is to be disbursed in taking up our State stocks. This should not be carried out at a sacrifice. This is a subject that invites the most earnest consideration of the General Assembly.—*Illinois State Register*.

Debt of Keokuk.

The city of Keokuk, Iowa, has issued a circular to its creditors, in which it states its inability to pay the interest upon its debt. The debt amounts to \$1,150,000, of which \$800,000 was issued to various railroads. Its assets amount to \$825,000, of which \$650,000 is railroad stock, and \$175,000 unpaid taxes of 1857 and 1858. The Mayor says that the citizens are utterly unable to pay the interest upon this debt, but are willing to pay on \$500,000, with a sinking fund for the extinction of this amount. He says:

It must be evident to all, that our debt is much too great for either the debtor or creditor. It must, therefore, be reduced within a practicable amount, at least one half, or within \$500,000, by a transfer of our railroad stocks. This amount our people would be willing to shoulder, and though a burden fully equal to their ability to carry, yet they would resolutely undertake to provide the means for promptly meeting the interest on that amount and raising a yearly sinking fund for the liquidation of the principal.

Our railroad stocks are equal to these of other western roads. The roads are partially completed and equipped for business, already having a good local traffic, and the work of extending them into the richest portions of the State is in progress, with the prospect of further material extensions through the proposed aid of the State credit, which must make the stocks directly remunerative to a reasonable extent.

We therefore can offer nothing better than the transfer of said stocks for the liquidation of a portion of our indebtedness; and the balance of our debt we propose to fund by an issue of other bonds bearing 6 per cent. interest. In the event of such an arrangement, the new class of bonds which would be issued, would be our only debt, and that would be fully guarded against any increase by the provision of the present State Constitution. The new bonds would, therefore, be more available and of more real value to the creditor than those now held under present circumstances.

The foregoing is respectfully submitted for the consideration of all our creditors, all of whom are

severally and collectively invited to a conference with the representative of this city, who will visit New York City, and remain there from the 20th to the 30th of January, 1859, only authorized to act for the city in making any arrangement with our creditors that may be regarded as mutually advantageous to all concerned.

Pensions Paid by the Government.

The aggregate amount paid for pensions by the United States government, from its foundation to June 30, 1858, is as follows:

	Army Pensions.	Navy Pensions.
Arkansas	\$118,765 03	No agency.
Alabama	585,941 40	No agency.
Connecticut	5,081,281 13	\$103,557 98
California	18,691 65	163 00
District of Columbia	819,304 09	1,032,855 92
Delaware	170,839 56	12,921 85
Florida	158,702 57	16,794 52
Georgia	1,053,389 78	18,744 35
Indiana	1,210,041 92	No agency.
Illinois	894,357 64	No agency.
Iowa	72,123 15	No agency.
Kentucky	3,981,297 52	37,418 55
Louisiana	260,218 92	52,338 18
Maine	4,999,322 24	99,242 95
Massachusetts	7,182,099 92	707,457 60
Maryland	1,453,105 48	425,077 31
Mississippi	143,755 98	No agency.
Missouri	531,112 94	14,537 21
Michigan	528,525 66	174 37
New Hampshire	3,595,523 25	135,627 61
New York	16,809,795 08	1,071,312 61
New Jersey	2,039,678 28	28,141 53
North Carolina	1,974,596 40	2,624 80
Ohio	2,913,009 35	19,702 46
Oregon Territory	8,072 19	No agency.
Pennsylvania	6,475,920 59	534,819 99
Rhode Island	1,737,681 45	149,037 18
South Carolina	1,179,071 03	73,710 55
Tennessee	2,876,757 66	No agency.
Vermont	4,605,567 66	No agency.
Virginia	6,747,076 04	291,492 30
Wisconsin	117,312 96	No agency.
Unknown	1,128,303 74	.....
	\$81,499,241 20	\$4,876,846 36

The aggregate amount was paid to the following classes:

To army invalids	\$18,531,997 12
To officers and soldiers of the Revolutionary War	45,924,532 09
To widows of deceased officers and soldiers of the Revolutionary War	17,465,146 14
To widows and orphans (five years' half pay)	3,367,218 56
At the treasury, but not easily apportionable among the several classes	1,128,303 74
To invalids and widows, and orphans of the Navy	4,467,877 81
To privateer invalids	154,333 10
To widows and orphans of privateer invalids	254,635 94

State Bank of Indiana.

The branches of this bank have closed their business in the following manner, as reported at a meeting of the directors last week:

By assignment for the benefit of stockholders—Branches at Indianapolis, Madison, and Fort Wayne.

By final dividend—Branches at South Bend and Michigan City.

By sale and final dividend—Branches at Lawrenceburg, Richmond, New Albany, Evansville, Vincennes, Bedford, Terre Haute, and Lafayette.

Each branch has contracted for the redemption of her remaining outstanding circulation *whenever presented*, and for its portion of the effaced notes for three years, taking bonds approved by the directors of the Branch and of the State Bank.—*Indiana Sentinel.*

Philadelphia, Wilmington and Baltimore Railroad.

The annual meeting of the stockholders of the Philadelphia, Wilmington and Baltimore Railroad Company, was held on the 10th inst., at Wilmington. The old Board of Directors was re-elected, except in the case of one member, who declined. The present Board is as follows:

Samuel M. Felton, Moncure Robinson, Wm. Lytleton Savage, Joseph C. Gilpin, John A. Duncan, Jesse Lane, Frederick A. Curtis, Edward Austin, John C. Groome, J. I. Cohen, Jr., Thos. Kelso, Columbus O'Donnell, Enoch Pratt, Thos. Donaldson, Wm. W. Corcoran.

Mr. Felton was unanimously re-elected President, and Alfred Horner, Secretary and Treasurer.

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending January 1st, were.....\$33,506 24
Week ending January 2, 1858..... 35,383 91

Decrease.....\$1,877 67
Total traffic from July 1st.....\$1,182,882 14
Same period last year..... 1,281,817 32

Decrease.....\$98,935 18

The earnings of the Central Railroad Company of New Jersey were:

For the month of December, 1858.....\$79,616 98
For the same month last year..... 60,753 98

Increase.....\$18,863 00

The receipts being larger than those of any previous month.

The earnings of the Norwich and Worcester Railroad for

December, 1858, were.....\$24,092 00
December, 1857..... 15,114 00

Increase.....\$8,978 00

The earnings of the North Pennsylvania Railroad for

December, 1858, were.....\$25,417 31
December, 1857..... 21,674 03

Increase.....\$3,743 23

The earnings of the Stonington Railroad in December,

1858, were.....\$16,684 93
1857..... 12,025 72

Increase.....\$4,658 31

The earnings of the Chicago and Fond du Lac road for December were as follows:

Southern Division.....\$18,223 63
Northern Division..... 4,499 21

Total.....\$22,722 84

The earnings of the Michigan Central Railroad for the whole of December were:

	1858.	1857.
Passengers	\$57,954 36	\$73,746 72
Freight	66,862 53	90,594 03
Miscellaneous	5,291 83	6,124 02

Total.....\$180,108 71 \$170,464 77
Decrease..... 40,356 06

The earnings of the Ohio and Mississippi Railroad Company for December were;

	1858.	1857.
Passengers	\$51,633 91	\$55,406 87
Freights.....	39,373 29	32,563 61
Express.....	3,167 50	3,442 50
Mail	6,585 42	5,077 05

Total.....\$101,160 12 \$96,489 98
Increase..... 4,670 19

The earnings of the Terre Haute, Alton and St. Louis Railroad Company for December, 1858,

compared with the corresponding period of 1857 were as follows:

	Dec., 1858.	1857.
Passengers	\$31,635 10	\$26,739 90
Freight	37,874 05	28,322 96
Mails, express, &c... ..	3,024 23	3,832 54

Total.....\$72,533 44 \$68,895 40
Increase in December, 1858..... 8,638 04

The December earnings of the Panama road were in

1858.....\$135,904
1857..... 129,998

The revenue of the Baltimore and Ohio Railroad Company for December, was:

MAIN STEM.	
From Passengers	\$48,425 61
" Mails	7,833 34
" Express	7,015 16
" Tonnage	215,125 23—\$278,389 39

WASHINGTON BRANCH.	
From Passengers	\$26,854 82
" Mails	1,600 00
" Express	1,350 00
" Tonnage	6,411 44— 35,616 26

NORTH-WESTERN VIRGINIA ROAD.	
From Passengers	\$3,260 56
" Mails	362 75
" Tonnage	18,722 05— 22,845 36

Total.....\$336,861 01

Compared with the same month of last year, the following result is shown:

	Main Stem.	N.W. Virg'a.
1858.....	\$278,399 39	\$22,845 26
1857.....	320,698 83	21,046 35

Decrease for 1858..\$42,209 44
Increase for 1858.. \$1,797.01

	Wash. Br'ch.	Total.
1858	\$35,616 26	\$336,861 01
1857	37,603 84	379,259 02

Decrease for 1858.. \$1,937 53 \$42,393 01

The financial year of the Company commenced with October. The receipts of the first quarter of the present year compare with those of the previous year as follows:

October.....	\$392,508 02	\$396,195 85
November.....	383,159 22	361,442 38
December.....	336,891 04	379,259 02

Total.....\$1,112,523 25 \$1,139,894 25
1,139,894 25

Dec. present year. \$27,371 60

New York State Banks.

We published last week an abstract of the report of the Superintendent of the Banking Department, relating to the Banks of this city. We subjoin the following, obtained from the same source, in reference to the Banks of the State:

The number of Banks in the State is as follows:
Incorporated Banks..... 32
Banking Associations..... 231
Individual Bankers..... 24
Closing and insolvent Banks..... 28

Total..... 335

This is a decrease of 10 as compared with last year.

The following new Banks were organized during the fiscal year:

Bank of Newport.....	Capital, \$100,000
Bank of Poughkeepsie	200,000
Cataract Bank, Lockport	100,000
Dover Plains Bank	100,000
Swiss Bank, Pine Plains.....	120,000

Total.....\$620,000

Circulating notes to the amount of \$180,636 were issued to these banks, and \$214,925 securities were deposited in the department, of which \$178,000 were New York State stocks, and \$36,925 bonds and mortgages.

The circulating notes issued and outstanding are as follows:

To Banking Associations and Bankers	\$24,603,194 00
To Incorporated Banks	11,003,968 00

Total	\$35,607,180 00
Circulation of free Banks, Sept. 1857	\$28,429,522 00
Do. do. 1858	24,603,194 00

Decrease	\$3,826,328 00
Securities held Sept., 1857	\$30,203,632 07
Do. do. 1858	26,393,098 83

Decrease	\$3,810,533 24
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as follows:

Bonds & mortgages	\$1,429,153 80
N. York State stock.	2,204,216 63
Arkansas do.	49,000 00
Illinois do.	54,600 00
Michigan do.	131,000 00

Total	\$3,867,970 43
Inc. U. S. stock	\$29,800 00
Inc. cash	27,637 19
	57,437 19
	\$3,810,533 24

The securities now held from the free bank circulation are as follows:

Bonds and mortgages	\$6,427,077 69
Per cent.	
N. Y. State stock, 4½%	\$323,600 00
Do. 5	7,007,602 01
Do. 5½	1,046,000 00
Do. 6	10,417,983 92
	18,795,158 92
U. S. stock	5 \$260,000 00
Do.	6 79,100 00
	339,100 00
	\$25,561,336 61

Bank Statements.

The following is a comparative statement of the New York Banks for the weeks ending—

	Jan'y 8th.	Jan'y 15th.
Capital	\$66,108,135	\$66,108,135
Loans	128,538,642	129,349,245
Specie	28,399,818	29,380,712
Circulation	7,930,292	7,586,163
Deposits	92,826,622	95,456,323

The following is a comparative statement of the Philadelphia Banks for the weeks ending—

	Jan'y 10th.	Jan'y 17th.
Capital	\$11,586,415	\$11,588,065
Loans	26,395,860	26,365,358
Specie	6,067,222	6,050,743
Circulation	2,854,398	2,830,384
Deposits	17,133,607	17,323,908

The following is a comparative statement of the Boston Banks for the weeks ending—

	Jan'y 10th.	Jan'y 17th.
Capital	\$33,912,200	\$33,318,000
Loans	60,320,000	60,106,798
Specie	8,295,400	7,931,712
Circulation	7,016,000	6,793,723
Deposits	21,615,500	21,127,712

The following is a comparative statement of the New Orleans Banks for the weeks ending—

	Jan. 1st.	Jan'y 8th.
Loans	\$20,587,467	\$20,453,417
Specie	15,948,189	16,294,474
Circulation	9,581,814	10,383,714
Deposits	24,972,662	24,297,165
Exchange	9,882,600	9,966,131
Due dist. banks	2,331,234	2,540,578

The Bank movement in the four principal cities of the Union, as compiled from the above, is as follows:

	LOANS.	DEPOSITS.	SPECIE.	CIRCULATION.
N. Y., Jan. 15.	\$119,349,745	\$95,456,323	\$29,380,712	\$7,586,163
Boston, " 17.	61,060,800	11,127,700	7,931,700	6,793,710
Philad., " 17.	26,365,358	17,323,918	6,050,743	2,830,384
N. Ori., " 8.	20,453,477	24,297,165	16,294,474	10,383,714
Total	236,274,847	158,204,066	59,657,629	27,593,961
Last week	\$235,841,969	156,583,391	\$58,710,609	27,832,504

These figures show a general expansion in the Bank movement.

Interest on Bonded Indebtedness.

The overdue coupons of the Rutland Railroad Co., (August, 1854,) are now being paid at No. 6 Devonshire St., Boston.

The interest on the 1st mortgage bonds of the Hudson River Railroad, due Feb. 1, will be paid at the Treasurer's office.

Railroad Dividends.

The Little Miami Railroad Co. have declared a dividend of 4 per cent., payable on demand.

A dividend of one dollar and ten cents per share on the stock of the Wrightville, York and Gettysburg Railroad Company, for the last year, has been declared by the Northern Central Railroad Company.

The Buffalo and State Line Railroad Co. have declared a cash dividend of 5 per cent., payable Feb. 15th.

The West Philadelphia City Passenger R. R. Co., a semi-annual dividend of 5 per cent.

The New Jersey Railroad Co., the usual half-yearly dividend of 5 per cent., payable Feb. 1st.

The Patterson and Hudson River Railroad, a dividend of 4½ per cent., payable on the 19th inst.

The Delaware and Raritan Canal, and Camden and Amboy Railroad, have declared a semi-annual dividend of six per cent., payable to the stockholders in this city by Ira Bliss, at the office of the Joint Companies, on the 21st inst.

Insurance Dividends.

The Republic Fire Insurance Company has declared a dividend \$6 25 per share to the stockholders, payable on demand; also, a scrip dividend of 80 per cent. on the earned premiums of 1858, for which certificates will be issued on the 8th of February, on which day interest will be paid on the outstanding scrip at the rate of 6 per cent. per annum.

The Lamar Fire Ins. Co., a semi-annual dividend of 10 per cent., payable on demand.

The New York Equitable Fire Ins. Co., a semi-annual dividend of 15 per cent.

The Mercantile Mutual, and the Great Western Stock and Mutual, Marine offices have just declared their dividends on the business of the year 1858. The Mercantile, after paying 6 per cent. interest on the outstanding scrip, divides 20 per cent. to policy holders in new scrip. The Great Western, after paying 7 per cent. interest on \$1,000,000 stock, divides 10 per cent. extra to the stockholders, and 20 per cent. to the policy holders.

PROPOSALS

WILL be received until the 12th of February next for the construction of 3,600 lineal feet of wooden bridging, on the line of the Lynchburg Extension, of the Orange and Alexandria Railroad. The plans are now ready for inspection, at the office of the Company, in ALEXANDRIA, Virginia.

Detailed information will be sent to any parties desiring it.
H. W. VANDEGRIFT,
Engineer and General Supt.

313

Mechanical Books.

RAILWAY MACHINERY;

A treatise on the Mechanical Engineering of Railways; embracing the Principles and Construction of Rolling and Fixed Plant, in all departments. Illustrated by a Series of Plates on a large scale, and by numerous Engravings on Wood. By D. NIEL KINNEAR CLARK, Engineer. 2 vols. half-morocco, \$24.

"This work contains the best published information extant upon locomotives. It is recommended to all builders, engineers, and machinists, as giving more useful, practical, and philosophical instruction at a cheaper rate than could be obtained by the purchase of any other work."—*American Railroad Journal.*

GRIER'S Mechanic's Pocket Dictionary;
Ninth edition. Bound, \$2 25.

GRIER'S Mechanic's Calculator;
Sixteenth edition. Bound, \$1 38.

THE ENGINEER AND MACHINIST'S DRAWING-BOOK;

Illustrated by numerous Engravings on wood and steel. Half-morocco, \$10 50.

"A complete and reliable Work on the draughting of machinery in all its details, exhibiting a high style of art. We are confident that this book will form an important element in the education of our young mechanics."—*Scientific American.*

BLACKIE & SON,
117 Fulton st.,
NEW YORK.

2m4

LOW & BURGESS, RAILWAY SUPPLY MERCHANTS, No. 9 SOUTH WILLIAM ST., NEW YORK,

MANUFACTURERS' AGENTS AND DEALERS IN
RAILROAD IRON,
SPIKES, AXLES, CAR WHEELS, HEAD LIGHTS,
LANTERNS, GAUGES AND STEAM WHISTLES,
LOCKS, BAGGAGE CHECKS,
OIL, WASTE, PACKING,
AND EVERY ARTICLE

USED IN THE
CONSTRUCTION, EQUIPMENT AND REPAIRS OF
Railways, Machine Shops and Steamships.

JAMES W. LOW. JOSIAH J. BURGESS.

NEW HAVEN ARMS CO., MANUFACTURERS OF THE CELEBRATED VOLCANIC REPEATING FIRE ARMS, COMPRISING RIFLES, CARBINES AND PISTOLS, WITH AMMUNITION WARRANTED WATER PROOF, NEW HAVEN, CONN.

Depot for Sales, 267 BROADWAY, NEW YORK.
JOSEPH MERWIN, Agent.

T. A. HOWLAND & CO., BROKERS IN RAILROAD IRON AND EQUIPMENTS,

51 WILLIAM ST., NEW YORK,
ARE prepared to furnish either Foreign or American
Rails, and Equipments of every kind desired, on
the most favorable terms.

WATER WORKS.

THE undersigned, many years Engineer of the Water Power
Works at Fairmount, as well as of the several Steam
Works supplying the City of Philadelphia with water, may be
consulted upon the location, complete design, construction,
and management of water-works of all kinds for the supply of
cities, towns, etc., etc. Address

FREDERIC GRAFF,
Consulting Engineer, 1337 Arch street
PHILADELPHIA.

3m42

TO MANUFACTURERS OF CEMENT.

OFFICE OF THE COVINGTON & OHIO R. R.,
Covington, Alleghany County, Va., Jan'y 3rd, 1859.
PROPOSALS will be received, at this office, until the 14th of February, 1859, inclusive,—to manufacture one hundred and fifty thousand bushels of hydraulic cement, within a distance of five miles of this place, for use in the masonry now under contract on the line of the Covington and Ohio Railroad.
Further information may be had by persons desirous of offering proposals, on application at this office on and after the 21st inst.

By order of the Board of Public Works,
CHARLES R. FISK,
Chief Engineer.

Notice to Contractors.

PROPOSALS will be received by the STATEN ISLAND RAILROAD COMPANY until the 1st day of February, 1859, for the completion of the Grading, Bridging and Masonry with partial equipment of furniture for said Road. The Rails, Chairs and Spikes will be furnished by the Company.
Previous to the letting all necessary information may be obtained as to the amount of work yet to be done, by addressing J. DEWITT MOSEFORD, Sec'y, 52 Warren st.
New York, December 27, 1858. 412

SAWYER, TINKER & CO., MANUFACTURERS OF COTTON DUCK,

For Car Roofing, of all widths, up to 140 in.
PATENT COTTON BELTING, cost about one-third of Leather.
Office, 36 BEEKMAN ST., NEW YORK.

Patents for Inventions.

T. D. STETSON, Agent for procuring patents, No. 5 Tryon St. Rm., (near City Hall). A circular with full information sent free by mail.
American correspondent *Prac. Mechanics' Jour.* from 1854.

REMOVAL.

W. D. STARLING, Metal Broker and Rail Inspector, from Lawrence Pountney Lane, to the Vestry House, Lawrence, Pountney Hill, LONDON, 1857.

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

RAILROAD IRON. WOOD, MORRELL & CO.,

Having leased the extensive Works of the
Cambria Iron Company,
Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,
And purchased all their real estate,
ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

Philadelphia Office, { North Penna. R. R. Building,
No. 407 Walnut st.

Railroad Iron.

2,000 TONS of Erie Pattern, Crawshays make, on sale. Apply to
JAMES TINKER,
54 Exchange Place.

RAILROAD IRON.

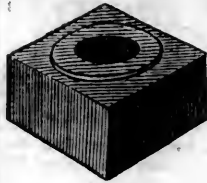
WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.
NORRIS & BROTHER,
6m35 BALTIMORE.
And 17 Nassau st., New York.

Railroad Iron.

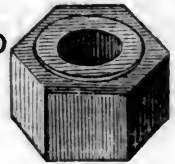
500 TONS 56 lbs. and 1,500 tons 60 lbs. best Welsh make, Erie pattern, now in port, for sale.
T. A. HOWLAND & CO.,
54 William st., New York.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other war kets.
CASWELL & PERKINS,
Brokers, 69 Wall st.
New York, January 1, 1859.



BOONTON, HOT PRESSED AND HOT PUNCHED PATENT MACHINE MADE WROUGHT IRON NUTS.



THE subscribers are now manufacturing at their Works, BOONTON, N. J., Hot pressed and hot punched WROUGHT IRON NUTS, upon R. H. COLE's newly patented Nut Machine. In their manufacture the patented device of the "Double Punch," namely two punches operating from opposite sides towards the centre of the Nut, forces into the body of the Nut most of the Iron, which in all other processes is punched out; and also condenses the Iron around the Bolt hole, thus ensuring the greatest strength in the Screw thread, and making as they believe a Nut superior to any made by hand, or the ordinary machine processes.
They invite all consumers of WROUGHT IRON NUTS to make trial of them, and will furnish samples and their price list on application.

FULLER, LORD & CO.,
137 & 139 GREENWICH ST.

FINANCIAL.

G. M. TRACY & CO.,
STOCKS, BONDS, ETC.
LOANS NEGOTIATED.
No. 49 EXCHANGE PLACE,
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EUGENE THOMSON,
STOCK AUCTIONEER AND BROKER,
No. 64 WALL ST., NEW YORK.

AUCTION SALES OF STOCKS AND BONDS every TUESDAY, at 12½ o'clock, at the Merchant's Exchange. RAILROAD BANK, INSURANCE and other SECURITIES bought and sold at the Brokers' Board, at Private Sale, or at Auction. All dividends payable in New York collected, and prompt remittances made.

NONE BUT BONA FIDE QUOTATIONS FURNISHED THE PRESS. THE MARKET VALUE OF SECURITIES WILL NOT BE SUPPRESSED OR ALTERED, AND DECEPTIVE OR IRRESPONSIBLE CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES.—Messrs. Wm. and Jno. O'Brien, Thos. Denny & Co., Horace Greeley & Co., Cragin & Co., Todd & Co., J. & C. Berrian, Geo. F. Nesbitt & Co., Eugene Plunkett & Co., (President Excelsior Ins. Co.), John G. Storm, Esq. (President Lenox Ins. Co.), L. G. Irving, Esq. (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Griscom, M.D., Rev. Edwin F. Hatfield, D.D., Rev. Theo. L. Cuyler, John Cameron, Esq., Benj. F. Manierre, Esq., New York; Otis Allen, Esq., Albany, N. Y.; Messrs. Gorham & Co., Providence, R. I.

PETERS, CAMPBELL & CO.,
BANKERS AND DEALERS IN
DOMESTIC EXCHANGE AND BANK NOTES,
No. 50 WALL STREET,
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SPECIAL ATTENTION GIVEN TO
COLLECTIONS
IN ALL PARTS OF THE UNITED STATES.

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D. T. C. PETERS, } DAVID E. SPENCE,
N. H. CAMPBELL, } DEXTER OTEY.

REFER TO
JAS. T. SOUTER, Esq., Pres't Bk Republic, { New York City
American Exchange Bank,
Banks and Bankers, Richmond and Lynchburg, Va.

KETCHAM & WILLIAMS,
STOCK BROKERS,
No. 1 HANOVER STREET,
Near Wall, NEW YORK.
Stocks and Bonds bought and sold on Commission, and Loans negotiated.

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BANKERS,
Corner Pine and Nassau Sts., NEW YORK.

CIRCULAR NOTES AND LETTERS OF CREDIT,
For travelers, available in all the principal cities of the world.
—ALSO, MERCANTILE CREDITS,
For use in EUROPE, CHINA, etc.

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MORSE & CO.,
BANKERS and DEALERS in Stocks, Bonds, Exchange and Commercial Paper, on commission, No. 49 Wall street, and 41 William street, NEW YORK.
Orders for the purchase and sale of Stocks and Bonds, at the Brokers' Board, by letter or otherwise, promptly executed.
Cash advanced on sound saleable securities.

REFER TO
G. VAN BAUR & CO., N. Y. CONTINENTAL Bk. N. Y.

R. H. RICKARD,
MINING AGENT & STOCK BROKER,
Office No. 21 Nassau st., NEW YORK.

BUYS and sells MINING SHARES, MINES and MINERAL LANDS on commission, will examine Mines and Mineral Lands in any part of the United States, and report on their value, etc., etc.

REFERENCES.—F. Chouteau, Jr., & Co., New York and St. Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A. Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., Forest & Forrest, Com. Mer's N. Y., John F. Butterworth, Esq., N. Y., G. O. Williams & Co., Detroit, Mich., Capt. D. Tyler, Norwich, Conn., Rittenhouse, Fant & Co., Bankers, Washington, D. C.
Particular attention given to Lake Superior business.

DINGEE & HOLDEN,
AUCTIONEERS AND REAL ESTATE BROKERS,
No. 9 NASSAU STREET,
Under Messrs. DUNCAN, SHERMAN & CO.
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Stocks, Bonds, Mortgages, & Commercial Paper Bought & Sold.

REFERENCES.
Citizens' Bank, N. Y. Hon. E. D. Campbell, Lt. Gov.,
Messrs. Thompson Bros., " Wm.
Bankers, " Hon. Judge L. rd, La Crosse, " Wis.
Messrs. Sewell, Ferris & Co., " Hon. M. Levy, Banker, " N. Y.
Geo. P. Rogers, Esq., " Hon. Franklin Steele, Minne-
A. Gridley, President McLean Co. Bank, Illinois. A. & W. A. Saunders, Bankers,
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By SIMEON DRAPER,
Office, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES
AT THE MERCHANTS' EXCHANGE EVERY DAY.
STOCKS and BONDS bought and sold at private sale.
Sale every day at 12½ o'clock. See Catalogue.

H MEIGS, Jr. & SMITH,
BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)
STOCKS and BONDS Bought and Sold on Commission.
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH,
New York, May 11, 1858.

CHAS. A. FISHER,
Late of the firm of FISHER, DENNY & CO.,
No. 18 Exchange Place.
STOCKS and Bonds bought and sold on commission. Loans negotiated.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

By the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnetic Ores from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per lineal yard, viz:—25, 30, 36, 40, 46, 50, 60, 62, and 75 lbs.

Samples of rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.

Address J. H. SCRANTON, President,
SCRANTON, Pa.,
or THEO. STURGES, Treasurer,
46 Exchange Place,
New York

40:1

THE ROUGH AND READY ROLLING MILLS OF DANVILLE, PA.,

ARE prepared to fill orders for RAILS of the best quality at the market price.

T. A. HOWLAND & CO., Agents,
54 William st., NEW YORK.

RAILROAD IRON. THE RENSSELAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

BUSSING, CROCKER & DODGE,
32 CHURCH ST.

IRON BOILER FLUES.

Lap-Welded Boiler Flues,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY

MORRIS, TASKER & CO.,

PASCAL IRON WORKS.

Established 1821.

Warehouse—209 South Third st.,

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STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,

Agents for the United States,

12 SOUTH CHARLES STREET,

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And 17 Nassau Street, NEW YORK.

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL

IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
OUT NAILS and SPIKES, PIG IRON, &c.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1864.

1733

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation.

February, 1863.

RAILROAD IRON. The Crescent Manufacturing Company, WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address
N. WILKINSON, Secy.,
WHEELING, VA.

54

RAILROAD IRON.
CONTRACTS FOR RAILS,
AT A FIXED PRICE OR ON COMMISSION,
DELIVERED AT AN ENGLISH PORT,
Or at a Port in United States,
WILL BE MADE BY THE UNDERSIGNED,
THEODORE DEHON,
10 Wall st., near Broadway, New York.
500 tons T rails on hand 54 to 57 lbs. per lineal yard.

RAILROAD IRON.
The undersigned, Agents for leading Manufacturers in
STAFFORDSHIRE AND WALES,
ARE PREPARED TO CONTRACT FOR DELIVERY
On board ship at Liverpool, or Welsh port.
G. CONGREVE & SON,
13 Cliff st., N. Y.

RAILROAD IRON.
The Undersigned, Agents for the Manufacturers,
ARE PREPARED TO CONTRACT TO DELIVER
Free on Board at Shipping Ports in England, or
At Ports of Discharge in the United States,
RAILS OF SUPERIOR QUALITY,
And of Weight or Pattern as may be required.
VOSE, LIVINGSTON & CO.,
New York, Aug. 1, 1855 — 9 South William Street.

RAILROAD IRON.
The Subscribers, Agents for the Manufacturers,
ARE PREPARED TO CONTRACT FOR THE
DELIVERY OF RAILROAD IRON AT ANY PORT
in the United States or Canada, or at a shipping port in Wales.
WAINWRIGHT & TAPPAN,
Boston, June, 1861. — 29 Central Wharf.

RAILROAD IRON AND
COMMON BARS.
THE UNDERSIGNED,
Sole Agents to Messrs. GUEST & CO.,
The Proprietors of the Dowlais Iron Works,
Near Cardiff, South Wales,
ARE duly authorized to contract for the sale of their G. L.
Railroad Iron, and Common Bars, on most advantageous terms.
R. & J. MAXIN, 70 Broad st.

To Railroad Companies,
MACHINISTS & OTHERS.
BEST quality COP WASTE, constantly on hand and for sale by
M. K. JESUP & CO.,
No. 44 Exchange Place,
NEW YORK.

407

STEEL, FILES, &c.
R. GROVES & SONS,
SHEFFIELD, ENGLAND,
MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.
A stock of the above goods constantly on hand.

CORPORATE MARK



CHAS. CONGREVE & SON, Agents,
13 Cliff street, N. Y.

TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:—
The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater,
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make. Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati, Ohio.

CAUTION.

As there are numerous imitations of our FRANGIPANNI, purchasers are requested to see that the names of PIESSE and LUBIN are impressed upon the Bottle.



Sold by all Fashionable Perfumers and Druggists in the world.
WHOLESALE AGENT FOR THE UNITED STATES
MR. JONAS PHILLIPS, 37 Pearl st., New York.

DEAFNESS & SINGING NOISES IN THE EARS, NERVOUS HEAD & MIND COMPLAINTS. AN ENGLISH CERTAIN AND INFALLIBLE CURE. British and Foreign Infirmary for the cure of Deafness, Head and Mind Complaints, 32, Spring Gardens, Charing Cross, London, England. Consulting Surgeon, CHARLES HENRY EDGELL SKINNER, Esq. Registered Pursuant to Act of Parliament. Secretary, JOHN POWELL, Esq. A New Discovery, being a positive method of self-cure, affording instant and magical relief to sufferers who may have been deaf for 40 or 50 years, by means of a compound medicated vapor applied to the external Ear. When the vapor is passing out, it is held by the sufferer for one minute to the ear affected, and instantly the Patient, who previously was deaf, is enabled to hear common toned conversation. A few nights' use in a similar way will guaranty to cure the most inveterate case of Deafness and Noises in the Head. It is a stop to Empiricism and most exorbitant fees. Sufferers extremely deaf, by means of this, can permanently cure themselves, in any distant part of the world, without pain. Thousands have been restored to perfect hearing, and for ever rescued from the snares of the numerous dangerous unqualified pretenders of the present day. Ho pital and private testimonials and certificates from the most eminent Physicians and Surgeons in England, in whose presence deaf persons have been cured, and many hundreds of private patients cured can be seen or referred to. Any sufferer on the Continent, or resident in any of the Four Quarters of the Globe, can now be cured, as this discovery can be sent to them with necessary Prescriptions, Preparations, &c., that will enable them positively to cure themselves. £5 5s. is the cost of the means of cure, which must be sent to the Secretary JOHN POWELL, Esq., 32, Spring Gardens, Charing Cross, London, England; it can be sent either by Banker's Draft, payable in England, or Notes of the Country. Sufficient to cure 3 cases of most inveterate Deafness and Noises in the Head, £10 10s.

A. BRIDGES & CO.,
MANUFACTURERS AND DEALERS IN
RAILROAD AND CAR
FINDINGS,
OF EVERY DESCRIPTION,
64 COURTLANDT ST., NEW YORK.

RAILROAD AXLES, WHEELS AND CARS,
SPIKES, BOLTS,
NUTS, WASHERS,
CAR, SHIP AND BRIDGE BOLTS.
IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.
STEEL AND RUBBER SPRINGS,
LOCOMOTIVE AND HAND LANTERNS,
PORTABLE FORGES AND JACK SCREWS,
COTTON DUCK FOR CAR COVERS,
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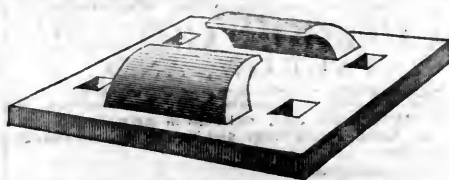
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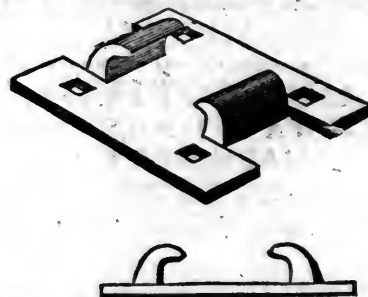
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The BURNING OIL will burn in any lamp that will burn Sperm, lasting longer, and burning without smell or smoke.

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GREATLY SUPERIOR TO ANY OTHER,
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3rd. It will keep all Journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such Journals as are inclined to heat up.

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 5.]

SATURDAY, JANUARY 29, 1859.

[WHOLE No. 1,189, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, January 29, 1859.

British Railways for 1858.

The number of miles in operation in the United Kingdom on the first day of January, 1859, from which returns were received, were 9,016. The total gross earnings for the past seven years have been as follows:

Years.	Mileage.	Earnings.
1852.....	6,915	£15,140,310
1853.....	6,944	16,845,531
1854.....	7,308	18,541,855
1855.....	7,692	20,243,151
1856.....	8,404	22,493,501
1857.....	8,676	23,672,465
1858.....	9,016	23,263,764

To the above mileage should be added 552 miles of road from which no returns were published. The cost of the 9,016 miles of road was £306,950,000; of the 552 miles, £9,000,000—making a total of £315,950,000, equal to \$1,529,198,000. In reference to a tabular statement showing the mileage and earnings of the British Railways for a series of years, we copy the following from *Hera-path's (English) Railway Journal*:

The above table shows that the published traffic returns of railways in the United Kingdom for the year 1858 amounted to £23,263,764, showing a decrease of £408,701 as compared with the preceding year. This sum added to £1,708,000, being the average yearly increase of railway traffic during the preceding five years, indicates an actual deficiency of £2,116,700 in the traffic of 1858 as compared with 1857 and preceding years. The average increase of railway traffic in the United Kingdom during the past fourteen years amounted to £1,380,000 per annum, which, added to the above decrease of £408,700, would show a deficiency of £1,788,700 in the receipts of the past year as compared with preceding years.

It is not only the accidental decrease in the latter end of 1857, and in the year 1858, that should be taken into account, but also what might be called the natural increase of railway traffic that would have taken place, had not the commercial panic and depression of trade occurred. From this, it would appear that the actual falling off in the traffic receipts, as compared with the preceding year, forms but a fraction of the actual loss sustained by the panic and depression of trade. This loss is more particularly felt by railway companies, in consequence of the practice of forestalling the increase of receipts, by the continual expenditure of large sums on capital account, for which no immediate return can be expected. The holders of ordinary stocks of railway companies are thus placed in the unenviable position of being the last to share in the prosperity, and the first to suffer in adversity. It seems hard and unjust that those who are the founders of the railway, as it were, by supplying the first capital to bring it into existence, should be placed in jeopardy ever afterwards, and deprived of a fair return for their outlay. There must be something radically bad in a system which perpetuates so great a wrong. In France the operation is exactly the reverse; the founders of the railway are secured the advantages of their enterprise, and they receive more out of the profits than any other class.

In addition to the receipts of lines published weekly, and given in the above table, there are other receipts from traffic on lines, the traffic receipts of which are not published either weekly or monthly, and for which an estimate has to be made; the amount of the traffic on those lines is about £500,000 for the past year on 552 miles of railway—making, with the published returns, a total receipt of £23,763,764 on 9,568 miles of railway, including about 300 miles of canal, being at the rate of £2,484 per mile for the year 1858.

The expenditure on the 552 miles is about £9,000,000, and on the lines, the traffic of which is included in the table, £306,950,000, making together £315,950,000 expended on 9,568 miles of

railway, being at the rate of about £33,000 per mile.

The perpetual expenditure of capital on the old railways seems to counterbalance the advantage that might otherwise be supposed to arise from the introduction of many cheap railways into the system, that is, so far as reducing the average cost per mile. The average cost of £33,000 per mile is only about £1,000 or £1,400 less than in 1842, when there were not quite 2,000 miles of railway in the United Kingdom.

The onward progress of railway traffic for a period of fifteen years, without any check of importance, except at times, perhaps in the amount of its increase over each preceding year, has had the effect of encouraging all sorts of extravagance, has strengthened the hands of Directors in keeping open the capital accounts, and in adding to their amounts every year.

There are many reasons why the capital accounts of railways should be closed, their debts funded, and their powers defined and limited. There should be a time after the opening of a railway that its capital account should be closed and everything provided out of revenue. It has been done in some instances, and it can be done.

Open capital accounts and large balances might suit the purposes of bankers, directors, lawyers, engineers, and contractors; but they endanger the prosperity and stability of railway property. It must be apparent that until the principle of closed capital accounts and judicious sinking funds be understood and acted upon, railway property must not be expected to become so valuable, or remunerative, as it ought and should be.

Fifteen years of successful increase in railway traffic had done its work, and it is hoped that the check it received from the depression of trade in 1857 and 1858 will not be forgotten by those who think the capital accounts of old lines ought to be closed. Fifteen years is but a short period in the life of a railway company, but it is a long period to keep a capital account open, for no other purpose than that of increasing the liabilities of the company, year after year. There are many serious reasons why the capital accounts of existing railways should not be increased. Economy, instead of extravagance, should be the order of the day. Who can tell what Parliament might do in the course of ten or fifteen years by granting competing lines in all directions, the system being advantageous to landowners, who gain by the outlay of millions of capital, it is likely to be continued? Who can tell whether the excursion traffic on railways will continue forever or only have its day? Who can tell to what perfection the electric telegraph might be brought, so as to save much expenditure in traveling? There are other things in the course of the next ten or twenty years that

might occur to seriously affect the profits of railway companies.

Richmond and Danville Railroad.

The eleventh annual meeting of the stockholders of this Company was held in Richmond, December 8th. The reports of the President, Superintendent and Treasurer were read and referred. The gross receipts of the Company during the year ending September 30th, were:

From passengers	\$152,631 55
" freight	315,668 90
" express	6,474 44
" mails	16,899 45
	<hr/>
	\$491,674 34
And the expenditures ...	\$329,182 42
Less extraordinary exp..	104,700 89
	<hr/>
	224,481 53

Leaving as net earnings \$267,192 81
—being 54.34 per cent. of the gross receipts. Compared with the previous year, the aggregate receipts show an increase of \$29,756 07; and the net earnings an increase of \$11,656 64. The increase of business is apportioned as follows: Passengers, \$20,078 25; freight, \$7,899 80; mails, \$1,778 02.

The Company has no floating debt except the trifling sum of \$21,796 08 due for Belle Island bridge, and bills payable, most of which has since matured and been paid.

The President's report gives the financial condition of the Company on the 30th Nov. We copy the following extract:

The Board has, during the last fiscal year, invested, in the payment of the bonds of the Company, due in 1859 and 1860, and in the purchase of certificates of debt of the State, the sum of \$102,482 98; the amount of which bonds and certificates, at their par value, is \$110,385, consisting of \$77,885 of State certificates, which cost \$71,580 48, and \$32,500 of the Company's bonds, which cost \$30,902 50. Our last report showed that we then held, at their par value, of the State certificates \$18,465, and of the bonds of the Company, which had been paid off and cancelled, \$23,600; and we therefore held, on the 30th September, 1858, \$96,350 of State certificates, at their par value, and \$56,100 of the Company's bonds, paid off, cancelled, amounting together to \$152,450, at par. Of the Company's bonds, cancelled, \$10,600 are bonds payable in 1860, and \$45,500 are bonds payable in 1859. Since the 30th of September last \$12,050 State certificates, at their par value, have been bought, making the amount of State certificates now held by the Company \$108,400, estimated at their par value. The original amount of the bonds of the Company, due on the 1st day of August, 1859, was \$250,000, of which there have been paid and cancelled, as stated above, \$45,000, leaving the amount now payable on that day of \$204,500. To the payment of this, the above amount of State certificates is applicable, and, if estimated at their par value, it leaves \$96,100* of those bonds to be provided for by the day of payment. The original amount of the bonds of the Company, payable on the 1st day of November, 1860, was \$150,000. Of these bonds, as stated above, \$10,600 have been paid and cancelled, leaving \$139,400 to be provided for by the day of payment. The whole amount of

* Since the report was adopted, bonds of the Company, payable in 1859, amounting, at their par value, to \$7,000, have been purchased, and together with \$500 of the same bonds, previously purchased, and not embraced in the estimates, make the sum of \$7,500; which leaves the amount of those bonds, now to be provided for, after the application of the State certificates to their payment, at their par value, \$88,600, instead of \$96,100.

these bonds to be provided for in 1859 and 1860, may, therefore, be stated to be \$235,500. With a net income of \$250,000 per annum, the means of Company, if not otherwise appropriated, will be amply sufficient to discharge this amount at the time when it becomes due, without any increase in the business, and without interfering with or interrupting the necessary repairs, or the contemplated improvement of the works.

When this debt of \$400,000 is thus paid off, the remaining debt of the Company, as shown by the last annual report, will consist of \$600,000 due to the State, on her loan to the Company, and \$200,000 on the coupon bonds of the Company, payable at different times in the year 1876, making together \$800,000. Of this debt, the \$600,000 due to the State is, by the terms of the loan, in a course of liquidation, by the payment of 7 per centum, semi-annually; and as our Company has fully complied with those terms heretofore, and will continue to do so for the future, that debt may be regarded as already provided for by the payment of \$21,000 semi-annually to the State, being the sinking fund that will discharge it at the time prescribed by law. As to the remaining debt of \$200,000, the accruing income of the Company will enable the Board, without the slightest difficulty, to discharge it, either by making provision for its payment before it becomes due, or by paying it at maturity, as to it may seem best. The above mentioned sums now constitute the whole debt of the Company, the Board not having deemed it prudent to divide the net profits of the Company, as contemplated by the resolutions of the stockholders, adopted at the annual meetings in 1852 and 1853. A small cash dividend may be made out of the profits of the fiscal year 1860, but after that year the stockholders may certainly expect a reasonable cash dividend, from the foregoing exhibit of the financial affairs of the Company.

The credit of the Company has been kept unimpaired. All its obligations to the State and to individuals have been faithfully fulfilled, and its pecuniary obligations have been punctually discharged out of the income derived from the profits of its works, including the \$21,000 due to the State on the 1st January, 1856, for interest on her loan, against which the Company held the acceptances of the Board of Public Works for \$21,462 04; the interest having been paid off in cash, and the acceptances converted into certificates of debt of the State.

The capital stock of the Company is \$2,000,000, of which \$1,980,997 50 has been paid. The resources of the Company on the 30th September, were:

Due from State of Virginia and private stockholders	\$19,002 50
Debts due the Company, including State bond for \$3,600.....	6,244 74
Due by underwriters of ship Harriet Augusta (in suit).....	16,807 81
State Stock, \$96,350, at par, purchased for sinking fund, cost.....	88,698 78
Cash on hand	2,703 16
	<hr/>
	\$133,456 99

The extraordinary expenditures were for—

Two new engines	\$18,787 50
" " passenger cars	3,000 00
Four eight-wheel freight cars	2,700 00
Six coal cars	2,250 00
New engine now building	8,567 99
Iron sills and labor for re-laying track	31,661 92
Reconstruction Richmond depot, etc...	12,296 11
Other depots	2,654 60
New engine and coach house in Manchester	14,436 04
Repairing culverts, etc.....	6,896 86
One new cast-iron turn-table (Sellers)	1,449 87
	<hr/>
	\$104,700 89

The Company have decided to gradually re-lay that portion of the road on which the flat bar was

laid, extending from the Appomattox to the Staunton River, with the heavy rail. In accordance with this plan, about five miles were re-laid during the past year. The engine house at Manchester, built to accommodate 24 engines, was nearly completed. The freight depot in Richmond was sufficiently advanced to admit of the removal into it of the offices of the Company. These improvements have all been paid for mostly out of the profits of the road. The Board have also purchased, and paid for, the real estate of the Chesterfield Railroad Company, extending from Manchester to the coal yards on the James River, for \$1,500.

The total tonnage of the road for the year amounted to 105,562 tons—being an excess over the previous year of 10,484 tons. The number of passengers transported was 84,888.

The equipment of the road consists of 21 engines and 2 extra tenders; 10 first class, 6 second class, 2 smoking, 10 baggage and mail, and 360 freight, stone, coal and gravel cars.

The whole number of miles run by engines were 263,893; by passenger trains, 125,957; by freight trains, 103,866; by coal trains, 8,659.

The cost for repairs has been:

Repairs of road—labor and materials...	\$72,020 78
" bridges	1,190 11
" engines	5,853 75
" passenger cars	3,942 93
" freight "	5,104 33
" coal "	1,018 90
	<hr/>
	\$89,130 78

GENERAL STATEMENT.

Receipts.

Capital stock	\$1,980,997 50
From unknown stockholder.....	20 00
From guaranteed bonds issued, due in 1875	200,000 00
From State of Virginia, loan for 34 years	600,000 00
From mortgage coupon bonds issued, due 1st Aug., 1859	\$250,000 00
Less discount on same ..	43,662 93
	<hr/>
	206,337 07
From registered bonds issued, due 1st Nov., 1860	150,000 00
Less discount on same ..	29,930 00
	<hr/>
	120,070 00

From rent, sales of iron, etc.....	26,695 54
" English insurance on iron	8,837 10
" sinking fund, for interest	1,665 17
" transportation and connections ..	2,194,119 31

Liabilities.

Due on open accounts.....	\$3,819 64
Bills payable	21,796 08
Board Public Works for int. due 1st Jan., 1856 ..	21,000 00
	<hr/>
	46,615 72

Less acceptances of Board Pub. Works, held to pay the above, (and since converted into bonds) ..	21,463 04
	<hr/>
	25,153 68

\$5,363,895 37

Disbursements.

Cost of road and property	\$3,588,653 26
Interest account	335,887 83
Redemption fund on \$600,00 loan ..	26,908 65
Discount on county bonds sold	6,200 00
Transportation	1,254,496 73
Casualties	994 30
Sinking fund, invested in Company's and State bonds	141,808 20
Debts due the Company	6,244 74
Balance in Banks	2,703 16

\$5,363,895 37

The officers of the Company are:

President, LEWIS E. HARVEY.

Secretary and Treasurer, THOS. W. BROCKENBROUGH.

Assistant Secretary, J. S. VAUGHAN.

Directors on the part of the State of Virginia

--J. B. Stovall, Vincent Witcher, E. G. Leigh.

Directors on the part of the Stockholders--R. O. Haskins, James Brown, Jr.

Superintendent--Charles Campbell.

Abstract of the Canal Auditor's Report.

The Auditor of the Canal Department, Mr. Nathaniel S. Benton, in his annual report presents a statement of the receipts and payments on account of the canals and canal debt, the balance of the fund on hand, and the condition of it during the year ending September 30, 1858. On the 1st of October, 1857, there was in the treasury and invested in stocks and securities the sum, belonging to the Canal Fund, \$3,833,086 35. During the year ensuing, the receipts were \$6,122,119 59. The payments for the year, amounted to \$7,475,877 86, leaving a remainder of \$2,479,308 58.

The over-payments in 1857 were \$657,400 02; in 1858, \$358,187 84, leaving a difference of \$300,212 18, which being deducted from the previous remainder, leaves a balance on the 30th of September last of \$2,179,096 40. Of this balance there was on deposit in banks to the credit of the Treasurer, on account of the Canal Fund, available, \$1,056,431 40; do. unavailable, \$153,021 71; securities invested in all, \$659,643 29. Of the securities the amount of \$194,062 71 is set down as due from the State Treasury to the Canal fund, and is held as part of that fund. It is the amount which in 1854-5 was transferred, illegally and unconstitutionally, from the Canal Fund to the General Fund, and used for the general purposes of the government. The legislature in 1857 made an appropriation to pay this sum to the Canal Fund, but it has not been done. It is a part of the Sinking Fund pledged for the payment of the Canal debt under section 1, article 7, of the constitution.

The revenue of the state canals from all sources during the current year amounts to \$2,072,204 88; the salaries, &c., \$1,087,878 91. This leaves a surplus of \$993,325 97, and will require a loan or tax of \$706,674 03, to make up the \$1,700,000 to be applied constitutionally to the extinction of the canal debt. The appropriation of \$850,000 for expenses of collection, superintendence and repairs, has been overdrawn \$228,878 91. The payments by superintendents and to repair contractors were \$280,000 more in 1857 than in 1856, and \$130,000 in 1858 over 1857 by the same agents. The expenses of collection have increased \$5,330 12; and miscellaneous charges for refunding toll, \$4,439. Mr. Benton is of opinion that the appropriation for this branch of the canal service should be specific to each branch of the service. When the disbursing agents have the whole sum to draw upon, each of them view the whole and not a part as the fund subject to his control.

Attention is called to the increasing cost of collecting the tolls. One of the chief causes is the multiplication of assistant collectors, an officer of small utility in most places, the large allowances for office furniture, increased rents and extravagant use of gas, amounting in one instance to \$75 a month. The abolition of the office of assistant is recommended.

The sums expended by the Canal Commissioners for repairs during the year, were \$55,863 27. This is a great reduction; and yet much of it was made by payment of old claims. The practice of leaving such claims is wrong, as it subjects all parties to inconvenience, and the state to imposition.

The expenses for ordinary repairs disbursed by superintendents amount to \$1,890,941 91. Mr. Benton thinks the cost should not exceed \$650,000. He goes into a discussion of the "ordinary repairs" and extraordinary repairs, and urges a deferential respect to the fundamental laws of the

state in the matter. A loose, careless and free construction may be a temporary benefit, but such a consideration should not be allowed to sanction a virtual violation of the solemn pledges of the state. The auditor regrets that in following out what he considered his duty, he has been "too often compelled to dissent from the opinion and action of others."

The rates of toll on property were reduced and adjusted in March last, by the concurrent action of the Canal Board and the Legislature, and have created much embarrassment and trouble at the department, and with collectors and forwarders. Tolls on specified articles of merchandise are reduced to two mills, while "articles not enumerated," as well as "agricultural productions of the United States not particularly specified," remained at four mills. Mr. Benton does not see, if the policy of low tolls is to become permanent, why the four-mill rates should be retained.

In 1851, three millions of tons carried paid \$3,000,000 tolls. In 1853, after tolls had been reduced to meet railway competition, four millions of tons of freight paid \$3,000,000. In 1857, 3,334,000 tons paid a little over \$2,000,000. If the tonnage of 1858 should reach four millions, as it possibly will, the tolls paid have been \$2,100,000. The aggregate of tonnage has not been increased in proportion to the rates; but it is alleged that the canals have retained a traffic which would otherwise have been diverted.

There is required for the sinking fund, to pay the interest and liquidate the old canal debt of 1846, \$1,700,000; to pay interest on the General Fund Debt, \$350,000; to pay interest on the New Canal Debt, \$710,000; contribution to support the Government, \$200,000; to pay interest on loans contracted for canal purposes, and now paid out of the General Fund, \$34,629 28--total, \$2,994,629 28. In addition to this amount there will be, as repairs are now managed, an additional million charged upon the canal tolls.

The largest movement of freight was in 1853--4,247,853 tons. To produce a revenue of \$4,000,000 would require 6,500,000 tons, as tolls were fixed in 1857; but as they were fixed in 1853, the tonnage must be nearly double that of 1853, and must exceed the total movement of all the canals in 1857, the tonnage and way freight on the New York Central, the New York and Erie, the Ogdensburgh railroads, and the whole tonnage of through freight on the Pennsylvania, and Baltimore and Ohio Railroads, the same year, by more than two millions of tons. This we cannot expect to reach in ten years, if ever.

The tonnage movement on the canals, at the present rate of toll, required to produce a revenue sufficient to cover the constitutional appropriations, must be a million of tons larger than the export tonnage of American and foreign vessels cleared from the United States for the year ending June 30, 1857. To produce a revenue of \$2,500,000 from tolls, the freight movement on the canals must be nearly five millions of tons, or eight hundred thousand tons over that of 1853--or, in other words, the tonnage of the New York and Erie and the New York Central Railroads with that of the canals for 1857. Hence it is obvious that we cannot expect to realize from tolls the revenue required to pay the interest on the Canal Debt, with the cost of collection, superintendence and repairs.

Mr. Benton does not design to suggest or urge a modification in the rate of tolls. He is of opinion that if it was not for the freight traffic competition within the State, the rates of tolls since 1852 would have been largely below a fair revenue standard, and that trade on the canals would not be in the least injuriously affected by re-imposing the rates of 1850.

The canal indebtedness in detail is as follows:--Under section 1, article 7 of the constitution, \$11,665,098 99; under section 3, \$12,000,000; under section 10, \$642,585 49--in all, \$24,307,684 49; the total interest of which is \$1,358,892 30. The debt under section 1 has been decreased \$1,558,605 34; that under section 3 by loan, \$500,000; and that under section 10, \$200,000; making

a net payment of \$858,605 34. The unexpected falling off in revenues since 1855 compelled the postponement of the debt of \$1,500,000 due in July, and the debts due in 1860 and 1861, amounting to \$3,126,074 23, will have to be provided for.

The aggregates of the Sinking Fund under section 1, article 7, September 30, 1858, were \$4,757,446 94; payments, \$2,655,177 40, leaving a balance of \$1,102,329 54. There are yet outstanding and unredeemed \$283,243 09; leaving in the Sinking Fund an available balance of \$819,086 45.

The aggregates under section 3, article 7, are \$884,028 54; payments, \$79,242 84; leaving a balance of \$92,585 07. This must remain as an investment to redeem the principal of the debt when it falls due in 1872.

There has been advanced during the year to this fund, from other funds, \$261,017 34, to pay interest, &c. Further advances must be made to pay interest falling due in January and April to the amount of \$335,000, before any portion of the taxes levied under the act of 1858 can be realized. If the receipts from taxes cannot be accelerated, the proceeds of the half-mill tax will be entirely anticipated, and the fund be in debt next October \$250,000. If the interest on the \$12,000,000 debt is to be provided by a tax only, the money should be collected before the interest falls due. This subject will require attention at an early day, as the stock debt of \$943,100 due July 1, 1860, and the \$2,182,974 23 due January 1, 1861, will absorb more than all the accumulations of the Sinking Fund up to those periods.

On July 1, 1858, fell due \$3,055,605 34 of canal stocks, and funds were placed in the Manhattan Company to reimburse that amount. Of that amount \$2,929,767 34 have been paid, and the Commissioners of the Canal Fund negotiated a loan of \$1,500,000 to provide the means of redemption of this stock.

In 1857, \$3,250,000 was appropriated for the enlargement of the canals, for the year commencing October 1, 1857, being the unappropriated balance of the premiums on certain loans, the proceeds of a mill-tax, and of a loan of \$500,000. At the close of the year there existed deficiencies in all, \$638,379. The Commissioners of the canal fund do not deem it expedient or proper, in the existing condition of things, to exhaust the whole power under the constitution of providing means to carry on the government, and no further aid from that source should be expected.

The appropriation was apportioned among the three divisions. There is a balance, deducting over-payments, \$659,167 69. The paid and unpaid drafts, amounting to \$3,899,776 14, exceed the appropriations \$559,776 14. The Auditor, assuming that \$2,750,000 could be realized, divided that amount among the several canals. The sums realized have not exceeded \$2,611,000, and the drafts drawn on the Auditor are more than \$1,000,000.

The accounts of the contractors on the books of the department cannot be closed till the outstanding drafts are paid, or surrendered for some equally valid evidence of indebtedness on the part of the State. The Auditor may be required to call for a surrender of all drafts dated prior to January 1, 1859, for enlargement and completion of the public works, or for damages, and be given authority to issue certificates under prescribed regulations and restrictions. It will enable the accounts to be closed.

The amount of unavailable funds in bank September 31, 1858, is \$458,021 71; a reduction of \$54,353 01. Some \$154,082 76 lie in Walter Joy's Bank, Buffalo, the Canal Bank, of Albany, and the Empire City Bank, New York.

The canal revenues for the fiscal year ending 30th September, 1859, from tolls, &c., are estimated at \$2,100,100. The appropriations for the year amount to \$4,320,000. The estimated receipts from the half-mill tax are \$710,000. This makes the estimated deficiency for the fiscal year at \$1,510,000. Of these appropriations \$550,000 have for several years been paid out of the General Fund. The \$110,000 can only be set apart from surplus revenues, after paying interest on the \$12,-

000,000 debt. This is not effective. There will be a deficiency in the appropriation to the Sinking Fund of \$500,000, which, added to the deficiencies of the previous years, amounts to \$1,277,153 43.

On the 24th March last, the State Engineer estimated the cost of completing the public works, after the 1st of January, 1858, at \$4,955,777 14; from which, deducting the paid and unpaid debts drawn for and applicable to the work embraced in these estimates, \$2,828,040 45, and the amount of \$2,127,746 69 is required to complete the work after the first day of October last. In addition to this there are \$1,330,033 30 Commissioners' drafts unpaid. October 1, 1858, making a total sum of \$3,457,770 99.

To complete the Erie Canal enlargement, the State Engineer estimates that \$3,421,631 25 would be required from the first of January, 1858, of which in the first part of October was paid \$1,009,506 58, leaving wanted \$2,402,224 67.

Mr. Benton concludes by suggesting that well founded doubts exist whether the State Engineer's estimate is sufficiently large to cover all the land damages. The outstanding drafts for the Erie Canal enlargement work and land damages, Oct. 1, 1858; amounted to \$988,330 14. In this case, a tax of \$1,055,555 32, to cover the balance of the whole cost, will be less onerous upon the people.—By the contracts completed it has been found that the estimates of the Engineer do not quite cover the actual cost of work completed. It will therefore be probable that a loan of \$3,000,000, under section 12 of article 7, and a tax-levy of three-fourths of a mill will be required to clear off the indebtedness of the canals and complete them; and an additional fourth of a mill to pay off the interest and principal of the loan is authorized. There will be no necessity of raising any more of the \$3,000,000 than may be required for the objects expressed in the law.

Sugar Trade of the United States in 1858.

The editors of the New York Shipping and Commercial List have published their annual statement of the sugar trade of the United States (exclusive of California and Oregon) for 1858. "The total receipts of foreign unrefined sugar into the United States for the year ending December 31, 1858, were 255,100 tons: against receipts in 1857 of 200,180 tons; in 1856, 275,662 tons; and in 1855, 205,064 tons; and the quantity of this description which passed into consumption in 1858 was 244,758 tons, against a consumption in 1857 of 241,765 tons; in 1856, 255,292 tons, and in 1855, 192,607 tons, being an increase in the consumption of foreign in 1858, over 1857, of 2,933 tons, or 1½ per cent., while the total consumption of foreign and domestic cane sugar in 1858 was 388,492 tons, against a total consumption in 1857 of 280,765 tons; in 1856, 378,760 tons; in 1855, 377,752 tons; in 1854, 385,298 tons; in 1853, 372,989 tons; in 1852, 315,217 tons; and in 1851, 238,485 tons, making an increase in the total consumption of foreign and domestic in 1858, as compared with 1857, of 107,727 tons, or over 38 per cent., being the largest quantity ever taken for consumption in the history of the country.

We slightly increase our estimate of the quantity of sugar made from molasses during the past year; the trade having been generally more prosperous, the business has been on a somewhat larger scale, though in this connection we would remark that notwithstanding the quantity of molasses consumed for this purpose exceeds that taken last year; and is nearly equal to that manufactured in 1856, and about the same as that boiled in 1855, yet the quantity of sugar obtained falls considerably below that yielded in the two latter years, owing to the introduction into Cuba within that period of centrifugal machinery, extracting more closely the saccharine matter contained in the molasses, and consequently rendering it less productive and not so desirable for refining purposes. We are informed that the quantity of sugar made from molasses in the country in 1858 may be placed at \$25,000,000 lbs., or say 11,160 tons, obtained from 50,000 hhd. molasses, against 10,300 tons yielded from 46 hhd. in 1857, 11,875 tons from 53,000

hhd. in 1856, 12,187 tons from 50,000 hhd. in 1855, and 14,923 tons from 66,500 hhd. in 1854; add to this the product of the maple tree the past year, say 24,000 tons, and the estimated consumption of California and Oregon, 7,500 tons, (the refineries recently established in San Francisco having somewhat increased the previous consumption,) would make the total consumption of raw sugar in the United States in 1858, 431,162 tons, against a total consumption in 1857 of 332,065 tons showing the increase in the consumption of all kinds in 1858 of 99,087 tons, or nearly 30 per cent.

We may add here that this increased consumption would have been doubtless still further enlarged but for the partial failure of the fruit crops in most of the Northern and Western States the past season, curtailing the amount that it is reasonable to suppose would have been otherwise consumed in the domestic manufacture of preserves, jellies, &c. The consumption of 1857, however, was greatly lessened by causes still fresh in the memory of all engaged in the trade. The high and extravagant rates which this article commanded in the markets both of the Old and New World, brought with them its inevitable consequences—an astonishingly diminished consumption—a severe revulsion, followed by, to many, a heavy disaster. The average price during the past year having been reduced equal to about 25 per cent. as compared with those ruling in 1857, has again given an impetus and vigor to the trade which will doubtless be continued while it retains its present healthful position. In reference to our estimate of Maple Sugar, we have to repeat our often expressed regret that there is no reliable data from which we may gather with certainty its extent, as a large proportion of it is consumed upon the farm, or in the interior villages, and but a comparatively small crop finds its way to the larger markets.

The season of 1858 was much less favorable than its predecessor, but it will be remembered that that was a very extraordinary one—more propitious than noted before in very many years, both in reference to the peculiar state of the weather for the flow of the sap and its long duration. From the information we have been able to glean with respect to this by no means unimportant interest, we are satisfied, however, that we do not err greatly in placing the yield of 1858 at 24,000 tons, or about one-third less than that of 1857. In our last annual statement, we remarked in substance, that the commerce in the then novel article known as Melado, Concentrated Molasses, &c., had been far from remunerative, and that the indications favored the opinion that a serious decline in the import of these goods for the current year might be expected. The result justifies the prediction, the importation having fallen from about 70,000 hogsheads in 1857, to about 11,000 hogsheads in 1858.

The following table showing the consumption of Sugar, in the United States, for the past nine years, with the average yearly rate of increase, is not without its interest:

Consumption of Foreign and Domestic Cane Sugar for the year ending December 31.

	Foreign.	Domestic.	Total.
1858	244,758	143,634	388,492
1857	241,765	39,000	280,765
1856	255,292	123,468	378,760
1855	192,604	185,148	377,752
1854	150,354	234,444	385,298
1853	200,610	172,379	372,989
1852	196,558	118,659	315,217
1851	181,047	107,438	288,485
1850	143,045	126,421	269,466

Average yearly increase for the above nine years, 5½ per cent.

The value of Sugars not only in our own market but also, in a measure, those of the producing countries, and in Europe, is always more or less affected by the extent of our domestic crop, and its almost total failure in 1855-6, and its partial deficiency in 1856-7, contributed in no inconsiderable degree to the unparalleled expansion in prices which prevailed in those years; consequently, great interest is felt abroad as to the probable

yield of the Louisiana crop now coming forward—we may say that the estimates vary from 290,000 hhd. to 330,000 hhd. After carefully collating the information in our possession, we think the amount will reach 300,000 to 325,000 hhd., and the quality is unusually good; this favorable result would have been still very considerably augmented, but for the serious damage suffered by the plantations in the earlier part of the season, owing to the overflow of the Mississippi, which destroys many luxuriant fields of cane, and reduced the crop, perhaps, 70,000 to 75,000 hhd.

Journal of Railroad Law.

ACCIDENT.—LIABILITY TO EMPLOYEE.

We have heretofore had occasion to remark upon and illustrate the rule of law now well settled, that a railroad company is not liable to one of its servants for injuries suffered by him in the course of his employment, by reason of the negligence of some other servant of the corporation. The case of *Russel* against the Hudson River Railroad Co., recently decided in the Court of Appeals in this State, is an illustration of this rule, and carries, it farther, we believe, than any adjudged case has hitherto done.

In this case it seems that the plaintiff lived in New York City, and was employed by the corporation in loading gravel and sand at the pits where they were dug. It was the practice of himself and the other workmen living in New York, to go from the city to the work in the morning, and return at night, in the gravel train. On the day of the accident the plaintiff went upon the cars with every load of gravel, to assist in unloading it. The last time some paving stones were taken upon the train, which proceeded towards New York. The stones were thrown off shortly above Spuyten Duyvil Creek, and the plaintiff then had no further duty to perform, except that it appeared that some of the workmen acted as brakemen for the gravel train upon which they returned home. The accident to the plaintiff occurred, while on their way to New York with the workmen residing there. The question was, whether the plaintiff could recover.

SELDEN, J.—The general rule that where several persons are employed in the same general service, and one is injured by the carelessness of another, the employer is not responsible, is now too well settled to be disputed. (*Hutchinson vs. The New York, &c., Railway Co.*, 14 Jurist, 827; *Wigget vs. Fox*, 36 Eng. L. and Eq. R., 486; *Tarrant vs. Webb*, 37 id.; *Hayes vs. The Western R. R. Co.*, 3 Cush., 270; *Murray vs. S. C. Railroad Co.*, 1 McMullan R., 285; *Ryan vs. The Cumberland Valley Railroad Co.*, 23 Penn., 386; *Coon vs. The Syracuse and Utica R. R. Co.*, 1 Seld., 494.) It is too late, after these numerous decisions affirming the proposition, and especially after that of this court in *Coon vs. The Syracuse and Utica Railroad Company*, to question the soundness of the reasoning upon which it is based.

But it is said that the rule applies only to cases where the servant or agent whose negligence caused the injury, and the party injured, are engaged in services of the same kind, and has no application to cases where the parties, although in the employment of the same person, are nevertheless engaged in different occupations. The truth of this position may perhaps be conceded. The reason, which is said in most of the cases to lie at the foundation of the rule is, that when a person engages in any employment, he voluntarily

takes upon himself all the ordinary risks belonging to the particular service in which he is to be employed; and is presumed to have indemnified himself by the terms of his engagement against any special hazard known to attend it. But the carelessness of persons engaged in business having no connection with that about which the party himself is to be employed, could hardly be regarded as such a risk. It is only those risks which may fairly be supposed to have entered into the contemplation of the parties, in making the contract, which fall within the rule, assuming such rule to rest upon the reason just given. Hence, if one employed to drive the private carriage of his master, should, by his careless manner of driving, injure another servant of the same master, engaged in some mechanical employment, it may be well doubted whether the rule we are considering would apply.

But the present is by no means such a case. The want of proper care and skill on the part of the engineers, who manage and control the locomotives upon a railroad, is one of the most common risks attending an employment by a railroad company. It is true that where the particular service for which the employee engaged has no connection with the railroad track, or with the running of cars thereon, although relating to the general business of the company, it might with some apparent force be urged that the parties could not have contemplated or provided against this class of risks. But here the particular labor in which the plaintiff was employed, involved the use of the very cars and locomotive to which the accident which caused the injury occurred, and his contract with the defendants expressly provided for his return to the city upon those cars. Whether, therefore, the rule in question rests exclusively upon the ground already suggested, or in part upon the ground that, as the effects of the carelessness of one servant may frequently be obviated by the watchfulness of another, public policy requires the adoption of the rule as an incentive to superior vigilance, there is no doubt of its application to the present case, so far as the objection under consideration is concerned.

But the main ground relied upon to distinguish this case from those previously decided is, that at the time when the accident occurred, the plaintiff was not an employee of the company, but a passenger merely, and entitled to protection as such. By the arrangement between him and the defendant he was to be taken home to the city upon the gravel train at night; and he insists that his day's work was completed when the last load of gravel was deposited, and that he was under no obligation to do anything for the Company; that carrying him home was a service to be performed by the company, in consideration of the labor previously done, and constituted a part of his wages; and that it was entirely optional with him to avail himself of this service or not.

It is not, I think, entirely clear, that the defendants would not have had a right, under their agreement with the plaintiff, to insist upon his returning to the city at night. The gravel train could not be properly managed by the engineer alone. Men were required to act as brakemen in case of accident. It appears that some of the same men who worked in the gravel pit also manned the brakes. A portion of the hands employed lived in the city,

and the defendants may have relied upon them to work the brakes, in case of necessity, upon the return of the train, and may have taken this into consideration in agreeing to bring them home at night.

But, conceding that the plaintiff was not bound to return, even if the defendants insisted upon it, it does not follow that while actually returning to the city with the train, he was not the servant of the company. If he was a mere passenger, he was not bound to do anything to facilitate the return of the train. If an emergency arose, requiring the use of the brakes, he might refuse to raise his hand. If an obstruction was met with upon the track, he might fold his arms until the company removed it; and what he might do in this respect, every other hand returning to the city, under similar circumstances, might also do. Such could not, I think, have been the true relation between the parties. The plaintiff was employed by the defendants as a day laborer. He was to be taken up at the city where he lived in the morning, and set down there at night; and he should, I think, be regarded as having been, during the entire interval, the servant of the company, and bound, as such, to render aid, if necessary, in promoting the passage of the train both to and from the city. This is decisive of the case.

Judgment (which was for the plaintiff) reversed.

Debt of Milwaukee for Railroads.

The Mayor of this city, in a communication to the City Council, states that four of the Railroad Companies to which aid has been given in the construction of their roads by an issue of City Bonds, have failed in whole or in part to pay the interest coupons which have matured since the 31st of Dec., 1857; and another (the Mil. and Miss. R. R. Co.) has also failed to meet the interest due Jan. 1st, 1859 on the bonds issued to that company.—The four other companies are the Milwaukee and Watertown, Milwaukee and Horicon, Milwaukee and Beloit, and Milwaukee and Superior, and the following is the amount and date of the Bonds issued to the several Railroad Companies, and the time of payment of the principal of said Bonds:

STATEMENT OF AMOUNT AND DATE OF R. R. BONDS.			
Bonds issued		When principal	
Date of issue.	to R. R. Cos. Amount.	is payable.	
1854 June 1, M. & Wat.	75,000	June 1, 1874	
1856 April 1, " "	95,000	April 1, 1876	
May 1, " "	30,000	May 1, 1876	
1855 July 2, M. & Hor.	100,000	July 2, 1875	
1855 Jan. 1, M. & Bel.	100,000	Jan. 1, 1876	
1856 Jan. 1, M. & Sup.	100,000	Jan. 1, 1877	

\$566,000

The Mil. & Miss. R. R. Co. defaulted in the payment of interest Jan. 1, 1859, on the following amount of Bonds:

1855 Nov. 1, M. & Miss.	30,000	Jan. 1, 1877
(Prev'sly iss'd) "	234,000	Jan. 1, 1877

\$1,100,000

The R. R. Cos. to which aid has been given, and which have not at this date defaulted in the payment of interest, are:

1854 March 1, G. Bay, Mil. & Chicago	200,000	March 1, 1874
March 16, La C. & Milwaukee	200,000	" 16, 1874
1853 Oct. 12, La C. & Mil. (issued to Mil., F. du L. & G. B. R. R. Co.) which has been consolidated with La Crosse & Mil.	114,000	Oct. 12, 1873

Total issued to R. R. Cos. \$614,000

The Mayor said the holders of these bonds had often written him about the default of the railroad companies to pay their interest, and insisting on measures for payment. Knowing that the Common Council at the time of issuing these bonds, relied on the securities taken and the pledges of the officers of the several companies to meet such payment, and that no provision had since been made for the liquidation, he could do no more than urge the proper officers of the roads to take up the past due coupons. Several of them assured him they would do so, and the city should be saved harmless. But they have paid but little attention to the matter, and he feared the city would be compelled to meet a large amount of indebtedness, and it is not improbable the whole of the unpaid interest and principal of the bonds issued.

Illinois Central Railroad.—Locomotive Performances for November, 1858.

We give below a summary of the monthly statement showing the performance of locomotives on the Illinois Central Railroad for the month ending November 30th, 1858. The length of road is as follows:—Chicago Branch, 252 miles; South Division, 230 miles; North Division, 224 miles: total, 706 miles. Whole number of engines, 113. Number of miles run by passenger trains, 78,875; do. freight trains, 75,733; do. construction trains, 21,236; do. wood trains, 3,459: total, 179,303. Pounds waste used, 2,194½; pounds tallow, 42½; gallons oil, 1,440½; cords wood, 3,398; tons coal, 878.14. The wages of engineers and firemen amounted to \$6,856.94. Cost of repairs, \$8,284.07. Value of waste, tallow and oil, \$1,369.03. Value of wood and coal, \$15,038.22. Cleaning engines, \$1,228.15;—making the total cost, \$32,776.41.

The following will show the various items distributed among the three Divisions of the road:—

TOTAL.						
	Passenger Trains.	Freight Trains.	Construct'n Trains.	Wood Trns.		Total.
Chic. Br...	29,320	37,511	4,697	1,712		73,240
South Div.	25,147	21,427	4,758	...		51,322
North Div.	24,408	10,795	11,781	1,747		54,731
	Lbs. Waste.	Lbs. Tallow.	Gallons Oil.	C'ds Wood.	Tons Coal.	Wages, Eng'n & Firemen.
Chic. Br.	1,055½	...	568½	1,175½	471.14	2,988.32
South D.	474	...	453½	1,165½	...	1,858.90
North D.	665½	42½	426½	1,057½	407	2,009.72
Repairs.	Value Waste, Oil, etc.	Value Wood and Coal.	Cleaning Engines.	Total Cost.		
Chic. B.	3,606.57	559.81	5,542.32	474.62	13,171.14	
S'th D.	1,254.48	399.82	4,544.47	273.15	9,201.82	
N'th D.	2,552.02	409.90	4,951.43	480.38	10,403.45	

COST PER MILE.						
	Oil, Waste, etc.	Wood & Coal.	Wages Eng'r & Firemen.	Repairs.	Cleaning Engines.	Total.
Whole Road...	.76	8.38	3.82	4.62	.68	18.27
Chicago Br...	.76	7.56	4.08	4.92	.64	17.98
South Division	.78	8.86	3.62	4.13	.54	17.93
North Division	.74	9.04	3.67	4.76	.87	19.00

The above oil includes that used in head lights, and in lamps of engineers. Wood is rated at \$3.90 per cord; coal, \$2.03 per ton, loaded on tenders, re-building, superintending, teaming, and all other expenditures appertaining to repairs, are included in the above cost of running locomotives.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY	Length of Road	Capital paid in.	Debt	Total cost of road & equip't	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY	Length of Road	Capital paid in.	Debt	Total cost of road & equip't	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.
Atlantic & St. Lawrence	149	2,494,900	2,382,000	6,923,911	445,762	150,224	6	---	Brunswick and Florida, Ga.	80	151,387	463,643	638,649	In progr.	---	---	---
Androscog. & Kennebec	66	457,509	1,335,305	2,210,947	169,513	83,368	---	---	South. Western	143	1,399,100	441,292	2,269,323	365,214	238,771	---	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,261	213,255	---	---	---	Tennessee and Alabama	30	309,754	636,889	679,906	53,775	29,406	---	---
Portland, Saco, & Portsmouth	91	1,396,400	---	1,369,373	263,717	122,000	94 1/2	---	Tennessee and Mississippi	61	757,440	611,812	1,161,132	191,601	99,483	---	---
Portland, Concord & Mt. Airy	61	---	1,104,686	2,814,977	355,629	174,025	16	---	Memphis and Charleston	287	2,228,177	3,495,283	5,672,470	642,022	334,504	---	---
Onondaga	51	1,000,000	899,313	3,179,687	317,000	125,654	4 1/2	---	Mobile and Ohio	306	6,784,819	2,094,459	10,701,428	554,382	278,428	---	---
Onondaga	36	1,500,000	8,242	1,412,676	305,810	146,986	4 1/2	---	Miss. Central	59	1,576,474	926,796	2,503,098	115,679	100,799	---	---
Northern, N. H.	90	3,063,400	409,284	3,068,400	177,580	73,401	---	---	South. N. (Miss.)	82	1,000,000	1,400,000	2,400,000	284,215	127,450	---	---
Conn't & Passumps. Riv.	90	1,000,000	800,000	1,784,146	392,111	41,438	---	---	N. O. Opelousas & G.W.	80	2,800,000	750,000	3,877,515	284,178	---	---	
Butland & Burlington	117	2,233,376	4,168,765	4,584,000	120,000	---	---	---	N. O. Jackson & G. N.	206	4,035,000	1,815,610	7,142,564	189,003	---	---	
Vermont and Canada	47	1,350,000	---	1,350,000	703,881	137,393	---	---	Vicksburg, Shreveport & Tex.	21	883,786	108,285	992,061	104,092	---	---	
Vermont Central	122	6,000,000	5,278,299	8,402,055	435,833	171,382	94	---	East Tennessee and Ga.	111	1,192,974	1,738,669	2,703,424	227,363	104,092	---	---
Boston and Lowell	74	1,830,000	438,920	2,412,251	770,802	305,502	94 1/2	---	East Tennessee and Va.	130	626,076	1,728,664	3,204,138	61,314	59,062	---	---
Boston and Maine	43	4,078,974	4,229,781	5,941,779	694,170	348,134	96 1/2	---	Nash. and Chattanooga	159	2,263,909	1,832,797	3,896,703	641,652	219,265	---	---
Boston and Providence	44	3,160,000	239,730	3,384,458	1,019,149	388,613	98	---	Ovington & Lexington	98	1,344,860	3,065,917	4,091,604	426,408	220,006	---	---
Boston and Worcester	47	4,500,000	599,974	4,847,779	122,960	39,899	49 1/2	---	Lexington and Frankfort	29	430,055	164,399	658,255	95,807	45,717	---	---
Cape Cod	50	681,690	291,007	1,031,625	297,710	65,096	---	---	Lexington and Danville	13	694,444	71,000	765,500	109,069	---	---	
Connecticut River	50	1,691,110	275,772	1,801,244	610,156	272,470	3	---	Louisville and Frankfort	65	741,039	625,210	1,502,095	245,750	---	---	
Eastern, Mass.	67	2,583,400	2,441,873	5,082,607	698,974	250,430	97 1/2	---	Atlantic & Gt. Western	118	866,939	77,294	613,231	149,741	---	---	
Fitchburg	67	3,540,000	100,000	3,872,821	198,925	27,827	6	---	Bellevue and Ind.	118	1,874,396	1,316,327	2,993,392	348,352	120,836	---	---
N. Bedford and Taunton	21	600,000	---	641,686	683,857	305,140	98	---	Clev., Col. and Cin.	141	4,746,210	90,407	4,762,370	149,741	511,740	94 1/2	---
Old Colony and Fall River	69	3,015,100	260,100	3,362,940	240,133	53,267	13 1/2	---	Cleveland and Toledo	200	3,333,712	4,225,558	7,193,016	930,282	433,790	---	---
Vermont and Mass.	168	2,332,641	1,019,148	3,241,975	2,117,982	899,734	105	---	Clev. and Mahoning	65	---	---	1,920,933	---	---	---	---
Western, Mass.	46	1,100,000	5,339,090	10,496,906	216,888	82,720	4	---	Clev. and Pittsburg	133	2,780,544	3,043,992	5,637,466	581,877	309,618	---	---
Worcester and Nashua	46	1,411,000	205,565	1,351,271	844,773	186,014	7	---	Clev., P. & Ashland	96	3,000,000	1,495,548	4,040,978	1,251,589	581,454	15	---
Providence and Worcester	42	1,510,020	306,000	1,781,018	769,005	340,835	10	---	Cin., Hamilton & Dayton	60	2,155,800	1,624,092	3,130,316	487,421	260,763	---	---
Hartford and N. Haven	72	2,356,000	944,000	3,329,602	274,428	112,125	1 1/2	---	Cin., Wm. & Zanesville	131	2,421,176	3,782,040	5,696,210	222,504	30,288	---	---
Hartford, Prov. and Fishkill	122	1,936,246	2,132,692	4,205,998	318,476	109,344	---	---	Columbus and Xenia	55	1,490,450	149,000	1,582,475	403,212	181,688	10	---
Housatonic	74	2,000,000	423,855	2,493,547	237,418	114,237	---	---	Dayton, Xen. & Beire	63	437,838	422,658	860,496	109,121	---	---	
Saugatuck	57	1,031,800	524,244	1,580,723	1,157,055	251,699	3	---	Dayton and Michigan	140	1,076,602	893,011	1,185,826	---	---	---	---
N. York and N. Haven	98	2,990,836	2,323,210	5,253,232	88,007	30,318	40	---	Dayton and Western	35	310,000	700,481	1,035,173	128,940	63,263	---	---
N. Haven and N. London	50	734,268	761,462	1,450,318	120,671	61,644	---	---	Eaton and Hamilton	42	459,763	832,669	1,176,169	140,936	50,008	---	---
N. London, W. & Palmer	60	510,700	1,052,000	1,603,230	126,417	44,847	30	---	Little Miami	65	2,981,292	1,268,000	3,925,167	77,442	290,123	10	---
Norwich and Worcester	66	2,122,300	724,153	2,598,671	117,710	9,904	---	---	Sandusky, Dayton & Cin.	171	2,697,090	3,368,000	6,065,090	692,614	---	---	---
Albany Northern	32	439,005	1,625,098	1,840,696	In progr.	---	---	Central Ohio	138	1,427,907	6,224,650	4,986,822	670,092	164,697	---	---	
Black River and Utica	53	643,370	317,353	974,323	172,470	66,333	---	---	Pittsb. Ft. Wayne & Chicago	123	6,247,040	9,822,550	14,279,704	1,546,359	677,787	20	---
Buffalo, Corn. and N. Y.	100	1,487,871	1,601,183	2,819,096	238,492	31,896	---	---	Pittsb. & Wayne & Cin.	50	371,350	81,000	390,933	---	---	---	---
Buffalo and N. Y. City	92	798,439	2,587,849	3,401,868	679,750	335,763	10	---	Sand. Manaf. & Newk	127	1,350,000	2,206,357	3,552,357	828,968	164,479	---	---
Buffalo and St. Line	69	1,300,000	1,047,000	2,494,364	174,089	69,506	---	---	Scioto & Hocking Valley	56	403,975	609,050	888,858	109,968	---	---	---
Canandaigua and Elmira	47	434,111	922,393	1,275,796	---	---	---	---	Spring, Mt. Vernon & P.	113	1,000,000	950,000	2,194,000	---	---	---	---
Canandaigua & Niagara F's	96	1,315,000	2,279,854	3,405,832	135,433	45,419	---	---	Tol. Wabash & St. Louis	242	2,965,100	7,577,500	10,542,600	Recently opened.	---	---	---
Oayuga & Susquehanna	35	697,000	506,689	1,187,562	1,902,328	688,380	33 1/2	---	Cin., Log. and Chicago	255	4,196,679	1,000,125	2,080,433	In progr.	---	---	---
Hudson River	144	3,758,466	9,250,302	12,737,896	325,113	86,186	11 1/2	---	Evansville & Crawfordsv.	109	995,061	1,270,872	2,158,713	249,869	124,140	---	---
Long Island	95	3,000,000	647,193	2,555,986	6,545,413	3,041,120	8 1/2	---	Ind. and Cincinnati	66	1,686,809	1,564,581	3,029,939	491,743	246,622	7	---
New York Central	582	24,182,400	14,402,635	30,783,518	6,743,807	1,454,032	16	---	Indiana Central	88	612,350	1,261,179	1,909,911	86,189	204,685	---	---
New York and Erie	484	11,717,000	23,041,465	34,469,324	1,640,390	324,991	13	---	Ind., Clev. & Pittsburg	83	835,701	1,071,694	1,826,426	263,19	86,248	---	---
New York and Harlem	143	5,111,100	4,822,498	8,768,203	1,040,390	324,991	16 1/2	---	Jeffersonville	74	1,014,252	694,000	1,839,676	222,737	94,318	---	---
Northern, N. Y.	118	1,633,022	4,406,874	6,470,714	149,373	78,764	1	---	Madison and Indianapolis	87	1,647,700	1,336,616	2,934,516	260,214	118,628	---	---
Oswego and Syracuse	35	303,130	213,025	752,039	In progr.	---	---	---	New Albany and Salem	288	2,635,121	6,281,848	7,029,494	646,827	371,402	---	---
Potomac and Watertown	29	407,200	294,189	749,683	211,149	82,600	---	---	Penn. and Indianapolis	73	---	558,314	2,000,000	150,000	90,000	---	---
Rensselaer & Saratoga	25	610,000	140,000	896,423	71,909	---	---	---	Terre Haute and Ind.	73	1,361,450	250,125	1,685,409	481,272	206,070	10	---
Saratoga and Whitehall	48	600,000	896,000	1,500,000	159,484	21,089	---	---	Chicago and Rock Isd.	182	6,248,000	1,731,318	6,628,272	1,896,190	850,039	---	---
Syracuse & Binghamton	51	763,369	1,578,804	2,272,777	160,364	22,503	---	---	Chicago, Burl. and Quincy	210	4,631,640	3,862,970	8,042,426	506,167	---	---	---
Troy and Boston	27	437,830	737,079	1,109,222	440,290	65,184	---	---	Chic. St. Paul & F'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Watertown and Rome	97	1,500,000	700,979	2,200,500	244,993	162,037	3 1/2	---	Galena and Chicago	259	6,023,900	3,899,015	9,395,455	2,316,786	1,192,042	8	---
Belvidere Delaware	64	1,000,000	1,619,000	2,844,090	1,604,757	114,832	63	---	Illinois Central	704	6,656,435	20,311,422	25,437,669	293,965	665,972	---	---
Camden and Amboy	94	3,000,000	1,140,200	8,791,096	1,117,839	694,114	12	---	Peoria and Oquawka	181	1,569,889	2,200,000	5,400,000	In progr.	---	---	---
Camden and Atlantic	60	3,485,000	1,550,854	1,738,117	911,611	45,442	---	---	Ohio & Miss. (Wst. Div.)	147	1,780,295	3,292,403	4,870,586	Recently opened.	---	---	---
New Jersey	30	3,485,000	788,544	3,660,017	684,940	357,193	10	---	Terre Haute, Alt. & St. Louis	209	8,011,150	9,826,927	8,729,764	823,767	247,757	---	---
New Jersey Central	63	2,000,000	3,692,828	6,921,829	231,760	101,542	---	---	Detroit and Milwaukee	185	838,000	1,128,964	1,966,968	Recently opened.	---	---	---
Morris and Essex	53	1,167,895	340,000	1,084,127	85,000	45,000	3 1/2	---	Nich. Central	282	6,057,840	3,866,639	12,847,232	2,448,738	764,945	8	---
Alleghany Valley	44	1,577,900	609,046	1,700,000	219,250	52,450	---	---	Nich. South'n & N. Ind.	475	8,874,400	10,459,89	19,330,044	2,309,487	544,311	20 1/2	---
Cataw. W. & Erie	63	1,700,000	1,940,000	3,640,000	156,465	77,92	---	---	Green Bay, Ml. & Ch.	40	1,000,000	780,000	1,780,000	---	---	---	---
Cumberland Valley	52	1,013,500	213,504	1,223,670	198,708	41,139	60	---	Milwaukee and Miss.	234	3,440,673	4,619,453	8,051,265	882,818	372,691	12	---
Dol. Lack. & Western	170	3,292,772	6,194,511	8,013,761	89,555												

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are as interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	92 1/2	94
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	85	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1866	0	55
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	82	88
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	72 1/2	75
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	94	96
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	65	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	12	55
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	77	82 1/2
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72		60
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72		60
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	62 1/2	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	40	47 1/2
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1870	86 1/2	87
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1861	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		72 1/2
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	98 1/2	99
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90 1/2	90 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	7	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	10	10 April, 10 Oct.	"	1863	87 1/2	93
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		85
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	65	82 1/2
Indianap. & Cin'ti (for Lawb. & U.M.)	800,000	Do. conv. till 1867	7	March, Sept.	"	1864	75	82 1/2
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1869	7	Feb'y, August	"	1865	73	76
Little Miami	1,500,000	Do. inconvertible	6	2 May, 2 Nov.	"	1863	81 1/2	82 1/2
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1868	98	99
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	92	94
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	70	80
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863	70	77 1/2
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	75	78
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		90
Do. do.	2,525,000	Do. 2d sec. con. till 1868	8	May, Novemb.	"	1864-75		90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		85
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66		75
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872		60
Pennsylvania (Central)	6,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	101 1/2	102
Racine and Mississippi	650,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875		75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,600,000	Do. convertible	7	Jan'y, July	"	1866		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77 1/2	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85 1/2	89
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	96	97 1/2
Erie Railroad	3,000,000	1st mortgage	7	Jan'y, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	88	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	76 1/2	78 1/2
Do. do.	8,000,000	4th mortgage not convertible	7	April, October	"	1860	62	63
Do. do.	4,000,000	Not conv. Stuk Fund, \$420,000	7	Feb'y, August	"	1875	41 1/2	42
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	41	41 1/2
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	41	41 1/2
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	103 1/2	104
Do. do.	2,000,000	2d do.	7	16 June, 16 Dec	"	1860	94 1/2	95 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	75 1/2	76 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	89	89 1/2
Do. do.	3,000,000	M'tge 345,000 acres-priv. 7 shars	7	March, Sept.	"	1860	85 1/2	87
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	85 1/2	87
New York and Harlem	1,200,000	Do. do.	7	May, Novemb.	"	1861-72	94 1/2	95
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60 1/2	93	95
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	85 1/2	87
Do. do.	1,500,000	Do. do.	7	Feb'y, August	"	1868	74 1/2	76
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	90 1/2	90 1/2
Do. do.	3,000,000	No m'tge conv. from June 57-59	7	15 June, 15 Dec	"	1864	101 1/2	102
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	115	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	1,300,000	Do. convertible	6	Jan'y, July	"	1870	82 1/2	83 1/2
Do. do.	3,469,000	Do. inconvertible	6	April, October	"	1866	73 1/2	73 1/2

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES.	Int't payable.	Off'd	Ask'd
New York, 5 per ct. ....1858-'60	May, August, and November, 30	97	99	Milwaukee, 7 per ct coup. X	Divers	60	70
Do. 5 do. ....1870-'75		103 1/2	95	New Orleans, 8 per ct. op. R.R. X	Do.	72	75 1/2
Do. 6 do. ....1885		103 1/2	103 1/2	N. Orleans, 6 per ct. op. municip. X	Jan'y, July ..	85	99
Do. 6 do. ....1890-93		90	94	Philadelphia, 6 per ct. ....1876-'98	Jan'y, July ..	102 1/2	102 1/2
Albany, 6 per ct. 1871-'81 X	Feb'y, August, 105	105 1/2	Pittsburgh, 6 per ct. coup. X	Divers	52	55	
Allegheny, 6 per ct. coup. X	Jan'y, July, 55	70	Quincy, 8 per ct. coup. ....1868 X	Jan'y, July ..	62 1/2	65	
Baltimore, 6 per ct. ....1879-'90	Quarterly, 97	99 1/2	Racine, 7 per ct. coup. ....1873 X	10 Feb'y, Aug	80	80	
Boston, 5 per ct. coup. Long X	April, October, 101	101 1/2	Rochester, 6 per cent. coup. X	Divers	90	97 1/2	
Brooklyn, 6 per ct. coup. X	Jan'y, July, 101 1/2	102	St. Louis, 6 per ct. coup. ....Long X	Do.	85 1/2	87	
Clev'r'd, 7 per ct. op. W.W. 1879 X	Do. do. 100	101	Do. do. Municipal	Do.	87 1/2	90	
Cincinnati, 8 per ct. coup. X	Divers	80	Sacramento, 10 per ct. op. 1862-'74 X	Do.	37	45	
Chicago, 6 per ct. coup. ....1873-'77 X	Jan'y, July, 86 1/2	87 1/2	S. Francisco, 7 per ct. op. 1865, pay. N.Y. X	May, Novemb.	60	70	
Do. 7 per ct. coup. ....1880 X	Jan'y, July, 98	99 1/2	Do. 10 per ct. op. ....1871 X	Do. do.	87	90	
Detroit, 7 per ct. W.W. 1873-'78 X	Feb'y, August, 100	102	Do. 10 do. pay. N.Y. X	Jan'y, July ..			
Dubuque, 8 per ct. op. X	March, Sept., 102	100	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	56	60	
Jersey City, 6 per ct. op. W.W. 1877 X	Jan'y, July, 90		Whiting, 6 per ct. coup. X	Divers	50		
Los Angeles, 6 per ct. op. ....1880-'83 X	Divers	70	Do. 6 per ct. op. Mun. ....1874 X	March, Sept.	81 1/2		
Memphis, 6 per ct. coup. ....1882 X	Jan'y, July, 61	65	Zanesville, 7 do. X	April, October			

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending January 24, 1859

	Bonds.	Percent.	and int.
Little Miami, 1st Mort.	68 1/2	52	
Covington and Lexington, 1st Mortgage	68 1/2	65	
Do. do. 2d do.	5	60	
Do. do. 3d do.	6	35	
Ohio & Miss., E. D., Construction	78 1/2	53	
Cinc. Ham. and Dayton, 1st Mortgage	78 1/2	40	
Do. do. 2d do.	78 1/2	75	
Indianap. & Cincinnati, do. do.	78 1/2	80	
STOCKS.			
Cincinnati, Hamilton & Dayton	53		
Columbus and Xenia	80		
Indianapolis & Cincinnati	63		
Little Miami	51 1/2		
Ohio and Mississippi (E. D.)	3 1/2		

Railroad Earnings.

The following is a statement of the earnings of the New York Central Railroad for the month of December, 1858, compared with its earnings for the corresponding month of the previous year:

1858	\$506,406 44
1857	646,192 49

Decrease.....\$139,786 05

The earnings of the Erie railroad for the month of December were—

1858	\$392,292 77
1857	477,658 34

Decrease.....\$85,365 57

The earnings of the New Orleans and Jackson railroad for December were:

	1857.	1858.
Freight	\$25,263	\$74,852
Passengers	9,011	33,802
Mails	766	3,466

Increase over 1857.....\$77,080

The receipts of the Grand Trunk Railway of Canada for the week ending January

8th, were	\$29,411 90
Week ending January 9, 1857.	29,008 56

Increase.....\$408 34

Total traffic from July 1st.	\$1,212,294 05
Same period last year	1,310,825 88

Decrease.....\$98,531 83

The earnings of the Toledo, Wabash and Western Railroad for the month of December were as follows:

Passengers	\$16,285 97
Freight	21,677 60
Mails and express	3,366 66

Total.....\$41,330 23

The earnings of the Vermont and Massachusetts railroad for December were:

1858	\$18,974 59
1857	16,416 47

Increase.....\$2,558 12

New Plan of Railroads.

S. A. BRES, C. E. of this city, has introduced a new feature in the construction of city railroads, namely: An entire cast iron structure, without tie or string piece, absolutely indestructible, is put down without removing but a few inches of the pavement; the rail so constructed at the joints as to preclude the possibility of any jolt at such place. Some of this track has been laid by the Broadway road of Brooklyn, and highly spoken of by those who saw it when putting down. A very important feature of this case is, that it can be constructed at far less cost than the plan now in use in this city, and must wear as long as two successive structures, as heretofore built of wood and rolled iron combined, especially when the rails are chilled in casting, by which they are rendered as hard as steel. A specimen of this

cast iron road can be seen in the office of the City Railroad Company, at the Fulton Ferry.—*Brooklyn Star*.

American Railroad Journal.

Saturday, January 29, 1859.

Passenger Traffic of the New York and Erie Railroad.—Is it Done at a Loss?

The total earnings from passengers on this road for the past year, were \$1,185,945. Of this sum, \$406,970 were from *through*, and \$778,975 from *way* passengers. The passenger trains ran 1,216,373 miles. The average cost of all the trains was \$1.27 per mile. At this rate, it cost the company \$1,544,350, or \$357,405 more than the receipts from this source, to conduct the passenger traffic. We are aware that numerous charges attach to the freight, that do not to the passenger traffic, but the difference is probably more than made up by the difference in the speeds of the two kinds of trains. The freight trains move, we presume, at the rate of 10 miles the hour—the passenger, probably, at 25 miles. The wear and tear to track and machinery at different speeds is estimated in ratio to their squares—that is, the wear and tear is more than six times greater at the latter speed than at the former. Taking, therefore, the effect of speeds into consideration, it is quite certain that it costs as much to move passenger trains one mile on the Erie railroad, as it does freight trains.

If such be the fact, which we cannot doubt, then the passenger business of this road the past year was done at a loss of \$357,405, which amount had to be made up by deducting an equal sum from the profits of the freight traffic. The net profits of the latter, consequently were \$1,526,427, equal to the interest on about \$22,000,000. As it was, the road earned the interest only on about \$17,000,000, while the funded and floating debt drawing interest is \$26,386,952.

We are surprised and disappointed that a fact so startling and so prejudicial to the interests of the unsecured bondholders should not have elicited a passing remark in the late report of the President. It is certainly a pregnant question for them to ask, whether a branch of traffic, which apparently eats up a sum equal to the interest on \$5,000,000, should not either be discontinued altogether, or so modified as to be at least self-sustaining, if it does not produce a net revenue.

While it is quite certain that, as at present conducted, the passenger traffic is done at a loss, we think it equally certain that it might be done at a fair profit. The company has a monopoly of its *way* traffic, for which it can charge remunerating rates and carry it at easy speeds. Suppose this department to have been carried on the past year at 60 per cent. of the receipts. Such a ratio would have produced \$311,590 net, which added to the net earnings from freight, would have produced \$1,855,998, equal to the interest on \$26,500,000, a sum larger than the funded debt.

We attribute the excessive wear and tear on the Erie railroad, in a great measure, to the enormous weights and high speeds of its passenger trains. No kind of track or machinery can long withstand them. The Erie is one of the four great Eastern and Western lines. It assumes to compete with them for passenger as well as freight. It must maintain the same rates of speed as the Hudson

River and Central roads, or retire from the contest. Compared with these roads, it labors under three disadvantages—in having a harder line, a wide gauge, and a very light business. Such being the case, it becomes a grave question whether it should not retire altogether from a contest that must result in certain loss, and confine itself to the passenger traffic of its line, which cannot be taken away, and which certainly can be made remunerative to a fair extent. We regret that Mr. Moran did not help to enlighten us upon this point. We should have liked to have had from him some estimate of the comparative cost of running freight and passenger trains, and some opinion as to the expediency of retiring from competition for the *through* traffic. Certainly, so large an apparent loss in this department should have been made a subject of consideration in the report. As it is, the question is still to be answered whether something may not be saved here. A report, if possible, should anticipate all such inquiries. The unsecured bondholders will hardly rest quiet till they see whether an expense which deprives them of their interest cannot be avoided. They will be all the more impatient at not finding the proper explanation in its proper place.

Dead-Headism.

A sufficient time has elapsed since the sweeping rules against *dead-heads* were put into vigorous operation, to have developed something of the results of a system by which a portion of our railroad companies have declared their entire independence of popular favor, and have cut themselves off from courtesies that obtain in all other relations than those just established between railroads and the public. We hope these companies will not fail to give us their experience under the new rule. We expected to see some notice of its workings on the Erie railroad in the late report of Mr. Moran. When a grand and radical change is made in previously established customs, the public are certainly entitled to know how the new order works.

We are quite willing to see the present experiment fully tried, as the only means of correcting some very false notions into which railroad companies, impelled by a peculiar state of the popular mind, have plunged. We fully believe, however, that there are not ten persons among the whole number connected with the railroads that have adopted the extremest measures, that are not thoroughly convinced, that a great mistake has been made, and that it will not be long before it will be corrected. In fact, we do not believe there is *one* company in the United States in which the rules recently adopted against *dead-heads* are not daily disregarded. They will be broken daily unless mankind is created entirely anew, without a touch of courtesy or pity in his nature. So long as these remain, railroad officials will occasionally pass a poor, decrepit, friendless man or woman. They will occasionally allow free passage to an amateur, or to officers of other roads who wish to perfect their experience by studying the operations of other lines. They will allow their workmen sometimes to ride free; and more than all, will they now and then thrust into the hand of an *editor*, a ticket in exchange for a good word to be spoken in their favor. To attempt to enforce the new rule in all its stringency,

is to lay the foundation of the worst kind of insubordination.

We contend that railroad companies cannot forego one of these favors, without direct and positive injury to themselves. A railroad president, when requested to send a poor person free of charge, may reply very properly, that his company is not a *charitable* institution. He thence draws, though very erroneously the conclusion that his company ought not to perform any act of charity. But no *man* is a charitable institution. Did he assume to be, the wealth of Croesus would not last him an hour. Success in his calling is his first duty; but for him to refuse all acts of charity is to make himself worse than a brute. Certain obligations of this kind lay in the path of every man or association of men; obligations arising out of their respective functions. Society compels every professional man to give, to a certain extent, gratuitous services to the poor. The duty grows out of the fact, that as the service must be gratuitous, it is properly rendered by the party to whom it costs the least, and who must perform it, even if another pays for it. The same duties attach to men in the aggregate as well to man in particular. The gratuity of traveling, where it must be extended, belongs to the owner or owners of railroads, as they can perform it with only slight expense and inconvenience. The rules that society has established in these matters are simply the exercise of common sense acting under a humane impulse, which, fortunately, is daily gaining strength, instead of being weakened. In saying this, we no more advocate indiscriminate charities by railroad companies, than by individuals. When they are given profusely, they do vastly more harm than good. But when extended to deserving objects, they carry a double blessing which railroad companies can no more forego than individuals.

Another class of men who always will and should have the free run of railroads, are managers of such works desirous of enlarging their experience by studying the operations of other lines. The widest opportunity ought to be thrown open for such objects. At present, the managers of one road know but little how others are conducted. For the want of such experience, an excellence in a system of management, or an improvement in machinery, may long remain the property of one line, which should in the outset have become the common property of all. By a proper intercourse, the aggregate experience of all our five hundred companies could become that of each. By bringing the officers of companies into such relations, a degree of fellowship and good feeling would spring up, which would render impossible most of the misunderstandings and feuds that are now constantly arising between railroad companies, and which consume so large a portion of their earnings, and would easily compose such as might happen. As it is, the members of the new league stand confronting each other with daggers drawn. The relationship existing is that of old feudal barons, who have cheated each other so often, and are so estranged, that mutual confidence for the future is impossible. Take the Central and Erie. How long will it be before the present *entente cordiale* will be broken. There is a compact without any belief in each other's faith. If the officials of our companies

could occasionally meet and ride over each other's roads, would they not rub off some of their sharp points, and find out that each are a pretty good set of fellows after all? But as it is, an effectual bar is put to all such communications. No person will go upon another's line if he can possibly avoid it. He will not submit to the indignity of filling the coffers of a rival with his money. We regard the refusal of railroad companies to pass, under any circumstances, the officers of other roads, to be one of the greatest mistakes ever committed. While persisted in, it cannot fail to keep companies in the same hostile attitudes that now exist, and which produced results the past year, by which was lost fifty times the fare of *dead-heads* passing over all our roads.

Another class who should be free riders under certain conditions, are workmen on the roads. For instance.—Where they have been employed at a distance from their families, they should, while in the employ of the company, be allowed to return to them free of expense. Every good workman on a road comes to regard it as his own property. To make him pay for every mile he passes over it, is to destroy such an idea altogether. Such a sentiment should always be encouraged and cherished as the means of securing vigilance and faithful services. A person so actuated will take a pride in having everything under his charge maintained in the utmost efficiency and order. Nothing will afford such a stimulus and impulse to the faithful discharge of his duties, as a proper recognition of his labors, and acts of kindness on the part of the company. In many instances, the most effectual and often the only mode in which they can be extended, is in that named. To refuse such favors would be to convert a faithful, into an eye, servant, and thus to destroy the principle upon which all efficient organization must be based. But certain perquisites or reservations of service always grow up out of the relationship between the superior and inferior, or between the employer and employed. In some cases, they are muniments with which the inferior protects himself from the power or caprice of the superior. In olden times, the serf had his patch of land, and sufficient time to himself to cultivate it. If employed in any branch of industry, a certain portion of the products will go to the workman, either free or at first cost. Labor always exacts and deserves some interest in what it produces in addition to the stipulated wages paid. To deny this is to degrade the servant to a machine; to divorce him from all interest in the subject matter of his labors, to convert him into a churl, and to place him in an attitude of hostility to his master. In such relations anything like success in any enterprise is impossible. For railroad companies to ignore the great laws that grow naturally out of all the relations of society, is to throw away the conditions upon which success is possible. Any regulations adopted in the fit of the moment, contravening such laws, are certain to work great mischief and in the end to be repealed.

We think the best investment the Erie railroad could make, to day, would be to issue 50 free passes to editors of leading newspapers, on condition that their use should be always accompanied by a notice of the road. Advertising is the secret of success, where one depends upon the public for patronage. The most valuable kind of advertising

for a railroad is not the publication of *time-tables*, but spirited description of its route, of the works on its line, of the country and communities it traverses. These are always eagerly read, and always create a desire to visit the scenes described. A description of the capabilities of the country, or of the cities and villages, or of the industry and products of the people upon the route of a road, will often be the means of sending large parties over it, in search of locations for themselves. More particularly is such kind of advertising necessary for the weaker of the two competing lines. The latter should be kept constantly before the public eye. Otherwise its existence will soon be almost forgotten. As a passenger road the Erie railroad is now nearly lost sight of. Few newspapers now refer to it except by way of disparagement. The public catch the same unfriendly feeling. No one passes over it unless compelled to do so. The result is that this road presents the remarkable phenomenon of a steadily decreasing passenger traffic, which was less the past year than in 1852, the first year it came into use. The road was opened on the 14th of May, 1851. The passenger earnings since that year up to the present time have been as follows:

1852.....	\$1,371,529	1856.....	\$1,656,674
1853.....	1,601,209	1857.....	1,529,456
1854.....	1,743,379	1858.....	1,182,558
1855.....	1,696,710		

The decrease from the highest point reached in 1854, has been \$560,821. Under the present system of management the receipts from passengers will be likely to decrease. What the road needs is a lift from the *newspapers*. It would cost the company nothing to gain their good will. But if it should cost it twice the amount that all the riding upon free tickets would come to, it would be politic to make the outlay. The advantage would be twenty to one on the side of the road. We think the last years receipts are a pretty loud argument in the premises. If not, we are willing that Mr. Moran should try his experiment a year or two longer. No road can afford rightfully, or wrongfully, to incur the hostility of the public press. To it our railroad companies owe a debt that never can be paid. Without it, our railroads could never have been constructed. The Erie railroad is more than any other road in the United States the creation of the newspapers. Not a cent could have been had from the State, and not a loan from the public, but for their good opinion. For Mr. Moran or any other man to affect to despise them, is to commit a mistake sufficiently grave to threaten to destroy the very work they have created.

Sales of Stock at Auction.

We are requested to refer to the advertisement of Mr. EUGENE THOMPSON, in another column. Mr. Thompson has proposed to himself the somewhat difficult task of having his public quotations represent exactly the sales made, and to be a party to no *bogus* transactions whatever. It is now well known that catalogues are often made up for the occasion, and the farce of making sales gone through with, with hardly a single *bona fide* transaction, for the purpose of shoving off some worthless trash, or of raising or depressing the quotation for particular securities. If Mr. Thompson will rise above these dishonorable tricks, he will do himself and the public a good thing. We hope to

be able, by-and-bye, to commend something more than good intentions.

Machine Made Nuts.

Our attention has been called to an improvement in the manufacture of machine-made iron nuts, which being an article of importance to railway machinists, we devote a few lines to describe. Until within a few years, the hand-made nuts were considered, and no doubt were, superior to those made by machinery; but latterly machines have been invented which have turned out a very satisfactory article: The first successful invention applied to the manufacture, formed a blank nut in a *die* box, which was suffered to become cold, and the hole for the bolt punched while cold; but it was found that the iron around the bolt hole was torn in the process, and the nut was not reliable where much strength was required. An improvement upon this was a machine which performed the punching process while the iron was hot. The nut made by this process gave much satisfaction, and was found, we are informed, equal, if not superior, to those made by a blacksmith. The last improvement (patented by Mr. Cole of St. Louis) also punches the hole for the bolt while the iron is hot. His principal improvement consists in the employment of two punches instead of one, which work from opposite sides towards the centre of the nut, thus forcing the iron into the body of the nut instead of punching it out. The manufacturers claim that this process condenses the iron around the bolt hole, and gives the greatest strength to the screw thread. Whether or no this is accomplished to the extent that they claim, is not, perhaps, for us to say, but must be decided by consumers themselves. We consider the invention described as worthy of attention. The advertisement of the manufacturers, Messrs. FULLER, LORD & Co., will be found in another column.

City Railroads.

As any improvement in the construction of railways, especially city roads, must be regarded with interest in all our larger towns, we will give a brief description of a new plan of track, recently laid on the Broadway railroad of Brooklyn, near Peck slip ferry. This track is composed wholly of *cast iron*, and is laid on a paved street without the use of ties, string pieces, chair, bolt, spike, or wood of any kind. The rail is $6\frac{1}{2}$ inches in depth, with a base of 4 inches in width, increased to 6 inches at the ends and in the centre, cast on a chill, making the rail perfectly smooth, and as hard as steel.

The tread of the rail may be cast to any desired pattern.

The length of rail is 12 feet, and weighs about 350 lbs. each. The end has a groove and tongue joint in the tread, and is further secured by a large cast iron splice wedge driven across the joint in continuous grooves cast on the side of each rail, by which the track is made perfectly continuous. In laying the track a trench is opened in the pavement about 18 inches wide and 8 inches deep. A thin plate of cast iron 9 by 16 inches is placed under the joint, and also under the centre of each rail. The gravel is then brought up firmly under the whole length of the base by the tamping bar, the trench filled in and tamped about the rail, and the paving replaced and firmly rammed. Nothing will be required in the way of repairs for many

years. We understand the cost to be only about \$8,000 per mile.

The plan is the invention of S. A. BEERS, Esq., Civil Engineer of Brooklyn, N. Y., who has made arrangements to furnish the rail, or construct roads where it is used in any part of the United States or Europe. To all parties contemplating the construction of railroads for cities, we would recommend a treatise recently published by Mr. Beers, entitled, "Railroads, their construction and management, with the remedies for their abuse, from twenty-five years experience."

Finances of Michigan.

The Report of the Auditor General for the year ending 30th Nov., 1858, gives the following summary of the receipts and expenditures of the State:

Balance on hand 30th Nov., 1858,	\$158,642 70.	
Expenditures, 1857-'58.		Receipts, 1857-'58.
General Fund	\$397,618 59	\$666,656 35
Internal Improvement Fund	225,207 93	5,297 28
University Fund.	30 00	2,400 85
Do. Interest Fund ..	35,580 29	19,221 45
Primary School Fund..	480 00	19,692 06
Do. Interest Fund ..	108,546 06	68,588 64
Normal School Fund..	.....	360 00
Do. Interest Fund ..	6,998 49	3,042 14
Swamp Land Fund...	13,842 74	62,897 67
Do. Interest Fund ..	187 75	4,614 06
State Building Fund..	6 75	1,069 32
Asylum Fund	59,526 25	2,933 11
Mich. Central Railroad Deposits.	40 00	.....
Sault Ste Marie Canal Fund .....	.....	8,947 42
Treasury Notes	1 00	.....
Balance on hand 30th Nov., 1858.	176,347 20	.....
Total	\$1,024,363 05	\$1,024,363 05

The general fund was derived from the following sources, viz.: Sales of old iron, etc., \$10 96; sales of lands for taxes, \$72,544 22; delinquent taxes collected, \$60,605 47; delinquent tax interest, \$3,216 32; State bonds sold, \$13,864 11; State bonds interest, \$2,472 20; State tax lands sold, \$3,366 68; State tax lands interest, \$220 92; redemption of State bonds, \$19,182 24; redemptions from sales to individuals, \$11,243 13; sundry counties, taxes collected, etc., \$34,422 55; expense of sales, \$1,652 39; office charges, \$3,601 87; brokers' licenses, \$93 00; peddlers' licenses, \$201 96; auction duties, \$4 69; interest on surplus revenue, \$5,980 70; sales of State salt springs, lands and interest, \$1,641 41; sales of asset lands, \$10; plank road specific tax, \$750 28; bank specific tax, \$7,596 75; Mining Co.'s specific tax, \$6,598 05; Manufacturing Co.'s specific tax, \$1,376 50; Railroad Co.'s specific tax, \$149,939 86; temporary loan bonds, \$50,000; loan of 1858, \$216,000—total, \$666,656 35.

The amount of delinquent taxes due in the several counties on the 30th Nov., 1858, was \$94,985 75.

The amount paid for salaries of State officers for the year was \$14,137 50; Supreme Court Judges, \$7,500; reporter to ditto, \$163 88; Circuit Judges, (10,) \$13,180 80; Recorder of Detroit, \$1,125; Dist. Judge of Upper Peninsula, \$1,250; Sheriff's fees, advertising, etc., \$2,320 42—making the total expenses of the Judiciary, \$25,840 10.

The funded and fundable debt not yet due is as follows:

Penitentiary Bonds due Jan. '59.	\$20,000
" " " " Jan. '60	40,000
Int. Imp. Warrant Bonds, on demand ...	50
Full-paid 5,000,000 loan bonds, due Jan. 1863	177,000
Adjusted bonds, due Jan. '63	1,726,685
Temporary Loan bonds.	50,000
Loan of 1858.	216,000
	\$2,229,735
The part-paid 5,000,000 Loan bonds (\$180,000) outstanding, when funded will amount to	104,142
Outstanding Int. Imp. Warrants.	3,752
Total	\$2,337,629

The estimated revenue (including \$176,347 20 balance on hand) for the year ending 30th Nov., 1859, is stated at \$804,747 20, and the estimated expenditures for the year are stated at \$626,958 03.

Finances of Pennsylvania.

The revenue and expenditures of the State of Pennsylvania for the fiscal year ending 30th Nov., 1858, are exhibited in the following aggregate summary:

The available balance in the Treasury, at the close of the fiscal year, 1857, \$528,106 47	
Receipts to November 30, 1858, inclusive	4,139,778 35
	\$4,667,884 82
Expenditures from November 30th, 1857, to November 30th, 1858, inclusive	\$3,775,857 06
Balance in Treasury, Nov. 30, 1858.	892,027 76
	\$4,667,884 82

The public debt of Pennsylvania on the 1st Dec., 1857 and 1858 is stated in the Governor's message to the Legislature as follows:

Funded Debt:	1857.	1858.
6 per cent. Loan	\$445,180	\$445,180
5 per cent. Loan	38,773,212	38,420,905
4½ do.	388,200	388,200
4 do.	100,000	100,000
5 per cent. coupon bonds sold by Girard Bank ..	28,000	.....
Total funded	\$39,734,592	\$39,354,285
Unfunded Debt:		
Relief notes outstanding ..	\$146,421	\$105,350
Interest certificates	23,474	23,357
Do. (unclaimed) ..	4,448	4,448
Domestic creditors	802	802
Total unfunded.	\$175,145	\$133,958
Total funded and un-funded	\$39,909,738	\$39,488,243

and since the close of the fiscal year 1858, the commissioners of the sinking fund have redeemed of the 5 per cent. loan the sum of \$220,132 leaving the real debt at the end of 1858, \$39,268,111.

To meet this debt, besides the ordinary sources of public revenue, the State owns bonds received from the sale of the public works amounting to \$11,181,000, and this deducted leaves the actual indebtedness of the State for which interest has to be provided from the public treasury \$28,087,111.

Railroad Convention.

On the 1st Monday of February next there will be the largest assemblage of railroad men ever convened in this city. The stockholders and officers of the Memphis and El Paso and Southern Pacific Companies, with representatives of all interests connected with the construction of a road to the Pacific, from the East, West, North and South, will be in attendance. It is rumored here, from New Orleans, that the terms of consolidating Southern Pacific and Memphis and El Paso Companies have already been agreed upon, and that

the Presidency of the new company has been offered to Hon. James C. Jones, of this city, and will by him be accepted.—*Memphis Daily Appeal.*

Charleston and Savannah Railroad.

The annual meeting of the stockholders of this Company was held in Charleston, on the 19th inst. The reports of the officers were submitted, approved and ordered to be printed. After which the following gentlemen were elected directors for the ensuing year:

Directors—Hon. Chas. Macbeth, G. W. Williams, Hon. W. F. Colcock, Gen. Wm. E. Martin, L. T. Potter, Otis Mills, Hon. T. M. Wagner, Henry Gourdin, Jas. B. Campbell, Hon. Edmund Rhett, W. B. Hodgson, R. Bradley.

President—Hon. THOS. F. DRAYTON.

Secretary and Treasurer—EDWARD L. PARKER.

Grand Trunk Railroad.

The Detroit *Advertiser* states that the Grand Trunk Railway Company have now secured the right of way throughout Wayne county for the Detroit and Huron branch of this line, and that the right of way for the entire route will no doubt be speedily secured. About thirty miles of the track is already graded. The road is being constructed in a substantial manner. The culverts and bridges are entirely of stone work and iron.

Debt of Boston.

The public debt of Boston at the end of 1822, when the town became a city amounted to only \$71,185. In the next 25 years it increased at an average rate of \$36,000 per annum; and in the year 1848 and each subsequent year amounted to the following sums:

1848	\$1,354,332	1853	\$1,886,459
1849	1,623,823	1854	2,367,594
1850	1,756,000	1855	2,387,188
1851	1,714,298	1856	2,631,688
1852	1,746,510	1857	3,421,038

and at the end of the year 1858 to \$3,954,461. Even the property of any and all the citizens as well as the city public property is liable for both principal and interest, and if the government neglects to provide means to pay these any private citizen upon whom the public creditor chooses to call, may be stripped of his property to liquidate the demand.

New Jersey Railroad and Transportation Company.

The following is a comparative statement of the business of this Company for the past two years:

Total income from passengers, freight and other sources.	1857.	1858.
	\$911,617 25	\$908,458 45
Total exp'ses for repairs, and operating of road and all contingencies.	376,866 03	349,370 73

Net income	\$534,751 22	554,086 72
Dividend of 10 per cent. on old and new stock	362,450 00	

Surplus earnings carried to sinking fund, after payment of tax, transit duties and interest on bonds.	\$123,982 72	
Diminished gross earnings for 1858, as compared with 1857	\$8,159 80	
Diminished expenses do.	27,495 30	

Increase of net receipts. \$19,335 50

The diminished gross earnings for the year 1858, compared with 1857, were caused by the falling off of receipts from other roads, while the earnings from the New Jersey Railroad proper, and its appendages, have increased.

North-East and South-West Alabama Railroad.

The annual meeting of the stockholders of this company was held at Eutaw, December 16th. The proceedings were interesting, and the official statements laid before the stockholders were important and encouraging. The *Tuscaloosa Monitor* gives a report of the proceedings.

It was ascertained that the whole grading from the Mobile and Ohio road to Tuscaloosa was provided for, except a slight deficit, estimated at about \$46,000, which occurs near that city, for which the Tuscaloosa subscription of \$40,000 in cash will amply provide. Then with the elevated grade, proposed by Engineer Rodas; from Tuscaloosa to Elyton, by which, it is stated, contractors can accomplish a greater length of distance under their contracts, the whole grading is provided to the town of Elyton.

The bridges across the Warrior and Bigbee rivers are in course of construction, and the only means lacking to complete the whole road-bed for the iron from the Mobile and Ohio road up to Elyton, is a sum necessary for cross-ties, trestle-work, small bridges and culverts—a part of which is already secured. In view of these facts, the stockholders passed a resolution authorizing the Directors to borrow a sum of money, not exceeding \$1,400,000, 'to enable them to purchase the iron, clothe and equip the road to Elyton from the Mobile and Ohio road, and to secure the same they are authorized to issue and negotiate mortgage or income bonds, or such other securities as in their opinion shall best promote the interests of the Company, and may pledge their lands, road-bed, or any and all other property of the Company, to secure the payment thereof.'

At the same meeting, the following gentlemen were elected Directors for the ensuing year: Jas. Jack, J. A. Mudd, A. Battle, A. B. Dearing, J. H. Dearing, B. F. Houston, J. Hair, J. I. Thornton, S. L. Creswell, S. McAlpine, R. P. Frierson, A. F. Alexander. The new Directors immediately organized, and unanimously elected L. N. Whitfield, Esq., of Tuscaloosa, President of the Company.

Kanawha River Improvement.

The Directors of the Kanawha River Improvement, have entered into a contract for the improvement of the navigation of the Kanawha.

They have contracted with Major Henry S. Kupp, of Pennsylvania, to improve the navigation by *sluices*, aided, where necessary, by *winged dams*, at rates amounting in the aggregate to about two hundred and fifty thousand dollars. The drawing and specifications of the work to be done were made by Mr. Beyers, Engineer of the River. And the improvement will extend from Lykin's Shoals, (twenty-eight miles above Charleston) to the mouth of the Kanawha.

Before this work, however, will be commenced by the contractor, \$200,000 in cash have to be raised from a sale of the Kanawha River Bonds.

The bonds will bear 8 per cent. interest per annum. They can be sold at a discount of 10 per centum. The Kanawha River Improvements and the tolls arising therefrom *in all time to come*, will be mortgaged to secure the payment of the said bonds, principal and interest. The Board of Directors have authorized \$300,000, of the said bonds to be issued, and have appointed agents to make sale of them. These \$300,000 will constitute the first lien or mortgage on the entire works and future tolls, and will have priority over all other bonds or indebtedness.

In looking over a report made a year ago in regard to the Kanawha River, we find it stated that the tolls from 1835 to 1855 on the Kanawha River

amounted to \$174,185, that there were expended, during the same period, on the river for improvements \$68,746, thus leaving a net revenue of \$110,337, in 20 years, or a net revenue of \$5,520 per annum.

Between 1851 and 1856, the tolls amounted to some \$15,000 per annum, and during that period very little coal was shipped. The tolls came chiefly from salt. With the navigation improved, the tolls on this river will soon amount to \$25,000, and even \$50,000 per annum.

Lake Trade of Cleveland.

The Cleveland *Herald* furnishes the annexed statement of the lake trade of that port for 1857 and 1858:

	1857.	1858.
Imports, coastwise	\$29,418,132	\$26,087,849
" foreign.....	186,484	168,409
	\$29,604,616	\$26,256,258
Exports, coastwise	\$42,394,170	\$23,166,256
" foreign.....	411,325	224,986
	\$42,804,495	\$23,391,342
Total lake trade for year.	\$72,410,111	\$49,647,500

United States Mint.

The operations of the U. S. Mint, at New Orleans, for December, were as follows:—

Gold Deposits.

California gold	\$16,832 70
Gold from other sources	2,454 45
	\$19,286 62

Silver Deposits.

Silver parted from California gold	\$106 06
Silver from other sources	408,019 05
	408,125 11

Total deposits

Silver Coinage.

604,000 half-dollars	\$302,000
4,000 quarter do.	1,000
10,000 dimes	1,000
	304,000 00

Total coinage

Laurens (S. C.) Railroad.

At a recent meeting of the stockholders of this road, the following gentlemen were re-elected Directors for the ensuing year:

President—Col. H. W. Garlington.

Directors—Dr. J. W. Simpson, Col. J. H. Irby, C. P. Sullivan, Esq., S. R. Todd, H. C. Young, Esq., Col. J. D. Williams, Capt. J. G. Williams, J. Nesbit, Major J. A. Eichelberger, John Smith, Col. J. F. Kern, Wm. Mills, Jr.

The gross receipts for the year ending July 31, 1858, were \$27,567 66; for the year ending July 31, 1857, \$23,959 74; balance in favor of this year, \$3,607 92. The amount of necessary expenditures for year ending July 31, 1858, was \$18,840 56; for year ending July 30, 1857, \$21,284 65; decrease of expenditures, \$2,444 56. Total balance in favor of this year, \$6,052 01.

The indebtedness of the company was, at the close of the fiscal year, ending 31st July, 1857, inclusive of bonds due 1st January last..... \$143,403 56
Upon which have paid the past year, from assessment and otherwise..... 37,185 76
Balance, inclusive of bonds, 31st July last..... 106,217 80
To meet this debt, the company has, of available assets..... 32,326 39

Balance, deducting assets..... \$73,891 41

Included in this amount there are, of bonds past due, \$29,500, a portion of which have been issued upon, and will soon pass into judgments.

The Wealth of Missouri.

The report of the Auditor of Missouri, gives the following comparative valuation of the real and personal property of the State for 1857 and 1858

	1857.	1858.
Land	\$124,747,730 08	\$221,605,766 94
Town lots.....	64,375,933 00	14,287,025 00
Slaves	41,655,608 00	45,090,028 00
Personal prop'ty	31,187,291 81	39,072,373 83
Valua'n of money and bonds....	26,013,470 00	35,556,380 00

\$287,980,032 89 \$355,621,573 27

Thus showing an increase in the valuation of 1858 over those of 1857, of \$67,641,540 89. The increase in the revenue of the State amounts to over 93 per cent., being largely in advance of the estimates of the Auditor in his annual report to the last legislature.

Cleveland and Pittsburg Railroad.

The Cleveland *Herald* says that this company is gradually recovering from its embarrassments. Considerable progress has been made in paying off interest on mortgages, the total receipts of 1858 having been larger than any previous year, \$772,083 33, and total expenses \$439,999 88, leaving a net earning of \$332,083 95. The per centage of running expenses is 57 per cent. on the gross. There was an increase of gross receipts over 1857 of about \$32,000, and of net earnings \$36,000. The indebtedness of the company has been reduced within the year \$137,097 26.

Des Moines River Improvement.

We learn from Washington that the Attorney General has given to the Secretary of the Interior a construction of the act of August 5, 1846, granting to the Territory of Iowa certain lands to aid in the improvement of the Des Moines river. He maintains that the grant only embraces lands between the mouth of the river and Raccoon Fork. The question of the extent of the grant has been agitated about ten years. His opinion is in accordance with those expressed by Messrs. Crittenden and Cushing on the same subject, and opposed to the opinions of Secretary Walker and Reverdy Johnson. This State claimed that the grant extended on both sides of the river from its mouth to its source, embracing millions of acres. The opinion limits it to about one-fourth the amount claimed.

Bank Dividends.

The Brooklyn Bank has declared a semi-annual dividend of 5 per cent. payable on the 1st of February.

The St. Nicholas Bank 3½, payable on the 14th of February.

The Bank of Mobile has declared a semi-annual dividend of 5 per cent. payable to the stockholders registered in this city, on demand, at the Merchants' Bank; the New York State Bank at Albany, a semi-annual dividend of 5 per cent. payable on the 21st inst.

The Leather Manufacturers' Bank, 5 per cent., payable 1st February.

Railroad Dividends.

The Brooklyn City Railroad Company has declared a dividend of 4 per cent. payable on demand.

The Sixth Avenue Railroad Company a quarterly dividend of 3 per cent., payable 1st of February.

The Galena and Chicago Railroad a dividend of 2 per cent., payable Feb. 15th, at the office of the company in Chicago.

The Peoria and Bureau Valley Railroad a dividend 4 per cent., payable at the office of the company, 13 William Street, Feb. 10th,

The Philadelphia and Trenton Railroad Company has declared a semi-annual of 4 per cent.

The coupons due 1st February on the 10 per cent. bonds of the Chicago and Milwaukee R. R. will be paid by the Bank of the Republic.

Insurance Dividends.

The Beekman Fire Insurance Company has declared a semi-annual dividend of 6 per cent, the Astor Company 8 per cent, and the Peter Cooper Company 6 per cent, all payable on the 1st of February. The Great Western Insurance Company have declared a dividend of 10 per cent. in cash and 20 per cent. in scrip, payable Feb'y 1st.

The Pacific Mutual Insurance Company has declared a dividend of 6 per cent. on the outstanding certificates of profits, and 43 per cent. on the net amount of earned premiums for the year 1858, both dividends payable on 1st of February.

The Home Insurance Co. have declared a semi-annual dividend of 20 per cent. payable on the 24th inst.

The Exchange Fire Insurance Company has declared a semi-annual dividend of 6 per cent., payable February 1st. The Greenwich Insurance Co. a semi-annual dividend of 7 per cent. payable Feb'y 1st. The Broadway Fire Insurance Company has declared a dividend of 7 per cent.

Interest on Bonded Indebtedness.

The outstanding bonds of the Paterson and Ramapo Railroad Company, past due, are paid on presentation at the Bank of North America. Interest on the same will cease after Feb. 1.

The Auditor of Franklin County, Ohio, has redeemed \$18,000 of the County Bonds issued to the Cincinnati and Xenia Railroad Co. This leaves \$2,000 still outstanding, which the Auditor desires should be returned for redemption.

The Commissioners of Jackson County, Ohio, say that provision was made by them for the payment of the interest on the 7 per cent. loan, which fell due Jan. 1, and paid to the Citizen's Bank of Jackson, to be transmitted to the Park Bank; New York; but in consequence of the failure of the Citizen's Bank, the money was not forwarded. There being no money in the treasury at present, they cannot pay the January interest till July 1, at which time they will have sufficient funds to pay all interest now due and then to become due.

The coupons of the 1st mortgage bonds of the Cleveland, Painesville and Ashtabula Railroad Company, due Feb. 1, will be paid at the Ocean Bank.

The interest on the bonds of the Peoria and Bureau Valley Railroad, due Feb. 1, will be paid at the Corn Exchange Bank.

Bank of England.

The return from the Bank of England for the week ending the 5th January, gives the following results, when compared with the previous week:

Public deposits.	£9,632,309	Increase...	£173,720
Other deposits.	13,580,106	Decrease...	676,488
Rest.....	3,166,862	Increase...	51,785

On the other side of the account:

Gov't Securities.	10,805,931	Increase...	£2,660
Other Securities.	18,203,742	Increase...	1,259,589
Notes unempl'd.	12,161,000	Decrease...	583,965

The amount of notes in circulation is £20,882,350, being an increase of £772,000; and the stock of bullion in both departments is £19,145,649 showing an increase of £178,649, when compared with the preceding return.

Bank of France.

The half-yearly dividend of the Bank of France is 48f. The last half-yearly dividend was 65f. The dividend on the whole year is 3f. 80c. per cent. This is an unfavorable result, and it has caused some disappointment to those who expected the Bank would have derived increased business from the late reduction in the rate of discount to 3 per cent.

Bank Statements.

The following is a comparative statement of the New York Banks for the weeks ending—

	Jan'y 15th.	Jan'y 22d.
Capital	\$66,108,135	\$66,108,135
Loans	129,349,245	129,540,000
Specie	29,380,712	29,472,056
Circulation	7,586,163	7,457,245
Deposits	95,456,323	95,060,400

The following is a comparative statement of the Philadelphia Banks for the weeks ending—

	Jan'y 17th.	Jan'y 24th.
Capital	\$11,588,065	\$11,588,065
Loans	26,365,358	26,283,118
Specie	6,050,743	6,099,317
Circulation	2,830,384	2,769,145
Deposits	17,323,908	17,498,219

The following is a comparative statement of the Boston Banks for the weeks ending—

	Jan'y 17th.	Jan'y 24th.
Capital	\$33,318,000	\$33,320,500
Loans	60,106,798	59,400,400
Specie	7,931,712	7,383,400
Circulation	6,793,723	6,609,400
Deposits	21,127,712	20,728,000

The following is a comparative statement of the New Orleans Banks for the weeks ending—

	Jan'y 8th.	Jan. 15th.
Loans	\$20,453,417	\$20,904,840
Specie	16,294,474	16,343,810
Circulation	10,383,714	10,919,489
Deposits	24,297,165	24,265,133
Exchange	9,966,131	9,666,071
Due dist. banks....	2,540,578	2,070,176

The Bank movement in the four principal cities of the Union, as compiled from the above, is as follows:

	LOANS.	DEPOSITS.	SPECIE.	CIRCULATION.
N. Y., Jan. 22.	\$129,540,000	\$95,060,400	\$29,472,056	\$7,457,245
Philad., " 24.	26,283,118	17,498,219	6,099,317	2,769,145
Boston, " 24.	59,400,400	20,728,000	7,383,400	6,609,400
N. Or., " 15.	20,904,840	24,265,133	16,343,810	10,919,489
Total.....	\$236,127,908	\$167,557,762	\$59,308,583	\$27,755,279
Last week ...	236,269,847	168,204,126	59,511,961	28,613,931

Decrease....\$141,439 \$646,374 \$213,368 \$858,702

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All inquiries in reference to the above articles will receive immediate attention.
New York, January, 1859.

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Detailed information will be sent to any parties desiring it.
H. W. VANDEGRIFT,
Engineer and General Supt.

313

TO MANUFACTURERS OF CEMENT.

OFFICE OF THE COMMISSIONER OF THE R. R.,
Corington, Allegheny County, Va., Jan'y 3rd, 1859.
PROPOSALS will be received, at this office, until the 14th
of February, 1859, inclusive, to manufacture one hundred
and fifty thousand barrels of hydraulic cement, within a distance
of five miles of this place, for use in the masonry now
under contract on the line of the C'vington and Ohio Railroad.
Further information may be had by persons desirous of offering
proposals, on application at this office on and after the
21st inst.

By order of the Board of Public Works,
CHARLES B. FISK,
Chief Engineer.

513

Notice to Contractors.

PROPOSALS will be received by the STATE ISLAND
RAILROAD COMPANY until the 1st day of February, 1859,
for the completion of the Grading, Bridging and Masonry with
partial equipment of furniture for said Road. The Rails,
Chairs and Spikes will be furnished by the Company.

Previous to the letting all necessary information may be obtained
as to the amount of work yet to be done, by addressing
J. DEWITT MONTFORT, Sec'y, 52 Warren st.
NEW YORK, December 27, 1858. 412

Patents for Inventions.

T. D. STETSON, Agent for procuring patents, No. 5 Tryon
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American correspondent *Prac. Mechanics' Jour.* from 1854.

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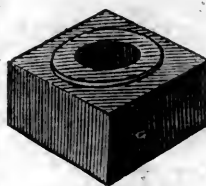
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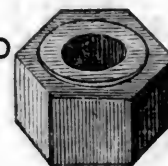
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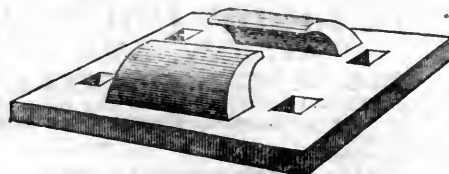
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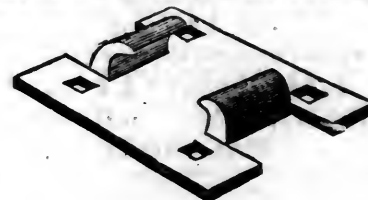
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, February 5, 1859.

New York and Erie Railroad,---Railroad Management.

The following communication is from the pen of one of the most experienced and successful railroad men in the United States, whose views upon all subjects connected with the management of railroads deserve careful attention :

(For the American Railroad Journal.)

The late report of the Erie Railroad Company presents some facts interesting for consideration. These will be better perceived by comparison with some other lines. It is about the same length of direct line as the railroad from Buffalo to Cincinnati—that of the Erie being about 465 miles, while the road from Buffalo to Cincinnati is about 462 miles.

The number of miles run by trains on each line is about the same, though probably the excess is on the Buffalo and Cincinnati.

The New York and Erie Railroad has received during the year, in the aggregate \$5,151,616 43
The line from Buffalo to Cincinnati has received. 4,350,131 77

In favor of the Erie \$801,484 66

The expenses of the New York and Erie were for the year \$3,791,457 92
Those of the Buffalo and Cincinnati line 2,139,767 13

Against the Erie. \$1,651,690 79
To show the details upon which this statement is made, and therefore its accuracy, the following is presented as the operation and business of the several sections of which the line from Buffalo to Cincinnati is composed :
The Buffalo & Erie Railroad, 88 miles long, received. \$939,373 48
The expenses for the year 538,618 91

Net receipts \$400,754 57
The expenses were 57 per cent. on the aggregate receipt.
The Cleveland, Painesville and Ash-tabula R. R., 95 miles long, rec'd. \$1,104,925 53
The expenses for the year were 43 per cent. 476,973 00

Net receipts \$627,952 53
The Cleveland, Columbus and Cincinnati Railroad, with its branch, about 141 miles long, received. \$1,105,333 47
The expenses for the year were 48 per cent. 534,961 04

Net receipts \$570,872 43
The Little Miami, and Columbus and Xenia, 138 miles long, received. \$1,200,499 29
The expenses for the year were 49 per cent. 589,394 18

Net receipts \$611,105 11
An average of expenses on the whole line for the year under 50 per cent. of the aggregate receipts.

The New York and Erie is a single corporation, with one Board of Directors, one President, one Superintendent, and a single, and of course united management. Its trains are continuous. It can bring force, or running stock, from any part of the line, to supply any deficiency at any point.

The line from Buffalo to Cincinnati is composed really of six corporations, but so managed by agreement in two instances, as to make practically four sections, as the receipts and expenses are above stated, and has therefore four sectional Boards of Directors, four Presidents, four Superintendents, and four distinct independent managements, each exclusive in the care and policy over its section, but all together running a continuous line.

The advantages of arrangement would, at first view, be all in favor of the Erie Railroad. Its receipts are shown to be nearly one million of dollars more than that of the Buffalo and Cincinnati line.

The Erie Railroad pays interest on but a part of its bond debt, while the line from Buffalo to Cincinnati pays regular dividends to its stockholders of 5 per cent. semi-annually, except the Little Miami, which for greater caution paid 4 per cent. the two last dividends, though with a liberal surplus, but for which it might have paid 5 also.

These are actually earned dividends, with available means in bank to pay them when the times of payment accrue. These roads have practically no floating debt. One of them, from Buffalo to Erie, at their late meeting resolved to close their construction account, and to have no longer any kind of cover for any of their expenditures. There would seem to be little hazard in saying that the line from Buffalo to Cincinnati is the best long line of railroad in this country, and the most certainly profitable.

Now in what consists the essential and great difference that exists between it and the Erie Railroad ?

If the reasons for that difference are correctly appreciated, they are very simple, and easily perceived. They are not accidental, or temporary, but will continue to exist, and to be equally distinct, under all circumstances of business, until, by some change, they shall be conducted more nearly upon similar principles.

This difference arises from the consideration which, at first view, and to a casual observer, would seem to be quite unfavorable to the Buffalo and Cincinnati line. It is from the fact that there are four Boards of Directors, four Presidents, four Superintendents, and separate and distinct care and thought exercised by each. They form the best scrutiny, the closest care, and the most economical administration of a long line of railroad, that we have yet tested in this country, and this is only the experience of men of observation in other branches of business.

Suppose the Erie Railroad was divided into four sections, along each of which were men enough to form a Board of Direction, competent in capacity and integrity, and having a *bona fide* interest in

the property—not stock operators, nor men seeking places and salaries, but real live men—would not such a government at once show a change in the management of the line, and in the reduction of expenses. Such men, so situated, so interested, so located that each Board could see and grasp the portion of the line belonging to them, would very likely reduce the expenditures very far below 73 per cent. on the aggregate receipts.

The receipts of the railroads increase as they approach the city, and the net balance should increase proportionably. It is very interesting to consider whether this consequence of increased business in the vicinity of the city, does follow; whether there is increased profit therefrom, and if not, why is it? Analogous to all our experience in business, as well as in government, we find that the expenses increase as that business, or nation, becomes extended. This is entirely natural and rational. The supervision cannot be as close, and therefore the economy of management is less.

A Board of Directors, and a President and Superintendent, all located in the city of New York, can never, through agents far from them, manage and control a railroad with the same thrift that several such Boards and officers could do, having the ownership and sole management of the same line in respective sections. Especially they could not do so without Mr. McCallum's system of government, perfected in its details, faithfully administered by such an iron will, such an integrity of purpose, and such a grasp of mental capacity, as we have not yet seen united.

So long as the Buffalo and Cincinnati line is governed in sections by Boards upon its line composed of owners, in fact, of such respective sections, it will most likely be profitable. If it was consolidated into one company with its office and controlling power in the city of New York, its expenses in every department would increase and its productive value fall.

In this view of the question, we have not considered the difference of capital or cost of the two lines; that only affects the rate of dividend. The point presented is, that a line under one management receives over eight hundred thousand dollars more than the other, and expends more than sixteen hundred thousand dollars more than the same. Here are such enormous differences that one represents the old system of taking care of your own business yourself, while the other exemplifies the system of attempting to have your business well done by agents. The Erie Railroad is not singular in this. Where is the instance of a thrifty railroad, with its office, power and management in the city, and the road and its operatives at a distance? Most glaring cases to show how uniform has been the law might be cited.

There is no mending it. The difficulty of such management is inherent in the system. Better by far would it be to interest competent men along the line, making their profits dependent upon their care, and thrift, and leaving them under this legitimate stimulus, independent, than to hope by any exaggerated salary, or by any set of abstractions to govern a long line of railroad.

There is no secret in the management of railroads. Like all other business it is best, and only good when it is in the hands of real owners. No rule can be set as to the amount of such interest which an individual should possess, except his

own estimate of its importance. Fifty shares to a man on the line is of more importance to him often than a hundred times that amount to a stockdealer in New York. The discharge of duty verges towards unfaithfulness in proportion as it is executed at a distance from the real supervision.

Railroads in Louisiana.

From the recent message of the Governor of Louisiana, we make the following extract in regard to the railroads of that State:

The total amount of bonds issued by the State to the railroad companies amount to \$1,735,000. As no provision has yet been made for the ultimate payment of these bonds at maturity, or for the payment of \$483,000 of bonds issued to the New Orleans and Nashville Railroad Company, and due on the 1st of April, 1867—and \$100,000 of bonds issued to the Mexican Gulf Railroad Company, due in 1870, I would urgently recommend the Legislature to take the necessary steps to provide for these debts of the State, by the creation of a *Reserved Fund*, to be appropriated to that purpose, and would suggest that this fund might be provided without the necessity of a resort to any increase of taxation. The Internal Improvement Tax Fund, which was created for the purpose of meeting the interest on the bonds issued to the railroad companies, and fixed at one-fourth of one mill on the dollar, or 25 cents on \$1,000, it is found meets the interest on the bonds, and leaves a surplus annually in the Treasury; that surplus now amounts to near \$100,000, and it is estimated will be increased by the 1st January, 1860, about \$50,000. By creating a fund for the "Redemption of Bonds issued to Railroad Companies," and investing the present surplus of the Internal Improvement Tax Fund in the Bonds of the State, annually appropriating the surplus that may appear to the Internal Improvement Tax Fund, and semi-annually investing in like manner the interest accruing on the bonds held by the Redemption Fund, and permanently fixing the Internal Improvement Tax at its present low rate, it is believed will very nearly, if not entirely, liquidate the debt of the State for account of railroad companies. I have, through the Presidents, been furnished with the reports of the Vicksburg, Shreveport and Texas, the New Orleans, Opelousas, and Great Western, and the Baton Rouge, Grosse Tete and Opelousas Railroad Companies—and am prepared to say that the affairs of these respective roads have been managed with great prudence and skill.

Bonds issued to Railroad Companies during the year 1858.

To the New Orleans, Opelousas and Great Western Railroad Company, 14 bonds of \$1,000.....	\$14,000
Issued previously.....	607,000
Total amount issued.....	\$621,000
To the New Orleans, Jackson and Great Northern Railroad, 27 bonds of \$1,000.....	27,000
Issued previously, 857 do.	857,000
Total amount issued.....	\$884,000
To the Vicksburg, Shreveport and Texas Railroad Co., 39 bonds of \$1,000.	39,000
Issued previously, 135 do.	135,000
Total issued.....	\$174,000
To the Baton Rouge, Grosse Tete and Opelousas Railroad Company, 20 bonds of \$1,000.....	20,000
Issued previously, 36 do.	36,000
Total amount issued.....	\$56,000

Recapitulation.

Bonds issued during 1858—100 bonds .	\$100,000
Previously issued—1,635 bonds.....	1,625,000
	\$1,735,000

Estimate filed in Auditor's Office of Bonds required for the year 1859.

By the New Orleans, Opelousas and Great Western Railroad Company, 50 bonds.....	\$50,000
By the New Orleans, Jackson and Great Northern Railroad Co., 175 bonds....	175,000
By the Vicksburg, Shreveport and Texas Railroad Company, 123 bonds.....	123,000
By the Baton Rouge, Grosse Tete and Opelousas Railroad Co., 40 bonds....	40,000

Total estimates, 388 bonds..... \$388,000

But little has been done during the last year, in the extension of our principal lines of railroad; yet the advantages resulting from their partial completion have fully realized the anticipations both of the commercial and agricultural interests of the State. The public mind is now well assured of the inestimable value of the privileges which await the State when New Orleans, with her unequaled natural advantages for inland navigation, shall also be united with the great interior by those works of art, which form, perhaps, the most remarkable feature of modern civilization.

The State of Mississippi is now a large stockholder in the New Orleans, Jackson and Great Northern Railroad Company, and votes on all her shares at the election of Directors for the Company, in the same manner allowed by law to individual stockholders; that is, one vote for each share. The State of Louisiana and city of New Orleans, though stockholders to more than five times the amount, are not permitted to vote at such elections, but are limited to a delegated representation in the Board of three delegates each. The remaining members of the Board, eighteen in number, are elected jointly by the State of Mississippi and the individual stockholders. With the view of preventing an undue influence on the part of Mississippi in the affairs of the corporation, the Legislature of Louisiana, at its last session, passed an Act "to authorize the Governors of the States of Louisiana and Mississippi to vote at all meetings of stockholders of the New Orleans, Jackson and Great Northern Railroad Company, upon shares of said Company held by said States." This Act was made subject to the approval of the stockholders, and was duly submitted and rejected. The Governor of Mississippi and the Mayor of New Orleans voting against granting to Louisiana an equal privilege with Mississippi at elections for Directors. I would suggest, as a temporary policy, that the right to vote at all meetings of stockholders should be conferred on the State of Louisiana and city of New Orleans, thus placing them, as stockholders, on the same footing with Mississippi; and that the State of Mississippi should be officially invited to adopt hereafter the policy of Louisiana with reference to this Railroad Company, and to accept by appointment an equal representation in the Board of Directors.

Finances of Massachusetts.

The report of the State Auditor exhibits the finances of the Commonwealth in a very satisfactory light. In the general statement of resources and liabilities the Commonwealth is credited with a surplus of \$7,115,929 68; \$3,080,677 71 of which lies in unproductive property, and \$2,453,730 of which is in unsold Back Bay Lands. The liabilities of the State, aside from the scrip issued to railroads, which amounts to a little less than \$5,000,000, and which is secured by mortgages, are only \$1,449,419 13, for the payment of which ample provision has been made. The receipts of the year, from ordinary revenue, on account of the funds, &c., and including temporary loans of \$405,000, were \$2,435,132 52. The payments were \$2,348,487 41, and the amount in the Treasury on the first of January was \$86,651 11. The largest item of revenue is the bank-tax, about \$600,000 being derived from that source. Of the expenses, the largest items were, for legislative purposes, \$107,379 36, for the Judiciary \$25,038 54, for charitable purposes \$194,147 10, for reformatory and correctional purposes \$152,845 07, for educational purposes \$42,408 73. The

Auditor makes several suggestions regarding retrenchment, which he thinks, if carried out, will bring the ordinary expenses of the State for the present year within the estimated revenue, \$725,898, without imposing a State tax.

Earnings of the Milwaukee and Mississippi Railroad for 1858.

	Passengers.	Freight.	Mails, &c.	Total.
Jan. 15, 979	32	\$25,827	12	\$1,375 00
Feb. 14, 156	58	24,534	64	1,105 00
Mar. 21, 154	39	29,285	33	1,494 66
Apr. 33, 990	96	40,798	33	1,216 66
May 30, 410	83	55,110	33	1,216 66
June 29, 422	81	73,060	09	1,216 66
July 29, 353	12	68,215	72	1,877 60
Aug. 26, 617	85	87,641	56	1,877 61
Sep. 29, 607	73	75,419	04	1,877 61
Oct. 34, 635	64	55,963	17	1,877 61
Nov. 19, 780	12	41,710	03	1,860 41
Dec. 13, 277	91	30,344	83	2,384 41

\$298,387 26 557,900 20 19,479 89 875,767 35

1858. 1857.
Total of way passengers..... 143,081 187,146
" through passengers.. 24,329 35,971 1/2

COMPARATIVE EARNINGS OF 1857 AND 1858.

	1857.	1858.
January.....	\$28,461 23	\$43,181 44
February.....	34,107 55	39,896 23
March.....	40,591 30	51,934 38
April.....	45,986 75	76,005 85
May.....	81,478 88	86,737 82
June.....	118,443 49	103,699 56
July.....	91,364 06	99,446 44
August.....	80,784 09	66,137 02
September.....	123,057 99	106,904 38
October.....	115,920 69	92,476 42
November.....	81,093 93	63,350 66
December.....	41,577 93	45,997 15

Total.....\$882,817 89 \$875,767 35
Decrease in 1858.....\$7,050 54

Shipments of Gold from California.

A San Francisco letter of Dec. 20, gives the following statement in regard to the gold product:

The mail steamer of to-day is the last which will leave San Francisco for New York in 1858. The export of treasure for the year up to yesterday, amounted to \$15,983,948. I cannot obtain in time for my letter the exact amount to be shipped to-day, but it will probably not be far from \$1,800,000. This would make the total shipment for 1858, \$47,783,998. Perhaps, however, other considerable shipments will be made by sailing vessels to various points on the Pacific. The shipments of treasure from California during the last ten years are as follows:

1849.....	\$4,921,250	1855.....	\$45,183,631
1850.....	27,676,346	1856.....	51,192,268
1851.....	34,492,009	1857.....	49,340,185
1852.....	45,779,000	1858.....	47,783,998
1853.....	54,965,000		
1854.....	51,429,098	Total..	\$412,711,727

Statistics of Manufactures.

The following is an abstract or general summary from the Digest of the Statistics of Manufactures, which has just been completed in accordance with an act of Congress, and transmitted to that body by the President. While this table presents only the general results in their most condensed form, the Digest itself develops the condition of every branch of manufacturing industry for the entire country in the year 1850, and will doubtless attract a large share of public attention, as presenting the only official and authentic information respecting the manufactures of all the States which has appeared for twenty-five years. Additional value attaches to this work, as furnishing the means of establishing the progress of the mechanic arts, now and hereafter, as the eighth Census is to be taken on the plan of the seventh.

Manufactures of the United States for the year ending June 1st, 1850.

States.	No. of estab- lishm'ts.	Capital.	Cost of Raw Material.	Male hands.	Female hands.	Cost of labor.	Value of product.
Alabama.....	1,025	\$3,450,606	\$2,224,960	4,397	539	\$1,105,824	\$4,528,576
Arkansas.....	261	305,015	215,789	812	30	158,676	537,908
California.....	1,003	1,006,197	1,201,154	3,964	.....	3,717,180	12,862,522
Connecticut...	3,482	23,890,348	23,589,397	31,287	16,483	11,695,230	45,110,102
Delaware.....	531	2,978,945	2,864,607	3,237	651	936,684	4,649,296
District of Col.	403	1,001,575	1,405,871	2,036	534	757,584	2,690,258
Florida.....	103	547,060	220,611	876	115	199,542	668,235
Georgia.....	1,522	5,456,482	3,404,917	6,650	1,718	1,709,664	7,082,075
Illinois.....	3,162	6,217,765	8,959,327	10,066	493	3,132,336	16,534,272
Indiana.....	4,392	7,750,402	10,369,700	13,748	692	3,728,844	18,725,133
Iowa.....	522	1,292,875	2,356,681	1,687	20	373,016	3,551,783
Kentucky.....	3,609	11,810,462	12,165,075	19,576	1,900	5,106,048	21,710,212
Louisiana...	1,008	5,032,424	2,459,508	5,458	750	2,033,928	6,779,418
Maine.....	3,974	14,699,152	13,553,144	21,853	6,167	7,485,588	24,661,057
Maryland.....	3,726	14,764,450	17,394,436	22,678	7,483	7,385,832	32,591,892
Massachusetts,	8,259	83,357,642	85,856,771	96,261	69,677	39,784,116	151,137,145
Michigan.....	2,023	6,563,660	6,136,328	8,990	354	2,716,124	11,169,002
Mississippi...	947	1,815,820	1,275,771	3,046	108	771,528	2,912,068
Missouri.....	2,923	8,576,607	12,798,351	14,880	928	4,692,648	24,324,418
N. Hampshire,	3,211	18,242,114	12,745,466	14,103	12,989	6,123,876	23,164,503
New Jersey...	4,106	22,183,580	21,990,236	28,547	8,762	9,202,680	39,711,206
New York.....	23,553	99,904,403	134,655,674	147,737	51,712	49,131,000	237,597,249
N. Carolina...	2,587	7,224,745	4,602,501	10,630	1,704	1,784,604	8,861,025
Ohio.....	10,622	29,019,538	34,678,019	47,054	4,437	13,467,156	62,691,279
Pennsylvania,	21,605	94,473,810	87,206,377	124,688	22,078	37,163,322	155,044,910
Rhode Island,	853	12,923,176	13,189,909	12,837	8,044	5,008,656	22,093,258
S. Carolina...	1,429	6,053,265	2,787,534	5,992	1,074	1,127,712	7,045,477
Tennessee...	2,887	6,527,739	5,116,886	11,080	954	2,247,492	9,725,003
Texas.....	309	539,290	394,642	1,042	24	222,368	1,164,538
Vermont.....	1,849	5,001,377	4,172,552	6,894	1,551	2,202,468	8,570,920
Virginia.....	4,740	18,109,143	16,101,131	25,790	3,320	5,433,476	29,602,507
Wisconsin....	1,262	3,382,148	5,414,931	5,798	291	1,712,496	7,293,068
Minnesota...	5	94,000	24,300	63	.....	18,540	58,300
New Mexico..	23	68,300	110,220	81	.....	20,772	209,010
Oregon.....	52	848,600	809,560	285	.....	388,620	2,236,640
Utah.....	14	44,400	337,381	51	.....	9,984	291,220
Total.....	121,993	\$525,149,108	\$554,783,917	713,154	225,491	\$232,957,440	\$1,010,628,779

Total...121,993 \$525,149,108 \$554,783,917 713,154 225,491 \$232,957,440 \$1,010,628,779

Wabash and Erie Canal.

We have received a copy of the annual report of the Board of Trustees of the Wabash and Erie Canal, from which we compile the following:

The Trustees have to report a series of disasters to the Canal in the month of June last, caused by the excessive floods beginning on the 8th of that month, by which great damage was done to the structures and embankments between Delphi and Terre Haute. The rains which fell during the entire month of May, and which proved so disastrous to agricultural industry, came in full force on the 8th and 9th of June, raising the river and creeks in the Wabash Valley higher than they had been since 1828, and at most points higher even than in that disastrous year. These floods extended over a large portion of Ohio, Indiana and Illinois, and the damage sustained by various public improvements was immense. The Canal under our charge sustained a full share of the general ruin which followed the overflow referred to.

When it is considered that this damage occurred at a season of the year when the labor of the country was in constant demand, some idea may be formed of the judgment, skill and energy with which the Chief Engineer and his assistants labored to repair the waste and destruction caused by the floods. The structures are rebuilt in the most substantial manner, and the Trustees are gratified in being able to state that the Canal north of Montezuma is in better condition than it has been since its construction. By this unlooked-for disaster, the active operations of navigation were materially retarded north of Terre Haute, on that portion of the Canal which has heretofore secured the largest amount of trade, and given the most satisfactory revenue. This suspension of navigation materially diminished this year's receipts, and has greatly curtailed the means at the disposal of the Board.

The total amount of tolls and water rents received during the year 1858, is \$63,996 44. The amount paid out for repairs, and other works on the canal during the year is \$143,824 56, showing

a deficiency of \$79,828 12, which deficiency has been supplied by the proceeds of the lands belonging to the Trust.

The revenues of the Canal for the year 1857 were \$60,195 08, and the expenditures for repairs, &c., were \$115,694 46, leaving a deficiency of \$55,529 38 for that year, to be a charge on the land.

The estimated outlay required for ordinary and necessary purposes on the entire Canal, for the year 1859, is \$155,722, of which \$92,849 is for the Canal south of Terre Haute, and \$62,873 for the Canal north of the State line—exclusive, in both cases, of the general expenses of the Trust.

The cash means of the Trust on hand on the 1st Dec., as appears from the statement herewith submitted, were \$24,253 42, which has been further reduced by payments on repairs and expense accounts made since that date.

During the winter there are no tolls to be received from the Canal, while the sales of lands at this time are uncertain and inconsiderable.

There are also liabilities to a considerable amount outstanding for which provision is required to be made, including an amount of about \$11,000 in judgments against the Board, which the Trustees deemed it their duty to appeal to the Supreme Court, and in which cases appeal bonds, with security, have been given by the Trustees.

Thus it is shown that the Trustees have not funds in their hands, and that there is no prospect that they will realize an amount from the tolls and revenues of the Canal during the ensuing season, adequate to defray the expense of opening and maintaining the same.

If the Trustees were permitted to use the proceeds of the remnant of the Canal lands for this purpose, still the moneys to be derived from that source would be totally inadequate, such lands being reduced so greatly in quantity and quality that the sales are too limited and uncertain to furnish a reliable basis.

At a meeting of the joint committee relating to Wabash and Erie Canal matters, held at the office of Winslow, Lanier & Co., on the 23d November,

1858, a number of resolutions were adopted, among which was the following:

Resolved, That the Canal south of Terre Haute (by reason of railroad competition) having failed, since its completion, to command sufficient business to pay even a small portion of the expenses necessary to keep it in repair, and having proved a tax on the Trust Fund to the amount of nearly \$150,000 for those repairs, it is deemed by this committee unwise to have the same worked at a sacrifice so ruinous to the holders of canal certificates, as well as to the holders of certificates representing the *advance* for the completion of the Canal to Evansville, we express the wish of those we represent, in this formal manner, that the Board of Trustees proceed with the least possible delay to stop the working of the Canal south of Terre Haute, dismissing at the earliest opportunity all the officials engaged on that division, taking care to preserve the Canal from all unnecessary damage, and having in view, till that portion of the Canal shall be finally closed, the convenience of those using the same as a channel of transportation.

Journal of Railroad Law.

AGENTS' AUTHORITY.—LIABILITY OF CORPORATION FOR AGENTS' ACTS.

The general question of the liability of a railroad contractor for the acts, and contracts of his managing agent, in employing hands and the like; how far men employed by such managing agent, contrary to the instructions of his principal will have the right to enforce payment from the contractor; has been the subject of discussion in a recent case in Pennsylvania. We refer to the case of *Williams vs. Getty*.

The facts in that case were as follows. David Williams (the defendant in the suit as originally brought) was a contractor on the North Western Railroad, and had in his employ one John O'Leary as clerk, foreman and general manager on his work.

In May, 1856, O'Leary contracted with Robert Getty, the plaintiff below, for the labor of a two horse team and driver, in the prosecution of the work, for a period of from four to five months, at \$3 50 per day. Getty sent his team accordingly, and it worked for 17½ days, at the end of which time O'Leary discharged it and paid the driver till that date. The team remained idle for 19½ days, before getting employment elsewhere.

This action was then instituted by Getty to recover damages from Williams for the lost time at the rate of \$3.50 per day. Williams denied that O'Leary had any authority to make such a contract for him. Plaintiff proved that O'Leary acted as a general manager of the work, engaged hands by the day and paid out money to them.

Under the instructions of the court the jury found a verdict for the plaintiff for \$74.40. The defendant Williams brought a writ of error, on the ground that the instructions given by the court below, were erroneous. The following is the opinion of the appellate court; affirming the judgment on the ground that the general manager for a railroad contractor has authority to make such an agreement which will bind his principal.

THOMPSON, J.—The learned Judge of the Court below charged, that, if the principal holds the agent out to the world as a general agent in the transaction of his business, any contract he may make within the scope of that business will be binding on the principal, although there might be, as between the principal and agent, a restriction upon the authority of the latter, if the person with whom the contract was made, had no notice

of such restriction. And that persons dealing with an agent carrying on a general business, such as a general manager of a railroad contractor, are not bound to enquire into the particulars of the agent's authority, when held out to the world as such general agent, and particularly when the principal makes no objection to his acts, and gives no notice of a restricted authority, although from time to time inspecting the progress of the work.

The plaintiff in error excepts to this, and assigns error upon it on the ground that as it had been the practice on that work to employ hands by the day, it was an excess of authority in the agent to employ the plaintiff below by the month. And this raises the question whether the practice restricted the authority of the agent, or whether being a general agent he was within the scope of his authority in contracting for the usual and ordinary means of accomplishing the business. His business was to advance to completion the work under his care, and this was to be done by the employment of laborers and teamsters. This was apparent and palpable to all, and being so, it is difficult to conceive of any duty resting on a party about contracting to assist in the accomplishment of what the agent had power to do, (namely, to construct the portion of road under his charge,) other than to see that he was engaged to do what was usual in such business. The authority of a general agent to contract, is implied in the nature and kind of business he has to do, and is only limited to the necessary and appropriate means of accomplishing it. If it were such a business as it was apparent would last but six months, a contract for a year doubtless would not be binding on the principal, because the party employed would be acting in bad faith, in undertaking, when it was apparent he would not be needed, and besides it would be equally apparent that such a contract was not necessary to the accomplishment of the object. But if the business were such as would apparently last for months, an employment for one or more months would seem to all to be covered by the agent's implied authority and would bind.

In *Addison on Contracts* the point is treated distinctly and briefly thus: "A foreman entrusted with the general management of a trade or business has an implied general authority from his employer to enter into all such contracts as are usually and necessarily entered into in the ordinary conduct and management of the business," (p. 401). And he cites the case of *Richardson vs. Cartwright*, (1 Car. & K. 328) of a foreman of a saw mill, who took an order from the plaintiff for a large quantity of Scotch fir staves, and agreed to have them ready for delivery within a particular period. It was held that his principal was responsible for the non-fulfilment of the contract, although no particular authority from the principal was shown to authorize the agent to make the contract. See also *Story on Agency*, Sec. 55, 56, 87, 97; 2 Kent's Com. 793 and note.

A general power implies the grant of any matter necessary to its complete execution. *Peck vs. Harriott*, 6 S. & R. 149; 17 Ohio Rep. 466; 1 Esp. 112. And in *Scott vs. Wells*, 6 W. & S. 357, it was held, that a general agent to make sales was competent to rescind a contract of sale with the consent of the other party. The principle is elementary and uniform, that an implied general au-

thority to transact business is only limited to the usual and ordinary means of accomplishing it. This doctrine is not to be confounded with that regulating special agents for limited purposes. There the extent of the authority must regulate the validity of the contract, and one who deals with such an agent must look to that.

We think the court was entirely accurate in the charge. The judgment must be affirmed.

Atlantic Telegraph Co.

As a full statement of the receipts and expenditures of this Company will interest many of our readers, we have put it into a convenient and intelligible form,—though in sterling money:

Receipts.

Original capital on 350 shares of £1,000	£350,000	0	0
New capital on £20 shares (less arrears)	36,435	0	0
New capital to release projectors' rights	75,000	0	0
Interest account	1,043	19	8
	£462,478	19	8

Expenditures.

Preliminary expenses, £2,537 16 2			
Cable, equipments, dredging, hire of tenders, etc.	324,142	13	5
Machinery, engines, salaries and other expenses of Engin'rs Department	20,399	11	8
Instruments, batteries, salaries, etc., of electrical department, 15,711 1 11			
Salaries, rent, books, printing, etc., in Secretary's Department	3,793	9	6
Insurance	807	16	9
Parliamentary & law expenses	1,606	0	10
Traveling expenses including agency in America	3,433	6	3
Postage and auditing, Recovering 57 miles of cable	2,547	16	2
Valentia station	1,247	10	8
Newfoundland do.	2,626	9	10
Purchase of projectors' rights	75,000	0	0
	£464,028	17	3

Balance in hand £8,449 2 5
The balance of the Company's unissued capital is £537,140.

The Coal Trade of the Country.

The *Pottsville Miners' Journal* publishes its annual statement of the coal trade for the United States for the year 1858, made up from official sources. The quantity sent to market for the years 1857 and 1858 were as follows:

	1857.	1858.
Schuylkill Region, tons.	3,042,378	2,926,608
Lehigh " "	1,318,549	1,380,030
Shamokin " "	155,806	135,893
Wyoming " "	1,914,645	2,058,656
Total anthracite	6,431,378	6,491,187
Semi-anthracite	811,263	340,009
Cumberland	612,291	642,725
Foreign bituminous	238,192	259,885

Total 7,593,124 7,733,806
Although the anthracite trade exhibits a small increase of 59,809 tons over last years' shipments, yet it falls short of the supply of 1856, 280,355 tons, notwithstanding the increase of population. The bituminous trade of Virginia, Western Penn-

sylvania, and the Great West, not included in the above, would probably amount to about 3,500,000 tons, making the aggregate coal trade of the United States upwards of 11,000,000 tons in 1858.

Of the supply of anthracite—
Schuylkill County furnished.....tons..2,616,608
The other Regions.....3,574,579

Total.....6,191,187

Up to 1856, Schuylkill County furnished more than one-half the anthracite coal sent to market, but in 1857 she fell short 346,622 tons, and this year she falls short of half the supply 657,971 tons. The opening of new regions and new outlets, has been the means of increasing the supplies from other quarters.

Iron Trade of the United States.

The subjoined table forming a part of the late Annual Report of the Secretary of the Treasury, shows the value of the imports of iron and steel during each of the last three years:

Articles.	Statement exhibiting the quantity and value of Iron and Steel, and manufactures thereof, imported into the United States during the fiscal years ending June 30th, 1856, 1857 and 1858.		
	1856.	1857.	1858.
Bar iron, cwt.	Quantity, 2,163,449	Value, \$5,252,785	Quantity, 1,314,928
Rod iron, " " " " " "	193,820	478,523	809,901
Sheet iron, lbs.	13,223,639	345,004	1,677,709
Pig iron, cwt.	81,387,353	36,047,576	29,523,002
Old and scrap iron, " " " " " "	1,180,239	1,171,085	837,717
Wire, cap and bonnet, lbs.	3,109,916	186,112	1,514,905
Nails, spikes and tacks, " " " " " "	155,376	4,892	6,900
Chain cables, " " " " " "	2,292,696	127,879	1,488,697
Anchor and parts, " " " " " "	16,560,788	485,568	1,564,081
Manufactures of iron and steel, cwt.	921,123	39,856	156,408
	960,809	46,828	8,072
	271,079	6,810,685	214,317
	2,538,328	292,154	5,360,343
	\$21,580,262	2,638,614	1,873,111
		\$25,954,111	\$16,328,639

Finances of Illinois.

EXTRACT FROM THE GOVERNOR'S MESSAGE.

Our financial condition is most cheering. Our taxes have been paid voluntarily and with promptness; and our citizens are looking forward with pride to the day—now not distant—when, without oppression or embarrassment to them, our State indebtedness will have been entirely removed and we left in possession of a secure and certain income sufficient, by that time, to defray all our ordinary expenses, without resort to taxation of any kind. I allow six years as the period within which this proud consummation may be effected.

The total amount of taxable property, as shown, for 1857, is \$407,477,367—an increase over the preceding year of \$57,526,095; and the total re-

ceipts into the treasury for taxes levied in 1857, are \$1,821,012 72.

The present condition of our State debt is shown by the following table:

During the years 1857 and 1858, the principal of the public debt has been reduced one million and fifty thousand three hundred and twenty-four dollars and thirteen cents; and the arrears of interest reduced one hundred sixteen thousand five hundred fifty-two dollars and sixty-one cents, as follows:

By amount of the State debt fund paid on the principal, <i>pro rata</i> , Jan., 1858, etc.	\$623,449 01
By certificates new internal improvement stock and interest bonds of 1847, purchased with the Central Railroad fund.....	89,604 60
By certificates new internal improvement stock purchased with the State land fund.....	42,875 24
By certificates new internal improvement stock purchased with the three per cent. school fund.....	7,038 24
By amount paid by the trustees Illinois and Michigan Canal on the principle of the registered debt.....	287,357 04
	\$1,050,324 13

By arrears of interest on certificates new internal improvement stock purchased with the land fund.....\$13,552 61

By arrears of interest on certificates purchased with the Central Railroad fund.....103,000 00

And as the accruing interest due January, 1857, and subsequent instalments, have been promptly paid, so far as presented, the present condition or amount of the public debt may be stated as follows, to wit:

Eighty-one old State bonds, bank, and internal improvement stock, outstanding debt.....	\$81,000 00
Internal improvement scrip.....	52,000 00
	\$133,000 00
Liquidation bonds.....	271,849 00
Certificates new internal improvement stock.....	2,583,368 15
Interest bonds of 1847, drawing interest from July, 1857.....	1,838,433 03
	\$4,826,650 18
Registered canal debt.....	\$2,713,113 19
Unregistered do.....	1,468,505 61
	4,181,618 80

Deduct State debt fund in the treasury, December 1, 1858, to be applied to the payment of principal. \$766,629 48

Amount of principal.....\$8,241,639 50

Certificates int'l stock not to draw interest until Jan'y 1, 1860, issued on account of arrears of interest surrendered, etc....\$2,758,814 43

Less amt'n purchased with the Central R.R. fund.....103,000 00

Estimated amount of arrears of interest not yet funded, about 243,000 00

Amount of certificates, interest stock and balance arrears of interest not yet funded.....2,896,814 43

Amount of the State debt, principal and arrears of interest.....\$11,138,453 93

California.

The shipments of specie from San Francisco for the years 1857 and 1858 were as follows:

	1857.	1858.
Steamers.....	\$45,366,096	\$45,169,269 43
Sail vessels.....	3,890,086	2,555,721 36
Total.....	\$49,256,182	\$47,724,990 79

In 1857 the deficiency, or falling off, in the total gold shipment of the year was \$1,720,051 less than 1856, and in 1858 it is \$1,531,191 21 less than 1857.

The operations of the U. S. Mint at San Francisco for 1858, were as follows:

Deposits.	Ozs.	Deposits.	Ozs.
January....	40,001 63	July.....	108,917 86
February....	77,770 73	August.....	64,062 44
March.....	120,700 44	September..	59,513 17
April.....	120,744 41	November..	64,418 17
May.....	154,159 46	December...	34,491 50
June.....	119,951 02		
Total.....			964,790 93
Deposits for the year 1858.....			1,067,593 85
Silver deposits during 1858.....			96,950 65

COINAGE—Gold coin, various denom'ts., \$17,148,200 00
Gold uparted bars.. 616,295 65
Silver coins, various denominations... 274,250 00

Total coinage, 1858.....\$18,238,745 75

The arrivals from all quarters at San Francisco for the past four years, have been as follows:

Vessels. Tons.	Vessels. Tons.
1855....1,520 517,919	1857....1,583 427,566
1856....1,455 444,015	1858....1,441 467,529

The following figures exhibit, in gross, the quarters whence the above arrivals have occurred:

From Dom. At- 1855.	1856.	1857.	1858.
Atlantic Ports..	147,870	149,370	109,525 114,321
From Dom. Coast			
Ports.....	189,635	138,149	182,036 158,336
From Foreign			
Ports.....	177,092	149,617	134,441 193,542

The following is a statement of the arrivals at and departures of passengers by sea from San Francisco during 1858, according to the Custom House books:

Total arrivals.....	40,739
Total departures.....	27,991

Net gain.....12,745

Virginia and Tennessee Railroad.

We give below a statement of the earnings of this road for the six months ending December 31st, 1858:

In July, for passengers...	\$30,244 44
" " freights.....	12,792 67
	\$43,037 11
In August, for passengers...	41,520 07
" " freights....	31,111 83
	72,631 90
In Sept'r, " passengers...	40,857 75
" " freights....	41,270 83
	82,127 89
In October, " passengers..	31,460 34
" " freights....	44,519 34
	75,979 68
In Novem., " passengers..	28,240 80
" " freights....	39,652 39
	67,893 10
In Decem., " passengers..	26,653 80
" " freight.....	26,728 12
	53,381 92

Received for same months 1857.....\$395,051 78
238,689 42

Increase over 1857.....\$156,362 36

The above shows a gain of sixty-five and a half per cent., as compared with the receipts of the corresponding months of the previous year.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,923,911	545,762	150,224	8	---	Brunswick and Florida, Ga.	30	151,887	463,645	538,649	In progr.	208,771	9	---	
Androscog & Kennebec	54	467,909	1,835,308	2,210,947	159,513	83,368	none	---	South Western	143	1,399,100	441,292	2,269,323	269,214	366,214	9	---	
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	213,255	120,909	94	---	Tennessee and Alabama	30	309,754	626,889	679,606	53,776	29,405	---	---	
Portland, Saco & Portland	51	1,396,400	1,369,373	2,765,773	353,717	174,025	16	---	Tennessee and Misiss.	64	757,440	611,812	1,161,152	161,001	99,888	---	---	
Boston, Concord & Montreal	93	1,104,558	2,848,977	3,953,535	321,767	113,077	5	---	Memphis and Charleston	247	2,228,177	3,495,283	6,723,470	642,022	334,504	---	---	
Cheshire	51	899,313	3,179,687	4,078,999	355,629	156,996	4	---	Mobile and Ohio	305	4,784,819	2,064,459	10,701,428	554,382	278,428	---	---	
Concord	35	1,500,000	8,242	1,508,242	317,05	125,664	50	---	Miss. Central	89	1,575,474	926,796	2,503,093	115,679	115,679	---	---	
Northern, N. H.	82	3,068,400	406,286	3,474,686	365,810	166,996	4	---	Sixes (N. H.)	82	1,000,000	1,400,000	2,400,000	284,255	150,759	---	---	
Contra & Passumpsic Riv.	90	1,000,000	800,000	1,800,000	177,588	73,401	none	---	N. O., Opelousa & G. W.	80	2,800,000	750,000	3,575,000	284,178	127,450	---	---	
Kentland & Burlington	117	2,233,376	1,868,763	4,102,139	312,11	41,888	none	---	N. O. Jackson & G. W.	206	4,035,000	1,815,610	7,142,561	180,003	---	---	---	
Vermont and Canada	47	1,350,000	1,350,000	2,700,000	703,83	127,389	30	---	Vicksburg, Shreveport & Tex.	21	83,746	103,285	992,051	In progr.	---	---	---	
Vermont Central	122	5,000,000	5,276,299	10,276,299	840,058	335,833	6	---	East Tennessee and Ga.	111	1,192,974	1,735,699	2,703,423	227,363	104,992	---	---	
Boston and Lowell	25	1,830,000	438,920	2,268,920	435,833	171,382	6	---	East Tennessee and Va.	130	628,076	1,228,664	3,208,135	61,314	39,002	---	---	
Boston and Maine	74	4,078,974	4,229,381	8,308,355	770,802	305,509	6	---	Nash. and Chattanooga	169	2,263,905	1,632,791	3,596,703	481,212	219,26	---	---	
Boston and Providence	43	3,160,000	239,710	3,399,710	534,176	245,134	6	---	Ovington & Lexington	98	1,334,850	3,085,917	4,091,004	426,408	220,906	---	---	
Boston and Worcester	44	4,500,000	599,974	5,099,974	484,179	209,149	6	---	Lexington and Frankfort	29	430,655	158,639	538,253	95,807	45,711	---	---	
Cape Cod	47	681,690	291,007	972,697	122,960	39,899	49	---	Lexington and Danville	13	694,444	71,000	765,500	284,255	150,759	---	---	
Connecticut River	60	1,591,110	275,772	1,866,882	267,710	65,096	8	---	Louisville and Frankfort	65	744,039	625,216	1,502,095	245,760	109,059	---	---	
Eastern, Mass.	67	2,533,400	2,441,713	4,975,113	616,156	270,437	47	---	Atlantic & Gt. Western	---	866,939	77,494	813,231	In progr.	---	---	---	
Fitchburg	60	3,640,000	100,000	3,740,000	683,974	252,813	0	---	Bellevue and Ind.	118	1,874,395	315,237	2,994,392	348,452	120,886	---	---	
N. Bedford and Taunton	21	500,000	none	500,000	198,225	27,827	6	---	Clev., Col. and Cin.	141	4,743,21	90,400	4,753,307	1,149,741	511,740	9	---	
Old Coffey and Fall River	77	3,015,100	260,100	3,275,200	683,357	305,140	6	---	Cleveland and Toledo	200	3,333,712	4,225,568	7,193,016	930,292	413,790	30	---	
Vermont and Mass.	69	2,232,541	1,019,148	3,251,689	240,133	82,267	none	---	Clev. and Mahoning	65	---	---	1,920,951	In progr.	---	---	---	
Western, Mass.	155	5,160,000	6,839,040	11,999,040	2,117,982	639,203	8	---	Clev. and Pittsburg	133	2,780,744	3,043,992	6,824,466	581,877	309,518	---	---	
Worcester and Nashua	46	1,141,000	206,866	1,347,866	216,688	82,720	4	---	Clev. P. & A. & H.	95	5,000,000	1,495,548	6,495,548	1,251,539	581,454	16	---	
Providence and Worcester	43	1,510,000	300,000	1,810,000	344,773	156,004	7	---	Cin. Hamilton & Dayton	60	1,558,800	1,632,092	3,190,892	481,212	260,763	---	---	
Hartford and N. Haven	72	2,350,000	944,000	3,294,000	709,066	304,835	10	---	Cin. Wm. & Zanesville	131	2,421,176	3,782,040	6,696,210	223,506	30,288	---	---	
Hartford, Prov. and Fishkill	122	1,936,246	2,132,692	4,068,938	273,428	112,323	none	---	Columbus and Xenia	65	1,490,450	149,000	1,639,450	403,212	181,688	---	---	
Housatonic	74	2,000,000	423,083	2,423,083	478,476	109,344	none	---	Dayton, Xen. & Belpre	149	327,838	322,658	860,496	In progr.	---	---	---	
Saugatuck	67	1,031,800	624,244	1,656,044	237,416	114,237	---	---	Dayton and Michigan	60	1,076,602	993,011	1,185,322	In progr.	---	---	---	
N. York and N. Haven	62	2,930,836	2,318,240	5,249,076	1,157,055	254,599	3	---	Dayton and Western	35	310,000	700,481	1,015,173	125,940	63,253	---	---	
N. Haven and N. London	60	738,258	761,462	1,500,000	88,007	30,318	none	---	Eaton and Hamilton	42	469,762	322,668	1,176,168	140,938	50,003	---	---	
N. London, W. & Palmer	98	510,700	1,052,000	1,562,700	120,671	61,444	none	---	Little Miami	65	2,081,282	1,266,000	3,347,282	775,414	290,123	10	---	
Norwich and Worcester	96	2,122,300	724,151	2,846,451	259,671	117,710	30	---	Sandusky, Dayton & Cin.	171	2,697,000	3,368,000	6,065,000	824,814	---	---	---	
Albany Northern	32	439,005	1,625,098	2,064,103	117,710	9,904	---	---	Central Ohio	138	1,227,907	1,002,656	2,230,563	570,029	164,997	---	---	
Black River and N. Y.	100	1,487,871	1,501,183	2,988,954	172,476	68,333	none	---	Pittsb. Ft. Wayne & Chicago	60	2,247,040	9,822,550	14,279,704	1,546,359	577,787	---	---	
Buffalo, Conn. and N. Y.	92	798,439	2,687,849	3,486,288	285,492	131,899	none	---	Pittsb. & N. Y.	127	1,850,000	2,206,387	3,552,387	328,968	104,479	---	---	
Buffalo and N. Y. City	99	1,300,000	1,040,000	2,340,000	679,750	355,763	10	---	Sandys, Mansf. & Newk.	60	371,350	81,000	390,953	In progr.	---	---	---	
Canada and Elmira	47	434,111	922,393	1,356,504	174,089	60,508	---	---	Scinto & Hocking Valley	127	1,850,000	2,206,387	3,552,387	328,968	104,479	---	---	
Canadawaga & Niagara F.	98	1,315,000	2,279,834	3,594,834	135,433	48,649	none	---	Spring, Mt. Vernon & P.	118	1,000,000	500,000	2,194,000	189,189	---	---	---	
Hudson River	144	3,768,466	9,250,362	13,018,828	1,902,922	688,500	30	---	Tol. Wabash & St. Louis	242	2,965,100	7,577,000	10,544,000	1,249,868	---	---	---	
Long Island	582	24,182,400	14,407,635	38,590,035	5,524,313	3,041,120	12	---	Cin., Log. and Cincinnati	255	4,196,879	1,006,125	5,203,004	249,868	124,140	---	---	
New York Central	404	11,000,000	20,391,483	31,391,483	7,442,007	4,154,032	13	---	Evansville & Crawfordsv.	109	989,061	1,270,872	2,158,713	249,868	124,140	---	---	
New York and Erie	148	5,717,100	4,822,499	10,539,599	1,040,393	324,891	none	---	Ind. and Cincinnati	66	1,686,890	1,664,584	3,351,474	249,868	124,140	---	---	
New York and Harlem	118	1,633,022	4,406,874	6,040,000	1,040,393	324,891	13	---	Indiana Central	66	612,350	1,261,179	1,909,911	368,159	204,655	---	---	
Northern, N. Y.	35	303,130	213,025	516,155	149,373	78,764	8	---	Ind., Clev. & Pittsburg	83	835,791	1,071,694	1,826,426	253,19	85,248	---	---	
Oswego and Syracuse	29	467,200	364,159	831,359	149,373	78,764	---	---	Jeffersonville	71	1,014,282	697,000	1,711,282	222,737	94,318	---	---	
Potsdam and Watertown	25	610,000	140,000	750,000	241,149	82,600	---	---	Madison and Indianapolis	71	1,014,282	697,000	1,711,282	222,737	94,318	---	---	
Rensselaer & Saratoga	48	600,000	350,000	950,000	171,909	21,989	---	---	New Albany and Salem	258	2,635,121	5,251,448	7,029,494	645,827	871,402	---	---	
Saratoga and Whitehall	80	768,389	1,578,804	2,347,193	159,484	22,503	---	---	Peru and Indianapolis	73	---	---	558,814	2,000,000	150,000	---	---	
Syracuse & Binghamton	27	437,830	737,079	1,174,909	159,484	22,503	---	---	Terre Haute and Ind.	73	1,361,450	250,125	1,586,500	481,272	206,079	10	---	
Troy and Boston	97	1,500,000	700,979	2,200,979	243,290	162,087	3	---	Chicago and Rock Isl.	182	5,248,000	1,734,318	6,982,318	6,028,272	1,889,196	850,039	---	---
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	160,757	69,114	---	---	Chicago, Burl. and Quincy	210	4,631,640	5,862,970	8,042,426	1,806,107	81,767	---	---	
Belvidere Delaware	64	3,000,000	11,407,200	14,407,200	1,619,000	794,096	10	---	Chic. St. Paul & Fd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---	
Camden and Amboy	94	3,485,000	1,580,864	5,065,864	1,107,359	434,642	12	---	Galena and Chicago	259	6,023,900	3,899,016	9,922,916	2,315,780	1,192,042	8	---	
Camden and Atlantic	60	3,485,000	1,580,864	5,065,864	1,107,359	434,642	12	---	Illinois Central	704	6,566,435	20,311,442	25,337,689	2,993,966	565,972	66	---	
New Jersey	30	4,485,000	785,844	5,270,844	911,611	534,951	10	---	Peoria and Ogawka	151	1,569,859	2,200,000	3,769,859	4,400,000	In progr.	---	---	
New Jersey Central	33	2,000,000	3,692,926	5,692,926	621,829	237,709	101	---	Ohio & Miss. (W. Div.)	147	1,780,295	3,292,403	4,870,698	Recently	opened.	---	---	
Morris and Essex	61	1,571,805	340,000	1,911,805	621,829	237,709	101	---	Terre Haute, Alt. & St. Louis	208	3,011,150	9,925,927	8,729,734	823,767	247,767	---	---	
Allegheny Valley	44	1,571,805	340,000	1,911,805	621,829	237,709	101	---	Detroit and Milwaukee	185	888,000	1,128,964	1,968,964	Recently	opened.	---	---	
Catawba, W. & Erie	61	1,700,000	1,940,000	3,640,000	35,000	45,000	3	---	Mich. Central	282	6,057,840	8,866,638	12,847,228	2,245,758	764,946	8	---	
Cumberland Valley	62	1,018,900	213,509	1,232,409	136,453	77,92	---	---	Mich. South'n & N. Ind.	475	8,874,400	10,459,63	19,334,034	2,309,487	644,311	18	---	
Del. Lack. & Western	170	3,247,772	6,194,561	9,442,333	918,708	41,139	6	---	Green Bay, M. & Ch.	40	1,000,000	750,000	1,750,000	---	---	---	---	
Erie and North East	20	600,000	150,000	750,000	99,535	63,335	---	---	Milwaukee and Miss.	234	3,440,673							

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are as interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	80	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	92 1/2	96
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	75	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	50	55
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	92
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	76	77
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1863		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	95	96
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	67 1/2	76
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	60	55
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72		55
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72		55
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	88	89
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1861	77	78
Fort Wayne and Chicago	1,200,000	Do. conv. till 1863	7	Jan'y, July	"	1873		72 1/2
Gaiana and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	98 1/2	99
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90 1/2	104
Great Western (Illinois)	1,000,000	1st mortgage, do.	7	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	10	April, Oct.	"	1863	87 1/2	93
Jeffersonville	800,000	Do. 2d sec. inconv.	6	April, October	"	1873		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		85
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1864	77	85
Lake Erie, Wabash, and St. Louis	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1865	73	74
Little Miami	1,500,000	Do. inconvertible	6	Feb'y, August	"	1863	81	82
Michigan Central	1,000,000	No mortgage, convertible	6	2 May, 2 Nov.	"	1863	95	97
Do. do.	600,000	Do. do.	8	April, October	Bost.	1869	91 1/2	93
Milwaukee and Mississippi	800,000	1st mort. 1st sec. conv. till 1857	8	March, Sept.	"	1869	64	65
Do. do.	850,000	Do. 2d do.	8	Jan'y, July	N.Y.	1862	70	77 1/2
Do. do.	1,250,000	Do. 3d do.	8	April, October	"	1863	75	78
New Albany and Salem	500,000	Do. 1st section	10	June, Decemb.	"	1877		
Do. do.	2,325,000	Do. oth. sec. conv. till 1858	10	April, October	"	1858-62		
Northern Cross	1,200,000	1st mortgage, convertible	8	May, Novemb.	"	1864-75		90
Ohio and Indiana	1,000,000	Do. do.	8	Jan'y, July	"	1873		75
Ohio and Pennsylvania	1,750,000	Do. do.	7	Feb'y, August	"	1867		85
Do. do.	2,000,000	Income, convertible	7	Jan'y, July	"	1865-66		60
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	7	April, October	"	1872		
Racine and Mississippi	680,000	Do. conv. sink'g f'd	6	Jan'y, July	Phila.	1860	101 1/2	102
Sacramento and Hocking Valley	300,000	Do. 1st sec. conv.	8	Feb'y, August	N.Y.	1875		75
Steubenville and Indiana	1,500,000	Do. convertible	7	May, Novemb.	"	1861		
Terre Haute and Indianapolis	600,000	Do. do.	7	Jan'y, July	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	March, Sept.	"	1866		
			7	Feb'y, August	"	1862-72	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest pay- able.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	84	85
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	92 1/2	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	87	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1868	75 1/2	76 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1860	59	60
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	43 1/2	44
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	40	41
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	40	41
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	101	102
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	94 1/2	95
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	73	74
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1875	87 1/2	89
Do. (Free Land)	3,000,000	M'tge 345,000 acres priv. 7 shars	7	March, Sept.	"	1860	90	91
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	87	88
New York and Harlem	1,200,000	Do. do.	7	May, Novemb.	"	1861-72	91 1/2	92
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	96	98
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	85 1/2	86 1/2
Do. Goschen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	74 1/2	76
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	91 1/2	92
Do. do.	3,000,000	No m'tge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	102	102 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	115	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	1,300,000	Do. convertible	6	Jan'y, July	"	1870	83	83 1/2
Do. do.	3,469,000	Do. inconvertible	6	April, October	"	1866	71	74

CITY SECURITIES.	Int't payable.	On'd	Ask'd	CITY SECURITIES	Int't payable.	On'd	Ask'd
New York, 5 per ct. ....1858-60	{ May, August, and November.	98	99	Milwaukee, 7 per ct. coup. X	Divers	60	75
Do. 5 do. ....1870-75		92	94 1/2	New Orleans, 6 per ct. cp. R.R. X	Do.	72	77 1/2
Do. 6 do. ....1883		102 1/2	103	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	87	90
Do. 5 do. ....1890-93		61	62	Philadelphia, 6 per ct. ....1876-98	Jan'y, July	99 1/2	99 1/2
Albany, 6 per ct. coup. ....1871-81	Feb'y, August.	99	101	Pittsburgh, 6 per ct. coup. X	Divers	50	53
Allegheny, 6 per ct. coup.	Jan'y, July	65	70	Quincy, 8 per ct. coup. ....1868 X	Jan'y, July	62 1/2	65
Baltimore, 6 per ct. ....1879-90	Quarterly	98	100	Racine, 7 per ct. coup. ....1873 X	10 Feb'y, Aug	90	90
Boston, 5 per ct. coup.	April, October	100	101	Rochester, 6 per cent. coup. X	Divers	80	97 1/2
Brooklyn, 6 per ct. coup. ....Long	Jan'y, July	101 1/2	102	St. Louis, 6 per ct. coup. ....Long X	Do.	85	87
Cleveland, 7 per ct. cp. W.W. 1879	Do. do.	100	103	Do. do. Municipal	X	Do.	87
Cincinnati, 6 per ct. coup.	Divers	90	95	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	37	45
Chicago, 6 per ct. coup. ....1873-77	Jan'y, July	85	86	S. Francisco, 7 p. cp. 1865, pay. N.Y. X	May, Novemb.	60	70
Do. 7 per ct. coup. ....1880	Jan'y, July	98	99 1/2	Do. 10 p. ct. cp. ....1871 X	Do. do.	89	91
Detroit, 7 per ct. cp. W.W. 1873-78	Feb'y, August.	100	102	Do. 10 do. pay. N.Y. X	Jan'y, July		
Dubuque, 8 per ct. cp. ....Long	March, Sept.	99 1/2	100	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	58	60
Jersey City, 6 p. ct. cp. W.W. 1877	Jan'y, July	99 1/2		Washing, 6 per ct. coupon	X	Divers	60
Louisville, 6 per ct. cp. ....1880-83	Divers	72	73	Do. 6 p. ct. cp. Mun. 1874 X	March, Sept.	80	81 1/2
Memphis, 6 per ct. coup. ....1882	Jan'y, July	65	66 1/2	Zanesville, 7 do.	X	April, October	

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending January 31, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6s	52
Covington and Lexington, 1st Mortgage	6s	65
Do. do. 2d do.	6s	80
Do. do. 3d do.	6s	35
Ohio & Miss., E. D. Construction	7s	20
Cinc. Ham. and Dayton, 1st Mortgage	7s	90
Do. do. 2d do.	7s	75
Indianap. & Cincinnati, do. do.	7s	60
STOCKS.		
Cincinnati, Hamilton & Dayton	4s	
Columbus and Xenia	51	
Indianapolis & Cincinnati	63	
Little Miami	73	
Ohio and Mississippi (E. D.)	3 1/2	

Chicago, Iowa and Nebraska Railroad.

We learn that this road was completed to Lisbon, fifty-four miles west of Clinton, on 8th instant. Lisbon is seventeen miles east of Cedar Rapids. Judge Green, one of the Directors, who lives at Cedar Rapids, has gone east prepared to make such arrangements as will procure the iron at once, to complete the road to Cedar Rapids before the first of May.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of February 2nd.

[TRANSLATED.]

NEW YORK, Tuesday, Feb. 1, 1859.

Our last advices are dated Jan. 18. Our Stock market retained a drooping tendency, but quotations generally were not materially reduced until yesterday, when a decided decline took place on the prices of almost all descriptions of securities. The principal cause of this fall is an enhancement in the rates of interest. Money, however, is still very abundant, but the demand has been quite active, owing to the payments on account of the Government loan of \$10,000,000. The exact awards of this loan are not yet known, but it is understood that the average premium at which it has been taken is about 2.60 per cent., being about 2.30 per cent. below the premium realized for the preceding loan of the same amount. The late political news from Europe seems to have had but little effect on our Stock Exchange. The market this morning is a little steadier. Money has been in better demand, and rates are higher. Loans on call 4 1/2%; indorsed paper 5 1/2% a 7 per cent. per annum. Exchange on Europe has been inactive, but the supply of bills is not large and rates are maintained. Sterling has been principally at 109 1/2 a 109 3/4 and Francs at 5.15.

Extract from Marie & Kan's Money Circular for the European Steamer of Feb. 2nd.

[TRANSLATED.]

NEW YORK, Tuesday, Feb. 1st, 1859.

Since our advices of the 18th ult., several influences have contributed to produce a heavy depression in the Stock Market. Thus far the public have shown but little disposition to buy stocks, and the operations of the fortnight have been on a limited scale. State Stocks—inactive, except Missouri, with a general decline. The United States 5s, 1874, in consequence of the negotiation of the last half of the loan, have declined 1 1/2 per cent.; heavy sales have been made at 103 1/2 a 103 1/4, and lastly at 102 1/2, which now leaves no profit to the takers; a few 5s, 1865, have been sold at 102 1/2 a 101 1/2; the 6s, 1868, have been sold at 109, 1 1/2 per cent. decline; Virginias have declined 3/4 per cent.; Missouris, 2 1/2; Tennessees, 1 1/2; Californias, 2 1/2; Ohio 6s, 1860, 4; Louisianas, 1 1/2; North Carolinas, 98 1/2 a 98; Kentuckys sold at 101 1/2 a 101 1/4; Indiana 5s, without change. City and County Bonds—transactions moderate, at well sustained prices; we note sales of St. Louis City 6s, (Municipal,) Louisville City 6s, (Water Loan and Railroad issues,) Detroit 7s, Albany 6s, Wheeling 6s, (Municipal,) and Brooklyn 6s, all at former prices. Railroad Bonds—Mostly at a decline, with small sales—Erie 1st Mortgages, sales at 95; do. 2d Mortgages, 1/2 per cent. higher; 3d Mortgages;

steady at 76; 4th Mortgages, $3\frac{1}{4}$ lower; Erie, 1871, $2\frac{1}{2}$ higher; New York Central 6s, $\frac{1}{2}$ lower; 7s, 1876, $\frac{1}{2}$; Illinois Central Construction, $1\frac{1}{2}$; Michigan Central, 1st Mortgages, 1882, 1; Michigan Southern, Sinking Fund, $\frac{1}{4}$; Hudson River, 3d Mortgages, $3\frac{1}{4}$; Harlem, 1st Mortgages $2\frac{1}{4}$; the rest have varied but slightly. Railroad Shares—A general decline—the heaviest fall taking place yesterday—inactive until to day.

American Railroad Journal.

Saturday, February 5, 1859.

New System of Management on the New York and Erie Railroad.

Mr. Moran, in his last report, tells us that he is introducing a new system of management on the New York and Erie Railroad. What the new system is, or is to be, he did not state. We take it, however, that the following circulars—one issued to the conductors of the road, and the other to the passengers, are parts of this new system.

Circular No. 1, to Conductors.

NEW YORK AND ERIE RAILROAD.

To Conductors.—Having repeatedly been informed that persons who wish to go but short distances are constantly getting in the cars without tickets, and when called upon tender tariff rates of fare less the ten cents reduction usually made at ticket offices, which, to a great extent conductors, to save a little trouble, have accepted, and believing that such persons intend to defraud the Company, by assuming to be through passengers or otherwise eluding the conductor, it becomes necessary that more vigilance be displayed to protect the interests of the Company; therefore, you will hereafter immediately on departure of your train from each station at which it stops, pass through the cars, and if passengers who have taken the cars at the station at which the train last stopped, are found without tickets, they must pay full tariff rates, except from stations where tickets are not sold, on which only, make the reduction of ten cents; if they decline you will at once cause the train to be stopped and the person ejected as soon as possible.

Conductors should be satisfied that passengers have tickets, and when there is any doubt they must be required to show them. To save them trouble, request passengers to keep their tickets in sight.

When you issue a check from a station to the next, at which your train stops, after having punched it, let the passenger retain it, but when issued beyond such station, collect it as usual after having passed one or more stations.

S. F. HEADLEY, Assistant President.
New York, January 20, 1859.

Circular No. 2, to Passengers.

NEW YORK AND ERIE R. R.

Notice to Passengers.

Hereafter conductors will issue a check to each person paying fare on trains, in which must be inserted the name of the station from and to which the fare is paid, the date, and the amount of fare paid. These checks will be good for the day and train only on which issued.

Passengers are requested to report to this Company any conductor who fails to issue such a check for each fare collected on his train, and the conductor who neglects such duty will be immediately dismissed.

S. F. HEADLEY, Assistant President.
New York, January 20, 1859.

These two circulars seem to cover the whole ground—that both the conductors and traveling public are rogues seeking to defraud the Company. To defeat the schemes of both, the conductors are enjoined to watch the public, and the public to watch and report the conductors! We are also informed that the conductors are required to re-

port the names of passengers to the Company, as additional checks upon the rascality of the former. These things may be all right, but their wisdom exceeds our humble comprehension. We learn that they are producing extraordinary excitement among the conductors, and great offence and disgust on the part of the public. A strike is threatened by the former, and will unquestionably take place unless the odious rule be repealed. As for the public, they will probably quit a road upon which they are subject to such annoyances.

New Jersey Railroad and Transportation Co.

The annual report of this company for 1858 gives the following result:

Capital Stock.....	\$3,749,000
Funded Debt.....	711,420
Profit and loss, being surplus earnings expended in the construction of road, and in payment of other property.....	\$381,502 00
Less paid for relaying rails, &c.....	39,204 00—
Dividend payable Feb. 1, 1859.....	137,450
Total.....	\$4,990,167
Cost of road and Equipment.....	3,538,827
Property, including real estate and privileges and cash on hand.....	1,451,340
Total.....	\$4,990,167

RECEIPTS.

From Passengers.....	\$645,403 00
From Freight.....	78,065 00
From U. S. Mail, &c.....	179,989 00—
	\$903,458

EXPENSES.

Maintain'g railroad, bridges and buildings.....	\$69,500 00
Repairs of locomotives, cars and machinery.....	34,677 00
Fuel—cost and labor in preparing.....	51,510 00
Operating the road and transporting passengers and freight.....	183,569 00
Office expenses, salaries and contingencies.....	10,113 00—
	349,370

Receipts over expenses..... \$551,088

APPLIED AS FOLLOWS:

Interest on bonds.....	\$4,496 49
Transit duties on passengers and freight.....	15,035 51
Tax on capital stock.....	18,122 50
Dividends in cash, August and February.....	362,450 00
Profit and loss to surplus earnings.....	113,989 22—
	\$551,088

Alexandria, Loudoun and Hampshire R. R.

We have received a copy of the sixth annual report of the officers of this Company for the fiscal year ending August 31, 1858. At that date the graduation and masonry upon forty miles of the road, lying between Alexandria and Clark's Gap, was nearly completed. The timber for the bridging upon the first 25 miles of the line, chairs for 12 miles of the track, and a portion of the freight cars, had been contracted for; 1,000 tons of rails, sufficient to lay 12 miles of track, had been delivered, and arrangements were in progress for a further supply. Cross-ties for 9 miles had been delivered at various points on the line. Preparations for building the bridge superstructure were in progress. In the opinion of C. P. Manning, Esq., the Consulting Engineer, the work of construction had arrived at that stage of progress where no obstacles of a physical nature were likely to prevent the completion of that portion of the

road, and its opening for use, from Alexandria to Clark's Gap, by the 1st of July next.

The capital account of the Company is stated as follows:

	Cr.
Capital Stock—Private.....	\$341,905
" " State of Virginia.....	502,748
Bills payable.....	50,259
Accounts.....	7,875
	\$902,787
	Dr.
Construction.....	\$597,538
Engineering.....	78,411
Right of Way.....	54,740
Iron.....	50,209
Other items.....	221,889
	\$902,787

The officers are:

LEWIS MCKENZIE, President.

R. JOHNSTON, Clerk and Treasurer.

C. P. MANNING, Consulting Engineer.

Providence and Worcester Railroad.

The receipts of this company for the year ending November 30th, 1858, were:

From passengers.....	\$114,288 21
" merchandise.....	148,615 85
" mails and rents.....	7,498 57
	\$270,402 63

And the expenses were:

For fuel.....	\$21,692 96
" oil.....	2,988 96
" repairs and renewal of cars.....	11,211 19
" repairs of engines.....	10,795 80
" freight department.....	23,574 91
" passenger.....	18,789 91
" maintenance of way.....	46,918 67
" miscellaneous.....	24,085 55
	160,057 95

Net earnings.....	\$110,344 68
Deduct int't paid on bonds.....	\$18,015 00
Less interest received on stock, etc.....	2,854 36
	15,160 64

Net income..... \$95,184 04

—disposed of as follows:

Dividend July, 1858.....	\$46,500
" Jan'y, 1859.....	46,500
	93,000 00

Carried to construction account..... \$2,184 04

—By which it will be seen, that notwithstanding the general depression of business during the early part of the year, which materially affected the receipts of the road, they have been such as to enable the company to earn and pay regular dividends. As the road depends almost entirely on the prosperity of the manufacturing business for its earnings, it is anticipated that the business of the present year will show a considerable increase. The bridges have all been carefully examined and extensively repaired. The three bridges at Albion have been entirely rebuilt; and a substantial granite pier built under each of the bridges at Valley Falls and Woonsocket. The condition of the rolling stock has been well maintained. Five hundred tons of new American rails, and 10,000 new ties have been laid; 3,000 new patent rubber chairs have also been put down. The passenger department has been conducted without accident to passengers. The hourly trains alone have carried over half a million of passengers.

The equipment of the road consists of 12 engines; 18 passenger, 250 merchandise, and 120

coal cars. One locomotive has been rebuilt; also 20 box and 8 coal cars to cover depreciation.

GENERAL STATEMENT.

Balance Sheet from the Treasurer's Books,
November 30, 1858.

Construction	\$1,534,910 90
Cars	148,923 08
Locomotives	105,642 47
	<hr/>
	\$1,789,476 44

Stock in Prov. & Wor. R. R. Co.— (398 shares)	39,800 00
Materials on hand	30,717 79
Notes receivable	11,904 00
Cash on hand	25,470 77
	<hr/>

Total permanent investment and resources

Capital stock

Bonds—outstanding, due Aug., 1860

Dividend of 3 per cent., due Jan'y, 1859

Dividends due but not paid.. ..

Total capital stock and liabilities... \$1,897,369 00

The officers of the company are:

President—WELCOME FARNUM.

Vice President—DANIEL W. VAUGHAN.

Treasurer—JOHN R. BALCH.

Superintendent—STEPHEN H. TABOR.

Comparative Productiveness of English and American Railroads.

We copy the following from the London *News* for two reasons.—It gives us an occasion to say a word in reference to Messrs. Holley & Colburn's mission to England, to which English engineers and the English Press are so fond of referring, and at the same time to correct some very erroneous impressions that now prevail abroad in reference to the productiveness of American roads.

The simple fact that Messrs. Holley & Colburn have done what they could to disparage our roads is the great reason why their report has been so warmly commended in England. They are there held up as *experienced* and *conscientious* engineers; while, in fact, neither of them is, nor ever has been, a railroad engineer, either by experience or training. Mr. Colburn has spent considerable time in machine shops, but always in a subordinate and irresponsible position. We presume he never was employed an hour in the construction of a road. Much less can be said of Mr. Holley's qualifications as a railroad engineer. This title, in this particular, is wholly *assumed*. We know nothing against his character as a man. It is well known, however, that Mr. Colburn is an empiric; ignorant, conceited and superficial. For years he drifted round from shop to shop, and from place to place. Wherever employed, the parties found themselves anxious to get rid of him. At last he conceived the idea of getting up a railroad paper upon the Spread Eagle plan. In this he was joined by Mr. Holley, which was his first appearance on the railroad stage. They floundered around at a great rate for a while,—till it was announced that the worthy couple had sailed for England. They abandoned their paper between two days, apparently, as it contained not the slightest hint of its approaching decease. It fell from sheer inanition. Our railroad companies would have nothing to do with these *experienced* and *conscientious* engineers. The first thing we heard from them afterwards was their wonderful book, to which the article copied refers, and in which they have done what they

could to revenge themselves upon our railroad companies for the cold support received from them. Those who know Mr. Colburn will readily understand his motive. He has, to a certain extent, accomplished his object, for we can bear testimony that his book has excited a powerful influence in discrediting our railroads in England. In this country, however, he is too well known to have his opinion entitled to the slightest influence or respect on any matters. He has given a distorted and exaggerated picture of our own, in comparison with English roads, and just such a one as suited his purpose to draw. It fortunately comes at a late day, and can do our companies much less harm than the foreign holders, by frightening them into sales at ruinous rates. The mischief contemplated will hit a very different class of people from what was supposed. Mr. Colburn has, we believe, taken up his residence in London, having thoroughly run out in this country.

With regard to the comparative cost and productiveness of the roads of the two countries, we cannot, perhaps, take better illustrations of our own roads than the two instanced in the *News* article, as showing the excessive cost of working our lines—the N. Y. Central, and the Buffalo and State Line. These roads have respectively cost \$44,000 and \$55,000. Their average earnings, since the first trains ran over them, have exceeded 25 per cent. per annum on their cost. Within ten years of its completion, the Central returned to its stockholders its first cost, in dividends. The Buffalo and State Line Road has never paid less than 10 per cent. annually in dividends. Neither road was completed when put in operation. They have, consequently, been having large sums annually expended upon them, properly chargeable to construction. This is the way in which we build our roads. We can get them in no other. In England, on the other hand, the abundance of capital enables companies to spend \$100,000 on their lines before opening them for traffic, or almost immediately afterwards. The cost of maintaining them, consequently, is reduced to the minimum sum, but no smaller than that expended to keep up many of our best roads. But with the large sums that are expended annually on our roads for construction, and the greater wear and tear necessarily incident to imperfectly built lines, we run them quite as cheaply, taking out the higher price of fuel in this country, as they do railways in England.

Notwithstanding all the hue and cry about our railroads, we have a very large number of well-managed and productive lines. It matters, however, comparatively little to us what foreigners think of them. They are no longer solicited to aid in their construction, except upon conditions which render them perfectly secure. But were it ever so desirable that they should entertain the most exalted opinion of them, the wisest course would be not to say a word in their favor till time had wrought a change in public sentiment, which time only can do. In making investments, people are much more influenced by their sentiments or feelings, than by reason. When disappointment follows, the logic is, that everything of the kind is alike bad. This conclusion may be wide from the track, but what is not reasoned up, cannot be reasoned down, and the only way is to let the feeling or sentiment at present excited, expend itself,

and to wait till the mind is again in a normal state, and in a condition to receive new impressions. We are always going from one extreme to another. This fact was never more strikingly illustrated than in the history of our railroads. They are still valuable. A great many of them will change hands at low prices, and be worth to their new owners their first cost. Whatever cause foreigners may have for alarm, the least of all should be the terrible stories of Messrs. Colburn and Holley.

Below is the article referred to:

The meeting held last week of the English shareholders of the Illinois Central Railway reminds us of the fact that so many of the English public have either as shareholders, bondholders, or mortgagees, become interested in the railways of the United States as to render the actual condition and the present prospects of railway property in that country a subject of no little interest on this side of the Atlantic.

Why is it then that United States railways don't pay; that the New York and Erie, and the Illinois Central, and indeed most of the great American lines, have only added to the great sum of railway disaster and loss which England and Englishmen have had to bear? Is the cause to be found simply in financial mismanagement, to speak of nothing worse, or does it lie deeper? Is it in consequence of mal-administration, or of defects in the lines themselves?

These are inquiries in the answer to which United States reputation and English capital are very deeply concerned; and although the exclamation by which they are so frequently met, that the Yankees are a parcel of rogues and rascals, to whom it is dangerous to lend money, is an easy and popular, it is not a pleasant or satisfactory style of reply. Neither can it be correct, when we see that the federal debt of the United States is just as good security as British Consols, that most of the State Loans are unimpeachable investments, and that even the municipal liabilities of the various towns of the Union are faithfully and punctually discharged. In all those cases were the people of the United States so thoroughly depraved and universally dishonest as they are said to be, they have ample opportunities of cheating their foreign creditors than they possess in railways. But with the exception of two States, they do not defraud those to whom they are indebted; and it is a remarkable fact to which one eminent English house has borne honorable testimony, that the debts of American traders which were brought into jeopardy by the commercial crisis a year ago, either have been collected or are in course of liquidation, with a facility that, to say the least of it, was not then anticipated.

Of course there has been no little immorality, deception, and extravagance in American railway management—quite as much, we may be sure, as in our own. Immense and illicit profits have been made out of contracts, dividends have been paid out of capital, the most improper and often illegal engagements have been entered into, railway jobs have been as frequent there as here. But as these characteristics do not of themselves account for the misfortunes of English railways, so will they not entirely or mainly account for the mischances of American railways. In England the chief causes of low dividends are to be found in what is called Railway Policy, in unwise competition, in obstinate opposition, in directorial animosities and perversities, and in Parliamentary negligence and absence of plan and system. Many of these causes are obviously in operation in the United States. What, then, is the reason of the deplorable state and worse prospects of railway property there, where speed has been largely reduced, trains have been diminished, salaries lowered, and fares augmented, without any corresponding advantages to the shareholders or bondholders?

Two United States engineers, who came to Europe to study its railways, and who in July last published a report of their observations and in-

vestigations on both sides of the Atlantic, enable us in some measure to answer this question. To a large extent, the report of these gentlemen is technical and scientific, and more fitted for professional than popular exposition. But there are some leading facts in it which will be useful to make the English public (too apt to make foreign investments) acquainted with, were it only to warn them, however late, of their dangers, and to reconcile them in some degree to their own country. We propose, therefore, to dip a little into the story Messrs. Colburn and Holley, after their experience of Europe, tell the people of the United States.

They at once start by confessing the inferiority of United States engineering. "Works," they very truly say, "which eat themselves up as fast as ours do, must be founded on a low standard of engineering." In Europe it is otherwise. "As a science, engineering is ably cultivated and creditably applied in Europe." In American works of construction "everything—the future especially—is sacrificed to the present. Quantity, not quality, is the staple demand."

Engineering, in all but its routine merely, is a business for which every tyro—surveyor, speculator, or large stockholder, deems himself entirely competent. There is no standard whatever, of qualification, excepting that of doing the most work for the least money. And engineers have followed this so far as to have often robbed their works of their vital proportions. Wherever engineers have thus degraded themselves and their profession, by sacrificing their better judgment to the cupidity of ignorant proprietors, they have fallen, hopelessly, to the rank of mere tools for contractors and railway directors.

The consequence is, as a general rule, United States railways have not been constructed on the plans or under the direction of competent engineers.

Each new line has its own "chief," born to the occasion, who, thus raw and compliant, devotes himself to the routine of the field and the office, while the president of the concern dictates the proportion of earthworks, the shape and quality of rails, and the selection of machinery and materials generally.

In England we have certainly not fallen into this mistake; probably our error has been of the opposite description—giving our railway engineers too much power over construction; and the consequence is that, with one or two honorable exceptions, little reliance can be placed on the estimates of English railway engineers.

Of course, this fundamental fault of the Americans has not produced any real economy even in the actual sums spent on permanent way. After analysing and eliminating the cost of English and American Permanent Way, after rejecting excessive cost of land and parliamentary expenses—under which latter head they discover "one Mr. Charles Austin, a solicitor, made \$200,100 yearly for three years, a Mr. Cockburn did nearly as well, and the Hon. John Talbot made \$60,000 a year"—Messrs. Colburn and Holley say that the cost of one mile of permanent way for an English road, with a 70 lbs. rail, and assuming given quantities of earth in each case, is \$15,806 against \$14,532 for one mile of American railroad with only a 60 lbs. rail.

That, however, is the cost in money only of two respective miles of English and American railroads, but, add the American engineers:

The first is a thoroughly first-class road, with ample slopes and ditches, deep ballast, a 70 lbs. rail, thoroughly fish-jointed, and the ties preserved to last 15 years.

The second, or American line, has scanty earthwork, thin ballast, a 60 lbs. rail, with open joints, and the ties destined to decay in from five to seven years.

The consequence of this serious difference in the quality of construction, arising out of the primary mistake of employing inferior engineering skill, is a much greater cost of maintenance of way in the United States as compared with European railways. This point is examined by Messrs. Colburn

and Holley with painful and conscientious minuteness, and the final result they arrive at "shows a general average cost of maintenance of way and works in England and France of 10 cents per mile run, against 25 cents in the Northern United States." There is also, they prove, "a consumption of fuel but little more than half as great on the European roads as on those of the United States," arising chiefly from the use of wood fuel on the latter. In the item of fuel our American friends look forward to reductions on English lines that will gladden the hearts of shareholders:

European engineers are sanguine of attaining still greater economy. The adoption of raw bituminous coal, in place of coke, will save one-third of the present cost of fuel. Heating the feed water generally is estimated to save 15 per cent. of the fuel. The use of pure water instead of the ordinary unprepared water is estimated to save 10 per cent. of fuel. Protecting the cylinders and superheating the steam, 10 per cent.; improved expansion apparatus, 25 per cent.; correct counterbalancing, 10 per cent. And putting these together, estimating each saving successively upon a previous saving, the whole would save 58 per cent. of the present locomotive expenses.

This would form, we may add, a dividend in itself, if our directors would only think less of the politics, and more of the business of their lines.

The expenses of French lines average 43 per cent. of their gross receipts. On the English lines the expenses, exclusive of rates and government duties, are 44 per cent. While in New York the expenses in 1855 were 57 per cent. of their gross receipts, and in Massachusetts 58 per cent. The rate of cost of maintaining the way of the New York Central in 1855 was four times that of the London and North-Western; and the rate of the Buffalo and Erie in 1856, exceeded the rate of the Great Northern nearly eight times.

Why after these statements, United States Railways don't pay, need not surprise any one. They have no doubt avoided many of the extravagances of English Railways, but they have missed that truest economy which lays down substantial works, and the consequence is a perpetual outlay which renders dividends out of profits almost a forlorn hope.

Finances of Louisiana.

EXTRACT FROM THE GOVERNOR'S MESSAGE.

The condition of the State Treasury, according to the report of the Auditor, shows a balance on the 31st of December, 1858, of \$621 96, to the credit of the General Funds.

The receipts into the Treasury for the ensuing year for account of the General Fund are estimated by the Auditor at \$985,000.

The estimated expenditures for the same period, including the unexpected balances, are \$1,210,976. Showing a deficit in the General Fund account for the fiscal year of \$216,355.

The necessary expenses of the State, from the General Funds, may be stated as follows:

Salaries of State Officers.....	\$158,000
Deductions and Commissions to Collectors of Taxes, 1858-'9.....	100,000
Expenses of the General Assembly.....	90,000
Interest on the various State Bonds.....	95,000
Printing.....	38,000
Charitable Hospital, Insane and Deaf and Dumb Asylums.....	60,000
Charitable Institution.....	21,000
Assessors.....	35,000
Publishing Decisions of Supreme Court.....	5,000
Refunding to owners of slaves convicted of criminal offenses.....	10,000

Outstanding warrants.....

\$612,000
184,000

\$746,000

The following extraordinary expenditures, made from the General Fund of the State Treasury during the year 1858, will diminish the amount necessary for the present year in the sum of \$415,530, on the following terms:

Payment of debt to State Bank.....	\$272,000
Appropriations for Deaf and Dumb Asylum.....	45,000
" " Louisiana Penitentiary Build'g.....	36,120
" " Seminary of Learning.....	30,000
" " School of Medicine.....	10,000
" " to take Census of State.....	10,683
" " lighting State House with gas.....	8,000
" " Calcasieu River.....	3,000

\$415,530

To this add amount of appropriation to pay expenses of criminal prosecutions.....

100,000
\$515,530

Thus it is apparent that there is no necessity to increase taxation, and if the Legislature will exercise a proper spirit of economy and retrenchment, the way will soon be prepared for that reduction of taxation demanded by the people.

By reference to the report of the Register of the Land Office, at Baton Rouge, you will find the operations of that Department to be as follows:

Amount of Swamp land sold by warrant during the year 1858, 131,890-58. Proceeds of sale, \$164,863 22.

Sales of Graduated lands, 35,661-36 acres. Proceeds of sale, \$26,746 02.

Proceeds of Swamp lands, \$191,609 24.

Internal Improvement lands sold, 14,367-59 acres. Proceeds, \$17,959 43.

School lands sold, 10,141-38 acres. Proceeds \$12,677 35.

Seminary lands sold, 80 acres. Proceeds \$100.

Amount of Swamp lands refunded and returned for market, 16,454-42: \$20,568 02.

Internal Improvement lands refunded, 495-05 acres: \$621.31.

School lands refunded, 4,561-91 acres: \$5,702 38.

Through Tickets between the North and the South.

The President of the Philadelphia, Wilmington and Baltimore Railroad, has communicated to the Board of Trade of Philadelphia on application of a committee appointed to solicit the earliest possible arrangement for a through ticket system on the railroads leading south and south-west, the following schedule of rates from the principal southern cities to Philadelphia and New York. These rates are to go into operation, or through tickets are to be offered for sale on these terms, on and after Monday, January 24:

	Philadelphia.	New York.
From New Orleans to.....	\$49 00	\$50 00
" Vicksburg.....	46 00	48 00
" Memphis.....	34 00	36 00
" Grand Junction.....	33 00	35 00
" Jackson.....	34 00	36 00
" Huntsville.....	31 00	33 00
" Knoxville.....	24 00	27 00
" Nashville.....	31 00	33 00
" Chattanooga or Dalton.....	28 00	31 00
" Atlanta.....	31 00	34 00
" Charleston or Columbia.....	23 50	26 50
" Augusta.....	26 00	29 00
" Savannah.....	31 00	33 00
" Macon.....	32 00	34 00
" Columbus.....	35 00	37 00
" Wilmington.....	17 00	19 00
" Weldon.....	11 75	14 75
" Richmond.....	8 50	11 50
" Petersburg.....	9 50	12 50

Transit Railroad.

The Winona (Minnesota) Democrat speaks quite encouragingly of the progress of this work, and confidently predicts that cars will be running over the entire distance between Winona and Rochester by the first of August next. Over fifty miles of grading is already completed. It also says:

In a couple of weeks a corps of engineers will commence locating a road from Winona to a junction with the Milwaukee and La Crosse road, at a point some thirty miles distant from this city. A charter for this road is now owned by the Transit

Company. The route is an excellent one—nearly an air line—the grades light; and the cost of construction will be comparatively small. The work will be let in the spring, and the road finished before the Root River Road is graded through the "Bluffs."

Railroad Earnings.

The earnings of the Pittsburg, Fort Wayne and Chicago Railroad Company during the month of December were as follows, viz:

From freight.....	\$59,256 24
" passengers.....	58,130 20
" mail.....	4,482 29
" rent of road.....	5,500 00
" rents, etc.....	4,198 74

Total.....	\$131,567 47
Earnings in same month last year....	111,628 69

Increase (17 per cent.).....\$19,938 69

The expenses in December were as follows, viz:

Station expenses.....	\$7,866 34
Cost of running.....	27,920 25
Maintenance of machinery.....	18,400 42
Maintenance of way, etc.....	43,491 27
General expenses.....	19,921 09

Total.....	\$117,599 37
Expenses same month last year.....	72,869 59

Increase.....\$44,729 58

Net earnings in December, 1858.....	\$13,968 10
Do. 1857.....	38,759 09

Decrease.....\$24,790 99

Gross earnings for the year ending Dec. 31, 1858.....	\$1,567,035 98
Gross earnings for the year ending Dec. 31, 1857.....	1,660,424 89

Decrease.....\$93,338 91

Expenses for the year ending Dec. 31, 1858.....	\$978,146 68
Expenses for the year ending Dec. 31, 1857.....	1,135,011 44

Decrease.....\$56,864 76

Net earnings for the year ending Dec. 31, 1858.....	\$588,889 30
Net earnings for the year ending Dec. 31, 1857.....	625,413 45

Decrease.....\$36,524 15

The earnings of the Pennsylvania Central Railroad for December were as follows:

	Gross Earnings.	Expenses.	Net Earnings.
Dec., 1858..	\$410,971.06	263,245.46	147,725.60
" 1857..	383,208.51	260,477.27	122,731.24

Increase..\$27,762.55 \$2,768.19 \$24,994.36

Earnings of the railroad from all sources from Jan. 1, 1858, to—

	Gross Earnings.	Expenses.	Net Earnings.
Jan. 1, '59,	\$5,185,330.68	3,021,885.04	2,163,445.64
" '58,	5,097,543.59	3,226,354.24	1,871,189.35

Increase....	\$87,787.09		\$292,256.29
Decrease....		\$204,469.20	

The business of the Mississippi and Tennessee railroad for December was:

Receipts from passengers.....	\$8,208 27
Do. freights.....	15,118 66

Total.....\$23,326 93

The receipts of the Grand Trunk Railway of Canada for the week ending January 15th, were.....\$32,880 17

Week ending January 16, 1858.....	31,672 29
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Increase.....\$1,206 88

Total traffic from July 1st.....	\$1,245,174 22
Same period last year.....	1,342,499 17

Decrease.....\$97,324 95

Cleveland and Pittsburg Railroad.

The Cleveland and Pittsburg Railroad is one of the most important "feeders" of the Pennsylvania Central road. It extends from Cleveland to Rochester (25 miles below Pittsburg) and besides sundry minor branches, has a line fifty miles long from Wellsville to Bellaire, (4 miles below Wheeling.) It brings the lake trade to the Pennsylvania road, and also forms one of the connecting links between Pittsburg and Cincinnati. It is in excellent order, and at present fully able to accommodate the large business which it naturally attracts.

What Railroads do for the People.

In 1850, Ohio had not over one hundred miles of railroad in active operation; the part then completed being a portion of the Cincinnati and Cleveland line. In 1852, there were 1,154 miles completed, and in 1858, there were 2,841 miles. The value of land, at these several periods, were as follows, viz:

In 1850.....	\$341,388,838
In 1852.....	363,490,901
In 1858.....	590,285,947

The increase from 1850 to 1858, in the value of real property, \$218,897,109—or 64 per cent. The increase of population in that time is about 22 per cent., or little over one-third the actual increase in the value of property.

Thus two-thirds this increase in the value of property is due to some other cause than the increase of population, which represents the permanent improvement made by labor. What other causes have contributed to give this additional value of 40 per cent., to the real property of the State? Undoubtedly, the increase in real money, by the increase of the gold mines of California, has had something to do with this increase of value. But, if we say that the whole property of the country has increased ten per cent. since 1850, in consequence of the increase of money only, we shall probably be quite up to the mark. This leaves 30 per cent. to be attributed solely to increased facilities of transportation. That this is so in Ohio, we know by actual observations. We can not be mistaken in saying that the increased value of land in Ohio is mainly due to the increased price of produce, and that increased price is again due chiefly to the ease and readiness with which produce is carried to the great markets of New York, Philadelphia, Boston, and Baltimore, all of which are now reached by excellent lines of railroad from every quarter of the State. The amount of value added to the property of this State, by the construction of railroads since 1850, is about one hundred and ten millions of dollars. This is more than the entire cost of all the roads in this State! Had the holders of real estate in Ohio been taxed fifty millions of dollars, they would have thought it an act of most enormous oppression. But they would have made fifty millions clear profit by the operation, and left all the roads of Ohio without a dollar of debt. As it is, the owners of real estate have the benefit, and the roads have the debts. In the harsh judgment which is sometimes passed on the managers of roads, it should be recollected that the enterprises they have undertaken, and the debts they have made, have conferred inestimable benefits on the great public. They have risked their own reputation, and often times lost their property in carrying forward enterprises which have resulted in the wealth and prosperity of the people.

2. Let us look at the effects of railroads on the employment of Labor. To furnish full employment for labor, is the most desirable function to be performed by any of the arts of life; for, it both employs those who might be otherwise idle, and it furnishes a market for large amounts of produce,

of agriculture and other arts which would not otherwise exist. We have ascertained that there are in round numbers, ten thousand able bodied men employed on the railroad operation of Ohio, independent of construction. These ten thousand men are equivalent (according to the usual ratio) to a population of 60,000 people. The money actually paid these employees (these are skilled laborers) is fully equal to five millions of dollars per annum. Then these 60,000 people must buy bread and meat of the farmers, and this is equal to 90,000 barrels of flour, and 30,000 cattle. Thus the railroad have furnished a new market for labor and a new market for agricultural produce.

In this brief review, we have sketched only a part of the profitable results which attend the construction of railroads in this State. When so many persons censure their management, we should recollect what they have done.—*Railroad Record.*

Bank Statements.

The following is a comparative statement of the New York Banks for the weeks ending—

	Jan'y 22d.	Jan'y 29th.
Capital.....	\$66,108,135	\$66,108,135
Loans.....	129,540,000	129,663,249
Specie.....	29,472,056	27,725,290
Circulation.....	7,457,245	7,483,642
Deposits.....	95,066,400	93,837,935

The following is a comparative statement of the Philadelphia Banks for the weeks ending—

	Jan'y 24th.	Jan'y 31st.
Capital.....	\$11,588,065	\$11,588,865
Loans.....	26,283,118	26,320,089
Specie.....	6,009,817	6,138,245
Circulation.....	2,769,145	2,709,811
Deposits.....	17,498,219	17,557,809

The following is a comparative statement of the Boston Banks for the weeks ending—

	Jan'y 24th.	Jan'y 31st.
Capital.....	\$33,320,500	\$33,221,700
Loans.....	59,400,400	58,992,600
Specie.....	7,383,400	7,888,700
Circulation.....	6,609,400	6,224,000
Deposits.....	20,728,000	20,598,000

The following is a comparative statement of the New Orleans Banks for the weeks ending—

	Jan. 15th.	Jan'y 22d.
Loans.....	\$20,904,840	\$21,427,167
Specie.....	16,343,810	16,280,663
Circulation.....	10,919,489	11,224,464
Deposits.....	24,265,133	24,608,022
Exchange.....	9,666,071	9,492,871
Due dist. banks....	2,070,176	2,056,817

The Bank movement in the four principal cities of the Union, as compiled from the above, is as follows:

	LOANS.	DEPOSITS.	SPECIE.	CIRCULATION.
N. Y., Jan. 21.	\$19,663,249	\$93,837,935	\$27,725,290	\$7,483,642
Boston, " 31.	58,992,600	20,598,000	7,888,700	6,224,000
Philad., " 31.	26,320,089	17,557,809	6,138,245	2,709,811
N. Ori., " 22.	21,427,167	24,608,022	16,280,663	11,224,464
Total.....	\$236,403,105	156,601,766	58,032,898	27,641,417
Last week....	236,128,408	157,657,762	59,298,683	27,765,270

Bank of England.

The return from the Bank of England for the week ending the 12th January, gives the following results, when compared with the previous week:

Public deposits..£5,518,742	Decrease..£4,113,767
Other deposits..15,725,808	Increase..2,145,702
Rest.....3,214,101	Increase..47,289

On the other side of the account:

Gov't Securities..10,698,897	Decrease...£107,124
Other Securities..16,564,194	Decrease...1,645,548
Notes unempl'd..11,955,935	Decrease...205,065

The amount of notes in circulation is £21,050,165, being an increase of £197,815; and the stock of bullion in both departments is £19,192,350, showing an increase of £46,701, when compared with the preceding return.

Bank of France.

The return of the Bank of France for the month ending the 13th inst. shows a decrease as compared with the preceding month of £1,188,000 on the specie, and £2,459 on the government deposits, and an increase of £1,721,000 on the discounts; £2,697,000 on the circulation; £1,355,000 on the private deposits; £5,700 on advance on government securities; £977,000 on advance on railway securities.

Union Railroad.

It is stated that the work on the Union Railroad, to connect the North-Western Virginia, and Marietta and Cincinnati Railroad, is steadily progressing. The rails for the whole have been procured, and money to complete the most of the graduation and masonry.

Interest on Bonded Indebtedness.

The coupons due on the 1st of February on the bonds of the New Jersey Railroad and Transportation Company, will be paid at the Bank of Commerce in this city.

The coupons on the first mortgage bonds of the Catawissa, Williamsport and Erie Railroad due 1st February, will be paid one-third on presentation, one third in April, and one-third in June. The coupons due in 1859 on the chattel bonds will be paid at maturity.

The interest coupons on the second mortgage bonds, 1861, and Dover Extension bonds of the Harlem Railroad will be paid at the Twenty-sixth street office.

The interest coupons of the first mortgage bonds of the Central Railroad Company of New Jersey, due Feb. 1, will be paid at No. 69 Wall st.

The interest due on the first mortgage Cleveland and Mahoning Railroad bonds, will be paid by Ward, Campbell & Co.

The interest due February 1, 1859, on the bonds of the Michigan Southern and Northern Indiana Railroad Companies, and the Detroit, Monroe and Toledo Railroad Company, will be paid at the Corn Exchange Bank, in this city.

The City of Davenport, City of Burlington and County of Cuyahoga coupons due Feb'y 1, will be paid by Messrs. Clark, Dodge & Co.

Insurance Dividends.

The Union Mutual Insurance Company will pay interest at the rate of 6 per cent. per annum on the outstanding certificates of profits on the 1st February next. They have also declared a dividend of 45 per cent. from the net earnings of the year, for which certificates will be issued on the 1st of March, and on that day the scrip issues of 1849 and 1850 will be redeemed in cash, after which time the interest thereon will cease.

The New York Life Insurance Company a scrip dividend of 30 per cent. on all policies paid twelve months prior to Jan. 1, 1859, is declared; also, 6 per cent. interest upon all previous dividends, payable on and after the first Monday in March next, to those holding certificates.

The Columbia Fire Insurance Company a dividend of 6 per cent., payable 10th inst.

The St. Mark's Fire Insurance Company a semi-annual dividend of 10 per cent., payable on demand.

The Peter Cooper Insurance Company a semi-annual dividend of 6 per cent., payable 1st inst.

The Manhattan Company, a semi-annual dividend of 5 per cent., payable on the 10th inst.

The City Fire Insurance Company, a dividend of \$9 per share, payable on the 9th inst.

The New York Life Insurance and Trust Company, a semi-annual dividend of 5 per cent., payable on demand.

Railroad Dividends.

The Brooklyn and Jamaica Railroad has declared a dividend of $4\frac{1}{2}$ per cent., payable on the 15th February.

The New York and New Haven Railroad Company, a dividend of \$3 per share, payable on the 16th inst.

Bank Dividends.

The Long Island Bank has declared a dividend of 5 per cent., payable on demand.

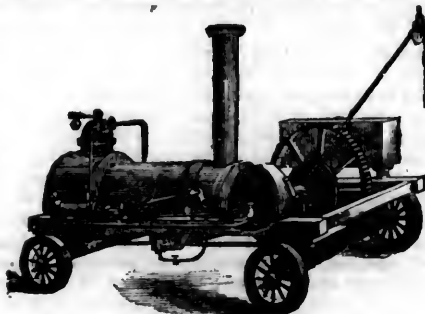
The Ocean Bank, a semi-annual dividend of $3\frac{1}{2}$ per cent., payable on the 10th inst.

The City Bank of Brooklyn, a semi-annual dividend of $3\frac{1}{2}$ per cent., payable on the 12th inst.

The Oriental Bank, a dividend of $3\frac{1}{2}$ per cent., payable on the 10 inst.

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THE MAILS for EUROPE, via Southampton and Havre, per U. S. Steamer *Araucario*, will close at this office on **SATURDAY**, the 5th day of February, 1859, at 10 $\frac{1}{2}$ o'clock A. M.

ISAAC V. FOWLER, Postmaster.

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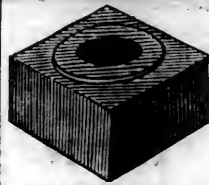
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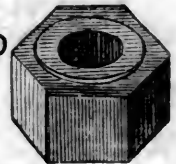
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BY the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnetic Ore from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per lineal yard, viz:—25, 30, 35, 40, 45, 50, 60, 62, and 75 lbs.

Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.

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401f

THE ROUGH AND READY ROLLING MILLS OF DANVILLE, PA.,

ARE prepared to fill orders for RAILS of the best quality at the market price.

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RAILROAD IRON. THE RENSSLAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

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received in exchange for new, or for re-manufacturing.

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IRON BOILER FLUES.

Lap-Welded Boiler Flues,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

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THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
Agents for the United States,
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MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
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OUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854

1733

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation.

February, 1855.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rail of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Secy.,
WHEELING, VA.

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RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.

The undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES,

ARE PREPARED TO CONTRACT FOR DELIVERY On board ship at Liverpool, or Welsh port.

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The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER

Free on Board at Shipping Ports in England, or At Ports of Discharge in the United States,

RAILS OF SUPERIOR QUALITY, And of Weight or Pattern as may be required.

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RAILROAD IRON. CONTRACTS FOR RAILS, AT A FIXED PRICE OR ON COMMISSION,

DELIVERED AT AN ENGLISH PORT,

Or at a Port in United States,

WILL BE MADE BY THE UNDERSIGNED, THEODORE DEMON,

10 Wall st., near Broadway, New York.

500 tons T rails on hand 54 to 57 lbs. per lineal yard.

RAILROAD IRON AND COMMON BARS.

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Sole Agents to Messrs. GUEST & CO.,

The Proprietors of the Dowlais Iron Works,

Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAXIN, 70 Broad st.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

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And 17 NASSAU st., NEW YORK.

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MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Bister, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.

A stock of the above goods constantly on hand.

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TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by STEPHENS & JOHNSON, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:—

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater,
Its welding nearer perfect, and
Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make. Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
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The Subscribers, Agents for the Manufacturers,

ARE PREPARED TO CONTRACT FOR THE DELIVERY OF RAILROAD IRON AT ANY PORT in the United States or Canada, or at a shipping port in Wales.

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RAILROAD IRON. WOOD, MORRELL & CO.,

Having leased the extensive Works of the

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Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

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BEST quality COP WASTE, constantly on hand and for sale by

M. K. JESUP & CO.,
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CAUTION.

AS there are numerous imitations of our FRANGIPANNI, purchasers are requested to see that the names of PIESSE and LUBIN are impressed upon the Bottles.



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Iron Rails, Chairs, & Spikes,
FREIGHT AND COAL CARS,
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Wheels and Axles of all kinds,
LOWMOOR, AMES, BOWLING, AND NASHUA TIRES,
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Car Trimmings, Paints, Oil, Varnish, Car and Switch
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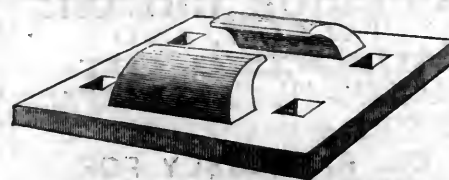
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Railroad Materials, Locomotive and Car Findings,
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Orders solicited, promptly filled, and forwarded with
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H. H. GOODMAN & CO.,
No. 7 WALL ST., NEW YORK,
Dealers in Railway, City, County, and State
BONDS,
RAILS, LOCOMOTIVES, &c.
We have on hand and for sale, of County Bonds—
Hardin County (Ky.), 5 per cts. Davidson City (Tenn.), 5 per cts.
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Mineral Point do. do.
Also a variety of CITY, COUNTY, and RAILWAY
SECURITIES in smaller lots.
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Nos. 6 & 8 Broadway, and 8 Beaver St.
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CHAIRS, SPIKES, CAR WHEELS, NAILS, ETC., ETC.
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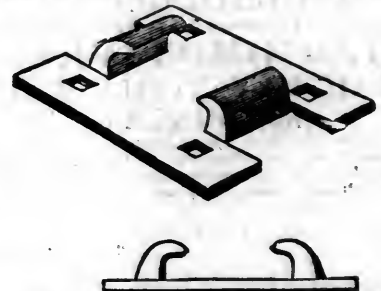
REFERENCES TO
Messrs. Cooper & Hewitt, Messrs. Stillman, Allen & Co.
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AGENTS FOR THE SALE OF
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RAILROAD CHAIR WORKS.
J B. GREEN & CO., Proprietors.
SUCCESSORS TO THE
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Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the
Patent Rights owned by the late New York Wrought
Iron Railroad Chair Company, and also the entire machinery
for manufacturing their improved Wrought Iron Railroad
Chair, we are now fully prepared to receive and fill all orders
from responsible parties, to any extent, with promptness and
dispatch.

The thickness of the lips of our Chair increases through the
bend, where the greatest strength is required, and diminishes
towards the edge; so that a less weight of metal may be used,
and a strength acquired equal, if not superior, to that of a
heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought
Iron Chair now in market, to our works for a supply; believing
they combine qualities superior to any others now manu-
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The Chairs weigh from seven and a-half to fifteen pounds,
according to the thickness of the Iron and size of the Chair.
To enable us to give you a perfect fit, it will be necessary al-
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make Chairs without a proper pattern, as it is impossible to
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Our manufacture of Chairs are used on a large number of
Roads, of which the following list comprises some of them, viz

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Messrs. M. K. JESUP & CO., 44 Exchange
Place, New York, are the only parties authorized to act
as our Agents.

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Locomotive & Machine
WORKS,

SUCCESSORS TO
ROGERS, KETCHUM & GROSVENOR,

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HAVING extensive facilities, are now prepared to furnish
promptly, of the best and most improved description, either
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LOCOMOTIVE ENGINES
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THE SCHENECTADY LOCOMOTIVE WORKS, SCHENECTADY, N. Y.

HAVING large facilities, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES AND TENDERS, either for burning WOOD or COAL, with promptness and dispatch.

BRASS and IRON CASTINGS; LOCOMOTIVE TYRES welded and blocked to exact sizes, and every thing connected with the building or repairing of Locomotives furnished on short notice.

These Works being located on the New York Central Railroad, near the centre of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

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SEVENTEENTH STREET, ABOVE CALLOWHILL,
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ESPECIALLY DEVOTED TO THE MANUFACTURE OF

LOCOMOTIVES, RAILWAY TOOLS AND MACHINERY.

MANUFACTURE to order, Locomotives of any Arrangement, Weight or Capacity. In Design, Material and Workmanship, the Locomotives produced at these Works, are equal to, and not excelled by any.

Locomotive Engines.

DANFORTH, COOK & CO., PATERSON, N. J.,

HAVING erected an extensive Shop, with the most approved Machinery and Tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various Tools suitable for turning and repairing Shop.

The business of Machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1749

UNION WORKS, BALTIMORE.

POOLE & HUNT, Iron Founders and General Machinists, ARE prepared to fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TYRES, equal to any produced in the country.

WHEELS and AXLES fitted for use.
HYDRAULIC PRESSES for expressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description. SHAFING, PULLIES and HANGERS.

WEST POINT FOUNDRY.

R. P. PARKOT, Levee.

Manufacturer of Marine and Stationary

ENGINES,

Sugar Mills, Saw Mills, Iron Bridges, Cannon, WATER PIPES, BOILERS, IRON BUILDINGS, CASTINGS & FORGINGS OF ALL KINDS

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REFINED NEAT'S FOOT OIL WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all kinds of machinery use.

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IMPROVED PATENT METALLIC OIL,

MANUFACTURED UNDER THE PATENT OF

J. & W. W. CUMBERLAND,
And under the personal Superintendence of the Inventor.

THE NEW YORK CUMBERLAND METALLIC OIL WORKS,

FOOT OF 24th STREET, EAST RIVER.

OFFICE, 205 BROADWAY,
NEW YORK.

WE respectfully call the attention of those interested in the running of

RAILROADS, STEAMSHIPS,

Machine Shops, Factories,

and Machinery of all kinds, to the valuable qualities of our Oil.

1. It is entirely free from Gum, cools heated Journals quicker than water, and keeps them cool by its superior anti-friction properties.

2. By its use less motive power is required than in using any other oil yet known. It will move machinery with very perceptibly less motive power than Sperm Oil.

3. The same quantity will last at least 33 1/2 per cent. longer than Sperm, or any other Oil, and the quality is always strictly uniform in its season. We make Summer and Winter Oil.

4. Having largely increased the capacity of our works, we have been enabled to reduce the prices below those of last year; and it is our intention to keep it at all times below the price of Sperm.

The prejudice existing against Oils has very properly grown up, and we are fully aware of the deceptions which have been and still are practised by unscrupulous persons; but we are prepared to substantiate all the foregoing statements relative to the superiority of our Oils, at

OUR OFFICE, 205 BROADWAY,
by large numbers of certificates of the best managed lines of Railroads, Steamships, Machine Shops, & Factories in this country, testifying to its value as being greatly superior to any other. Most of the certificates being of prominent Companies, it is probable that more or less of them will be known to all. We have also the MEDALS and DIPLOMAS awarded to us by the AMERICAN INSTITUTE.

We will at all times be ready to refund the money if the facts above stated are not satisfactorily substantiated on trial of the Oil; and we only solicit from those who have never used it very small trial orders. We also make

SUPERIOR GREASE, TALLOW, AND BURNING OIL.

The BURNING OIL will burn in any lamp that will burn Sperm, lasting longer, and burning without smell or smoke.

We manufacture an

OIL EXPRESSLY FOR SEWING MACHINES, GREATLY SUPERIOR TO ANY OTHER, AND WITH LESS SMELL.

Several have attempted to imitate our Oil, calling it "METALLIC OIL," as well as giving it a similar appearance; and we would CAUTION buyers against them, and advise them to see that our brand—

"NEW YORK CUMBERLAND METALLIC OIL WORKS, FOOT OF EAST 24th ST."

with the names of the inventors and kind of Oil, is upon every package, however small.

Address,—

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THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,
(Formerly W. HULL & SON.)

108, 110, 112, 114, 116 and 118 CHURCH ST.,

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FOR RAILROADS,

STEAMSHIPS, MILLS, MACHINE SHOPS, ETC.

THIS OIL, having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is vastly less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

Also,—

J. C. HULL & SONS' REFINED BURNING OIL.

Buyers are requested to give this OIL a trial, as it is believed that it will be found the

CHEAPEST, CLEANEST AND BEST OIL FOR BURNING,

(all things considered), in the market.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

TAW & BEERS,

DEALERS IN

Sperm, Whale and Elephant Oils,
Adamantine Car and other Candles,

AND MANUFACTURERS OF

TAW'S LUBRICATING GREASE

FOR RAILROAD CARS AND HEAVY MACHINERY.

THIS celebrated GREASE has been in use upwards of Ten years; and is in the opinion of FORTY RAILROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or description of machinery.

TAW & BEERS,
18 SOUTH WATER ST.,
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OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Sperm Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

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Reliable orders filled for any part of the United States & Europe.

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STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, February 12, 1859.

Railroad Management.—New York and Erie Railroad.

(The following communication is from the same pen as the article in our last week's issue, upon a similar subject.)

The whole country has a deep stake in the successful management of railroads. We all want the trade of the West through our railroads to our city. While this is accomplished, we also desire that the railroads themselves should be profitable and self-sustaining. This can only be accomplished by economy of management. If the owners of railroads manage them by the constant application of personal care, they will be just as successful as they are by the application of such care in any and every other business. We see it daily stated that there are four great lines of railroad to the West, and that they are competing for the same business. Honest and right-minded men, when engaged in sharp competition for a common business, endeavor to reach success by transacting their respective shares of such business with the strictest good faith, and the most rigid economy. In this way success is insured. The same rules should govern men in the management of railroads. They will govern them, if such men have a real in-

terest in the success of the road. We do not want to have railroad managers reduce fares and freights—now too low—and in that way destroy the value of the railroad property. Nothing can be more fatal than this.

The Erie Railroad has shown that its receipts are over five million of dollars a year, and yet with such receipts it cannot pay interest on its debt. Its capital is gone. It should show a yearly net income of two millions and a quarter of dollars. It would show this, if it was managed as property ought to be. That line has always suffered. There have been collateral objects, that have taken up the time of its managers; or they have set themselves down here in the city of New York, and attempted to manage it by a set of abstractions; by issuing circulars; by the theories of a single mind. This will never be successful.

A great deal more practical, thoughtful counsel is required. Such an addition would at once take an interest with the operatives on the road; would enter into their feelings, and thereby soon engage all their interests and exertions in a common effort to redeem the road from its embarrassment; to produce economy in every department; in short, to make it thrifty. Exactly the opposite must be the feelings of the men now. This is a matter in which not merely the stock and bondholders of the Erie Railroad are concerned. The whole railroad interest will be advanced by the success of that great road. Personal considerations are of no sort of consequence. Unfitness, the moment it is obvious, should be noticed; and when such sad results as the last report of the Company shows, are considered, it is the right and duty of all men to speak. The President's salary would pay six men for passing most of their time on the line of the road, and would soon enable them to become acquainted with the value of every service rendered upon it. It would lead them to become acquainted with all the men upon it; to consult with them, and to obtain their views and opinions. It is in every railroad man's experience that the most valuable suggestions are thus obtained. When these are properly appreciated, those who offer them will be stimulated to exertion, and the result will be a general improvement. We repeat, that the reform most needed on the Erie Railroad is a reduction of expenses; not a moderate, but a large

reduction. There must be great waste or great unfaithfulness somewhere. Five millions of dollars earned and received in one year for freight and fare, is an enormous receipt. It is enough, if the affairs of the Company are well conducted, to make every creditor satisfied, and every stockholder of the concern hopeful. It is not increased receipts, not the sale of lots, not the borrowing of money, not cutting off a few editors, not requiring passengers' names, not openly setting the public to watch their conductors, that is wanted, but real genuine acquaintance with every locality upon the road; a patient and careful examination as to its business; a respect for the views of the inhabitants on the line; acquaintance with all the agents employed upon the road; a consultation with them; an intimate knowledge of the manner in which their respective service is rendered; whether it is grudgingly or freely rendered; whether the condition of any could be made more comfortable by an enquiry into their cases and such attention to them, as the man who is well served always cheerfully bestows. Ten thousand little things of this character, which cost nothing, and go so far to conciliate and produce so much better results than crabbed and silly orders, and a dictatorial rule. We may rely upon it, that there will never be an increase in net receipts until there is strict, and faithful, and conciliating care exercised over the expenses, and they be brought down to reasonable limits.

In these suggestions we have but one hope, one end, and one earnest wish, and that is, that the Erie Railroad, as a property, may be improved. It is a great work. In its origin, and process to completion, there was manifested an earnestness of purpose, and an energy of action, that commanded respect. Now that it is finished, and one among the most prominent of this greatest of modern improvements, there must be nothing to impede its usefulness, or impair its value. Its managers must feel that they have a mission far higher than to be conducting a system of espionage upon other lines, and bring the public with complaints against one line for one thing, and another for something else. They must be sure to do their own business well by the public, and the property committed to their trust will reach its highest value, and command a corresponding price.

Wilmington and Manchester Railroad.

The eleventh annual meeting of the stockholders in this road was held at Wilmington, N. C., Nov. 18th. The reports of the President, Superintendent, Treasurer, etc., giving a detailed history of the operations of the road for the fiscal year ending Sept. 30th, were presented and adopted. The receipts were:

From through travel	\$139,813 74
" way "	70,697 05
" up freights	43,289 32
" down "	85,641 63
" mails	42,750 00
	<u>\$382,191 74</u>

The expenditures were:

Repairs of track	\$71,300 12
" bridge's & trestle	11,595 07
" engines	39,610 67
" cars	22,882 83
Station expenses	20,829 54
Wood and coal	18,876 49
Oil, fluid, tallow, etc.	5,174 51
Engineers, firemen, conductors, etc.	33,375 52
Ferry expenses	8,572 99
Salaries of officers	8,734 99
Paid S. C. R. R. Co.	5,551 97
Office exp., printing, etc. ..	1,887 00
Lost and damaged goods, etc.	5,479 13
	<u>\$253,870 82</u>

Applicable to previous year	44,105 12
	<u>209,765 70</u>

Accounts outstanding this year	13,801 79
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Net revenue	\$159,124 25
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Included in the cost of repairs of engines and cars are: one new engine, \$9,000; and 10 freight and 2 mail cars built in the company's shops, \$1,700. Five passenger cars have also been rebuilt.

A comparison of the earnings of the past with the previous year, shows a falling off in receipts from up freights of \$14,333 34; down freights, \$4,996 44; through travel, \$63,314 17. The receipts from way travel show an increase of \$2,319 77. This diminution of business is attributable to several causes—foremost among which may be mentioned the financial embarrassments in which the whole country was involved, and which was felt to a greater or less extent by all departments of industry. The opening of the North East Railroad afforded a more direct communication with Charleston. The transportation of cotton to market, and of goods in the interior, was to some extent shared with that road, while the coastwise travel was diverted at Florence, the point of junction. By the completion of the East Tennessee & Virginia railroad, a new and more direct route was opened between the north-eastern and south-western cities, over which through tickets were issued at greatly reduced rates; while increased accommodations were afforded by the several lines of steamers between Savannah and Charleston and the North. The long established through ticket arrangement between Wilmington and the northern cities was broken up, and the fares increased some twenty per cent. This latter, more than all other adverse circumstances, tended to divert the through travel from this, and to turn it into the new channel. Hopes are expressed in the report that the through ticket system will be re-established;

and that "whenever the route from Baltimore to Atlanta over this line can offer to the traveler through tickets at the same price as by the western line, and give the same facilities for checking baggage to remote points, it will command a fair share of the travel."

The following is a statement of the receipts from all sources, and the disbursements during the year:

RECEIPTS.	
Cash and cash items, Sept. 30, 1857 ..	\$65,028 63
Increase of capital during the year ...	1,427 10
Credited to profit and loss	1,030 70
Receipts from transportation	382,191 74
	<u>\$449,678 17</u>

DISBURSEMENTS.	
Paid current expense of road	\$209,765 70
" accounts applicable to previous years	44,105 12
" interest and premium on exchange	84,007 45
Amount of debt decreased	9,211 97
Paid on account of construction, etc. ..	41,424 04
Cash and cash items	61,163 89
	<u>\$449,678 17</u>

The company have 14 passenger and 8 freight engines; 20 first class and 2 second class passenger cars; 6 baggage and 4 mail cars; and 156 freight cars.

The same mileage has been performed by the trains as in the previous year, and with an equal amount of rolling stock in active service. The business might also have reached or even exceeded that of 1857 without adding appreciably to the cost of operating.

GENERAL STATEMENT.
Balance Sheet from the Treasurer's Books,
Sept. 30, 1858. Cr.

By Capital Stock	\$1,125,314 91
" First Mortg. Bonds	\$596,000 00
" Second do. do.	200,000 00
" Income Bonds	177,000 00
	<u>973,000 00</u>
" Bonds secur'd by W. & W. R. R. stock, 150,000 00	
" Bills payable	108,807 92
" Requisitions payable	813 64
	<u>259,621 56</u>
Due on Negro Bonds, open accounts, etc.	28,118 29
By Profit and loss account	315,863 30
" Net profits of the road for the past year	128,320 92
	<u>\$2,830,238 98</u>

Dr.	
Construction	\$2,413,364 63
Filling trestle	20,399 09
Interest on stock	28,815 30
Interest account	83,345 78
Paid on account of contracts	2,438 90
Waterree & Hamburg R. R. survey ..	2,439 07
C. & D. R. R. Co., on account of stock	19,211 22
Wilmington & Weldon R. R. stock ..	201,500 00
Due from Post Office Department	\$10,637 50
Amount of bills rec'v'able	9,550 92
Due from R. R. companies	6,520 85
Do. agents	16,921 34
Do. banks	321 60
	<u>44,002 21</u>
Cash on hand	14,722 78
	<u>\$2,830,238 98</u>

The officers of the company are:

President—THOMAS D. WALKER.

General Superintendent—JAMES P. ROBERTSON.

Secretary—Wm. A. WALKER.

Pork-Packing in the West—Full Returns from all Points.

The Cincinnati *Price Current*, of the 2d inst., publishes full returns from all hog-slaughtering points in the West, except Chicago and Toledo, (those places are reported up to latest dates,) which show an increase this season over last of 227,888 hogs. The figures comparing the two seasons, and remarks, are as follows:

	1857-8.	1858-9.
Ohio	610,060	624,109
Kentucky	372,609	397,117
Indiana	441,885	407,636
Illinois	463,577	596,136
Missouri	176,386	155,774
Tennessee	42,875	65,172
Iowa	85,583	158,217
Wisconsin	16,000	32,702
Grand totals	2,208,975	2,436,863
		<u>2,208,975</u>

Increase

There is an increase of slightly over 10¼ per cent., as compared with the packing last year.

With reference to the weight, we succeeded in obtaining the comparison from one hundred and seventy-nine places, both as regards the average weight of hogs and the yield of lard per hog.

We have classified the weight for each State, and find the average to be as follows:

	Average Weight of Hogs.		Yield of Lard per Hog.	
	1857-8.	1858-9.	1857-8.	1858-9.
Ohio	211	196	28	23
Indiana	202	186	31	22
Illinois	202	183	37	27
Kentucky	212	217	31	33
Iowa	199	173	39	22
Missouri	202	174	27	23
Tennessee	213	218	37	39
Wisconsin	235	230	30	28

The averages of the above weights would not be a correct average for all the hogs packed, as the relative numbers packed in each State are to be taken into calculation, in arriving at an estimate approximating to accuracy. For instance, the above figures would show a falling off in lard of 4½ pounds per hog, when in fact it is 4½ pounds per hog, as we have ascertained by calculating each State, and the same remarks will apply to the average weight of hogs.

As regards the average weight of hogs, we obtained, as we have already stated, the returns from 179 places, and find the total weight of hogs packed at these places last year to be 411,199,140 pounds. The weight of a similar number packed at the same places this year is 386,009,183. This is slightly over 6½ per cent. of a decrease in weight, which is equal to 139,253 hogs; which being deducted from the excess as given above, leaves the net increase in number 78,635, thus showing a net increase of a shade over 3½ per cent., as compared with the crop of last year. The hog crop of 1858-9 compares then as follows, with that of the last two years:

3½ per cent. greater than that of 1857-8.
18½ " " " " 1856-7.

As regards the falling-off in the lard, the average yield per hog, as shown by the returns, was 30 lbs. last year, and 25½ lbs. this year. Now, by multiplying the whole number of hogs packed both years, as reported above, by the yield of lard per hog each year, we can arrive at the comparative supply of this article with all the accuracy necessary:

	Lbs.
1857-8. 2,208,975 hogs, 30 lbs. per hog,	66,269,250
1858-9. 2,436,862 hogs, 25½ " " "	61,530,791

Decrease

This is about 7½ per cent. of a decrease as compared with last year. An impression prevails, very generally, that the deficiency in lard is much greater than this; but it seems to have been over-

looked that while there is a large falling-off in the yield per hog, there is a greater number of hogs from which to obtain the article this year than last.

Our correspondents are unanimous in stating that farmers and store-keepers packed very little pork this season, while a greater amount than usual was cured by them last year; so that there can be no doubt that the supply of bacon and bulk meats from this source, the present season, will be very small indeed, as compared with that of last year. It should be remembered, however, that the large amount of last year's cure, which passed over into this year, answers, to a great extent, as an offset for this deficiency, and in making calculations regarding the supply, this should be borne in mind.

Eaton and Hamilton Railroad.

The receipts of this road for the fiscal year ending December 31, 1858, were:

From passengers	\$56,942 47
" freight	89,380 91
" mails and express	5,542 84
	<u>\$151,866 22</u>

And the expenses were:

Maintenance of track	\$18,672 20
Do. equipment	17,089 16
Rent of track at Hamilton ..	10,000 00
" paid for equipment ..	6,010 38
Fuel	8,326 48
Conducting transportation ..	35,240 62
Rebuilding bridges	4,737 35
" culvert	4,136 56
Delinquent taxes for 1857 ..	3,038 26
	<u>107,251 01</u>

Carried to general revenue account....\$44,615 21

To which add—

Individual debts and cash assets of 1857	6,493 67
Proceeds of real estate sold	84,054 94
Miscellaneous items	14,005 46

General revenue for the year 1858 ...\$149,169 28

Disbursed as follows:

Interest account	\$4,137 41
Paid for cars	4,600 00
Domestic bonds redeemed ..	26,031 29
Notes paid	38,467 37
Real estate bonds redeemed ..	40,000 00
Suspended interest paid ..	20,193 32
Paid balances due in 1857 ..	10,556 52
Sundries	2,868 13
	<u>146,654 04</u>

Assets and cash on hand\$2,515 24

It will be seen from the above that the original floating debt of the company has been reduced some \$74,500; the funded debt some \$40,000; and the suspended interest debt some \$20,000—still leaving a floating debt to be provided for of some \$30,000, in addition to the suspended interest debt. For the payment of this balance of floating debt, and to complete the purchase of rolling stock sufficient to successfully operate the road, will require the entire application of the net revenues of the year 1859.

The gross revenue of the road for the past, as compared with the preceding year, show an increase of \$10,930 34. This increase was derived exclusively from the tonnage of the road—which was some \$16,000 in excess of 1857; while the passenger traffic was some \$6,000 less.

Included in the current expenses above, are some \$12,000, which are not properly chargeable thereto—having been expended in rebuilding two bridges that were destroyed by fire, for rebuilding a stone culvert and the payment of taxes for the previous year. The following is the company's

GENERAL STATEMENT.

Capital stock	\$469,762 68
Bonds issued	717,734 00
Domestic bonds	11,118 84
Bills payable	14,218 59
Suspended interest	138,445 62
Miscellaneous	7,558 16
	<u>\$1,358,867 89</u>
Construction	\$1,101,744 69
Equipment	79,022 91
Real estate	37,091 51
Cincinnati and Chicago R. R. Co. ..	47,300 00
Cincinnati, Logansport and Chicago Railroad Line	15,330 70
Profit and loss	63,778 77
Transportation balance	11,776 79
Post Office Department	\$1,173 25
Railroad current balance ..	1,487 86
Treasurer E. & H. R. R.	161 92
	<u>2,822 52</u>
	<u>\$1,358,867 89</u>

The officers are:

President—D. BARNET.

Treasurer—E. W. M'GUIRE.

Superintendent—D. M. MORROW.

South Carolina Railroad.

In the report of this Company for the fiscal year ending December 31st, the gross earnings from operations of the road are stated as follows:

From freight	\$1,017,421 31
" passengers	416,801 05
" mails and minor sources	66,786 08
	<u>\$1,501,008 44</u>

The expenses for same time were:

Bureau department—salaries and contingencies ..	\$18,054 37
Transportation department—salaries and wages ..	238,323 98
Conducting transportation ..	37,551 06
Annuities to the city of Augusta, from Aug. 1, 1857, to Dec. 31, 1858 ..	9,916 66
Oil and tallow	20,635 32
Wood	53,587 94
Maintenance of machinery ..	146,029 69
" " road	127,689 68
Savannah River Bridge ..	27,837 21
Masonry on Hampton's Bridge	870 68
	<u>680,496 59</u>
	<u>\$820,511 85</u>
Less sterling interest	\$122,142 74
" general	56,803 05
" damages, etc.	13,486 42
	<u>192,432 21</u>

Leaving a net income of	\$628,079 64
Dividend for first 6 mos.	\$155,184 00
" " second	164,883 00
	<u>\$320,067 00</u>

Carried to surplus income acc't. \$308,012 64

Compared with the previous year, there has been an increase in gross receipts of \$51,205 62; and in net earnings, \$83,537, notwithstanding a decrease of passage during the year of \$17,283 93 on local business, and of \$60,378 on through business; the latter was chiefly attributable to the opening of the Virginia and Tennessee route. The increase on the general business of the road has, however, more than supplied the deficiency. The business of the year has also been done at a much reduced cost when compared with the years 1856 and 1857—having been brought to the very economical point of 45.34 per cent., which covers extra as well as ordinary expenses. But for the decline in passenger business, the results of the year

would have far exceeded those of 1855, in which the income of the road reached its highest point.

The Auditor's Statement shows that the debt of the company has been reduced from \$3,537,608 65, in 1857, to \$3,213,850 12. This reduction, amounting to \$323,758 53, has been effected, in part, by the application of \$212,123 60 from the current income of the year, the balance, \$111,634 93, from the application of assets which have been made available and applied to this purpose.

The bonds of the Company fall due as follows:

Past due	\$11,400 00
In 1859	24,597 99
" 1860	47,631 67
" 1861	3,500 00
" 1863	451,333 33
" 1866	2,000,000 00
" 1868	192,000 00
	<u>\$2,730,462 99</u>

The President recommends that the policy of the Company with reference to its debt should, to a general extent, be determined on. He says:

"The ability of the Company to discharge its obligations is unquestionable; but the original agreement made when the European debt was contracted, imposes upon us the obligation to provide for too large an amount in one instalment. The debt should be arranged by distributing it over a series of years. The rate of interest paid on the foreign debt being only 5 per cent., it was inexpedient at an earlier period to exchange it for one bearing a larger rate of interest. It is, however, improper to suffer the maturity of the debt to approach too near, before provision be made against even a temporary default of payment. We, therefore, propose that the Company, by resolution, declare its concurrence in the policy indicated, and authorize the Board to re-arrange, by the substitution of other bonds, such portion of the present debt of the Company as they may find it inconvenient to provide for out of the present assets and current income, without interfering, to too great an extent, with the usual dividends. The Board are of opinion that there is no reason to believe that the rate of dividend recently declared will be diminished by adopting the plan suggested. They would also bring to the attention of the stockholders the fact exhibited on the last annual statements, that for the next four years the bonds falling due amount to but \$80,000, so that the discharge of a considerable portion of debt will necessarily be effected by payments of cash during the same period—thus strengthening the credit of the Company and facilitating the operation of extending the term of settlement for the balance of the debt."

No expense of an extraordinary character has been incurred in the road department during the past year, except for the erection of a new bridge over the Savannah River, at Augusta, and for the stone abutments for the renewal of a bridge of one span eighty feet in length, at Hampton's, on the Columbia road. The former was sufficiently completed to allow trains to pass over it on the 10th of December.

Howe's patent has been followed in its construction; It is of six spans, 904 feet in length, inclusive of a pivot draw. The end spans are 152 feet each, the remaining four 150 feet each. Its width outside is 18 feet 6 inches—width in the clear, 14 feet—and in clear height, 18 feet. It is supported upon seven piers of carefully selected black cypress, and an abutment of brick at the eastern end. Each pier, strongly framed, sets upon 20 piles—the draw pier upon 36 piles. On the Hamburg side, a trestle, about 1,000 feet in length, has been erected to approach this bridge, and an alteration and

elevation of the tracks in Augusta, became also necessary.

The masonry at Hampton's is progressing.

The line of road is in very good order, with the exception of a few points on the Hamburg branch, which require new iron. The Company will receive, during 1859, 2,000 tons of American rails, under a contract recently made with the Phoenix Iron Works, of Pennsylvania. The weight will be 58 lbs. per yard. Old rails are delivered to them in Philadelphia, the new iron received at that port, paying them a difference of \$20 per ton.

GENERAL CONDENSED STATEMENT.

Capital stock, 42,803 shares	\$4,179,475 00
Surplus income	308,012 64
6 per ct. sterl. b'ds, payable in 1863	183,333 33
5 do. do. do. 1866	2,000 00 00
6 do. b'ds to St. of S. C. do. 1858	8,000 00
6 do. do. do. 1863	192,000 00
7 do. bonds to Auditor's order	246,500 00
Bonds to individuals	34,629 66
Do. issued for double track, etc.	66,000 00
Bills payable	172,993 88
Scrip account	20,092 68
Pay rolls	39,534 92
Dividend notes due April, 1859	24,919 00
Do. do. January, 1, 1858	164,883 00
Transient creditors, coupons, etc.	60,963 65

\$7,701,337 76

Property in 242 miles of road	\$5,517,384 58
Lands	324,531 43
88 Negroes	77,961 72
62 Locomotives	516,344 46
59 passenger and 790 freight cars ..	534,444 60
Materials and machinery	52,341 21
Bills receivable	12,172 02
Bonds do.	53,283 36
Stock in various roads	374,060 00
Transient debtors	12,179 57
Sundry railroad accounts	71,672 40
Due by agents	103,370 19
Do. Post Office Department	12,750 00
Cash	38,842 22

\$7,701,337 76

The officers of the company are:

JOHN CALDWELL, *President.*

H. T. PEAKE, *Superintendent.*

THOS. WARING, *Auditor.*

[From "Nouvelles Annales de la Construction, August, 1858."]

Employment of Artillery in Public Works.

They are now working in the "Département de l'Ariège, (France,) in the improvement of the Imperial Route, No. 119, which, according to the location adopted, passes through the grotto of Mas-d'Azil, which has already been opened. At the entrance of the grotto, and at the highest part of the arch, there hung an enormous block of stone, presenting a considerable surface and adhering in a very imperfect manner in the adjacent rock.

Suspended at a height of 197 feet (60 metres) above the road, this rock menaced the safety of the travel; it was very necessary to detach the parts threatening to fall, and to consolidate the rest.

The engineer in charge of the works, saw that in blasting under such circumstances, the difficulties were almost insurmountable, and it seemed that cannon only could dislodge this inaccessible obstacle.

He therefore wrote to the prefect of Ariège to ask him for the assistance of some artillery, when, fortunately, a battery of the 10th regiment of that arm passed through Labastide about ten kilometres from the grotto.

The officer of this battery, having received in the meantime, by telegraph, orders to consult with the engineer, and to assist him, if possible, went on the 19th of June to Mas-d'Azil with two pieces

(cannons obusiers) of four inches ((0.12m.) diameter.

He placed these pieces on the road at a distance of 820 ft. (250 m.) from the grotto, in such a position, that notwithstanding the height of the rock, the limit of the angle which the gun could make with the horizon was not passed. The two guns threw with a remarkable precision. At the fourth shot the operation was finished, all portions of the rock which had seemed not to be intimately connected with the arch having been removed. The large block remained, but was no longer menacing; to prove its solidity, several balls were lodged in an open crack on the slope of the hill, and during this firing no movement was manifested in the mass, although the projectiles were forced to break off the edges of the rock, and to penetrate like wedges.

Journal of Railroad Law.

STOCK SUBSCRIPTION.—LIABILITY THEREON.

The liability of persons upon voluntary subscriptions has been a matter of much consideration and of some doubt. The following recent case in the Court of Appeals of this State determines the liability of a person on a subscription for railroad shares.

The Buffalo & N. Y. City R. R. Co. agt. Dudley.

This action was brought to recover the amount of a subscription made by the defendant to the capital stock of the Attica and Hornellsville R. R. Co. The name was subsequently changed to the Buffalo & New York City Railroad Company. The route also was changed. The defendant contended that, firstly, his subscription created no legal liability and, second, even if it did, the subsequent charge would absolve him therefrom. We shall give this week only such part of the case as bears upon the first question leaving the other for a subsequent occasion.

The caption or statement in the books, under which the defendant subscribed, were as follows:

"ATTICA & HORNELLSVILLE RAILROAD.

Capital Stock, \$750,000, divided into shares of \$50 each.

Books opened at the Mansion House, in the city of Buffalo, pursuant to a resolution of the commissioners, on the 10th day of December, 1845.

We the subscribers agree to take the number of shares by us subscribed of the capital stock of the Attica and Hornellsville Railroad Company subject to all the liabilities and penalties of the charter and by-laws of the said corporation."

Under this the defendant with other subscribers, wrote his name as follows: "Thomas J. Dudley, twenty shares." This was done about the 24th of March, 1847; and at the time of subscribing the defendant paid five per cent. upon the amount and took the receipt of one of the commissioners therefor.

JOHNSON, J., who delivered the leading opinion of the Court after a consideration of the question whether this subscription constituted an express written promise to pay, arrived at the conclusion that it did not and then proceeded as follows:

But upon this subscription, undoubtedly, the law raises an undertaking to pay the amount subscribed. It is contended by the defendant's counsel that an implied promise can only be raised upon a past consideration, upon some benefit or advantage which has already accrued to the party upon whom the obligation is presumed to rest. This is conceded. But the interest in the twenty shares of stock subscribed vested in the defendant the moment his subscription was complete. And this obviates also the other difficulty suggested by the defendant's counsel of a want of mutuality on the part of the plaintiff. The contract was ex-

ecuted on the part of the plaintiff when the defendant became a stockholder. That the defendant became a stockholder in the corporation and the owner of the shares subscribed for, is fully settled in *Spear vs. Crawford* (14 Wend. 20). Indeed the power of forfeiture given to the directors in the charter must proceed upon the assumption that the subscriber becomes the owner of the stock.* The interest acquired by the subscription is a good consideration to support an action for the amount subscribed by the subscriber. *Aug & Ames on Corp.*, 474. If this is not so and the argument is to be regarded as merely executory between the parties to deliver stock on one side when paid for and to pay on the other, it would clearly fail for want of an undertaking on the part of the plaintiff to deliver. There would be no mutuality whatever. The defendant's counsel insists that the defendant could not become a stockholder until his stock was apportioned or set off to him by the commissioners appointed to receive subscriptions. The charter however only provides for a distribution in case of an excess of subscriptions over the amount of stock. But that fact is not shown, and is not to be presumed in the absence of evidence. If no more than the amount was subscribed, the commissioners had no power to distribute and the several subscribers would be the stockholders holding the number of shares respectively taken. Had it been shown that the amount subscribed before the books were closed was greater than the whole capital, the plaintiff would have been compelled to prove in order to fix the defendant's liability, that the amount subscribed, or some other amount, had been awarded to him in the distribution; because, in such a case, as the amount of stock cannot be increased, a distribution becomes necessary in order to determine who are the stockholders, and the number of shares each is entitled to, and the subscriptions are made subject to such right or power of distribution, if the state of the subscription shall render its exercise necessary. The presumption of law, however, must be, I think, that the books were closed the moment the stock was all taken by subscription, and thus the title of the several subscribers to the number of shares respectively taken, subject to forfeiture by the directors for non-payment, became perfect the moment the books were closed.

The certificate is not essential to the ownership. It is mere evidence of title which the owner may require at any time and which the court would compel the corporation to deliver to the person entitled. *Aug. & Ames on Corp.*, 476; *Chester Glass Company vs. Dewey*, 16 Mass., 94; *Spear vs. Crawford, supra*. The plaintiff is not deprived of the remedy by action to recover the amount subscribed, because the power to forfeit the stock for non-payment is conferred by the charter upon the directors. That is a cumulative remedy merely. The corporation may lose the right of action by first resorting to remedy by forfeiture, for the reason that the forfeiture operates as a rescission of the contract, and the contract being ended no foundation remains for an action to rest upon. This was settled in the case of *Small vs. the Her-*

* The charter of the plaintiffs provided might require payment of the subscriptions under the penalty of forfeiture of the stock and all previous payments.

kiner Manufacturing Company (2 Comst., 330). But as long as the contract remains in force, an action to recover for the amount of stock taken may be maintained by the corporation against a subscriber. And it makes no difference whether the promise to pay is express or implied. The legal consequences of the undertaking to pay must be the same, whether it is express or such as the law implies merely. Several cases decided in other States were cited upon the argument to sustain the position that the corporation must resort to the remedy by forfeiture, in the case of an implied promise to pay for the stock subscribed, and could maintain an action only upon an express promise to pay. I am unable to perceive any solid grounds upon which such a distinction can rest. It has never been obtained in this State, and I cannot see how it can be maintained upon principle. For aught I can see, the rights of the subscriber and the corporation are precisely the same in either case. This point was fully considered in the Northern Railroad Company vs. Miller (10 Barb., 260), in the able and elaborate opinion of Mr. Justice Willard, and the distinction shown to be entirely destitute of foundation.

Mr. Justice Selden also rendered an opinion, in which he concurred with Mr. Justice Johnson in holding that the contract of subscription raised at least an implied promise to pay therefor, and that the remedy by forfeiture given to the directors was cumulative only. He was also of the opinion that the subscription itself constituted an express written promise to pay the subscription, on which point his opinion was as follows:

It is insisted that the promise to pay, if any exists, arises by implication alone, and that to give a common law remedy by action, in addition to the statutory remedy by forfeiture, provided by the charter, it is necessary there should be an express promise. To this it may be answered that it is by no means clear that the promise is to be regarded as implied merely. On the contrary, as I understand the distinction between express and implied promises, that existing in this case belongs to the former class. An express promise is one which is expressed in words. No particular form of words is essential to such a promise; but if the language used, when fairly interpreted, imports an undertaking to pay this, I apprehend, constitutes an express promise. The letters I O U, which have been held to amount to a promissory note, constitute an express promise no less than if the words "I promise to pay" had been used. An implied promise, on the other hand, is one which is not deduced from the language of the party, but which the law raises upon principles of equity and justice, in view of some consideration received. In this case a promise to pay is necessarily embraced in the agreement to take stock, subject to the "liabilities of the charter." As there was no way in which the defendant could take stock, agreeably to the charter, without paying for it, an agreement to take of course included a promise to pay, and this, I apprehend, must be considered an express promise.

If, however, it be considered as belonging to the class of implied promises, the consequences would be the same. I am not aware of any distinction, so far as the remedy is concerned, between an express promise and one which exists by implication of law. The promise being once raised, the ob-

ligation imposed is as binding and effectual in one case as in the other.

The Court also considered the effect of the alteration of the Company's route, which they held to be no defence, and judgment was rendered for the plaintiffs.

Finances of Philadelphia.

EXTRACT FROM THE MAYOR'S MESSAGE.

The finances of the city during the past year have been embarrassed, owing to the insufficiency of taxes provided for the payment of the appropriations to the different departments, and for the discharge of the outstanding liabilities of the preceding year.

Besides the revenue of the city derived from other resources the net amount of proceeds from taxation needed to provide for the appropriations of 1858 and for the deficiency of 1857, was about \$2,959,000, whilst the net amount to be received from that source, under the rate as fixed by Councils, could not exceed \$2,550,000. The deficiency thus caused, together with the inadequacy of the appropriations for the necessary current expenses of the government has been provided for by the creation of a loan of \$450,000, thus unavoidably adding to the funded debt of the city.

The receipts of the City Treasury during the past year amounted to \$4,744,963 44, which, with the balance on hand January 1st, 1858, made a total of \$5,233,001 54. Of this sum \$5,035,518 33 have been expended, leaving on the 1st of January, 1859, a balance of \$197,383 20. A temporary loan of \$200,000, negotiated in November last, will mature in March of the present year, but will be amply provided for by outstanding taxes.

Many of the warrants issued in 1855 and 1856 are withheld from presentation at the Treasury until provision is made for the payment of the interest which has accrued upon them. The appropriation of \$10,000, made in March last for such interest, has already been exhausted upon the warrants redeemed during 1858, and it is recommended that a similar appropriation be made, which it is believed will suffice to discharge all the remaining liabilities of this description.

The statement of the City Comptroller exhibits the entire funded debt of the city to mature after the 1st of January, 1859, to be \$20,338,705 31—of which amount \$3,173,432 52 are of five per cent., and \$17,165,281 79 of six per cent. loans. In addition to such amount the sum of \$86,368 42 has already matured, but had not been presented for payment.

This amount of \$20,338,705 31 will be increased by the loan of \$200,000 authorized for the construction of culverts, but not yet issued.

Of this amount of indebtedness there will fall due in 1860 \$945,234 64, and in 1861 \$448,108 55, for the payment of which some other provision must be made then by resort to the investments of the Sinking Funds and their accumulations.

By the report of the Commissioner of the Sinking Funds provided for the redemption of the city debt it will appear that nine several accounts have been opened for as many distinct loans, and that to each respectively is credited the amount appropriated for its redemption under the terms of the ordinance by which it has been created.

The amount standing to the credit of each Sinking Fund on the 1st of January, 1859, was as follows:

	Loans.	Cash.
Loan of \$10,000,000	\$166,993 74	\$7,466 79
" 1,000,000	11,800 00	54 63
" 800,000	20,500 00	10 05
" 96,900	4,200 00	76 50
" 675,000	27,100 00	55 75
" 1,050,000	35,300 00	47 25
" 100,000	2,400 00	34 25
Gas Works, loan	38,400 00	4,526 00
	\$336,693 74	\$12,271 22

No appropriation has yet been received to the sinking fund of the recent loan of \$450,000.

The most careful estimate that can be given, by

the Receiver of Taxes makes the gross amount, \$2,806,896 88, from which \$40,000 must be deducted for exempted estates and \$117,298 43 for the discount allowed to tax payers, which makes the revenue from taxation for 1858 \$2,549,598 45.

The ordinance fixing the rate of taxes for 1858 at one dollar and eighty-five cents on the hundred dollars of assessed value, was approved February 12th, and the books of the Receiver were opened March 8th for payment thereof.

The receipts from that date to the end of the year were \$2,019,712 25, leaving \$529,886 20 outstanding on the 1st of January, 1859, or nearly 20 per cent. of the entire tax levy, of which there has since been received to the 22nd instant, \$224,059 96 to avoid additional charge of 5 per cent. imposed by legal process for collection.

The amount of discounts allowed to tax payers during the past year, as previously stated, was \$117,298 43, or about 4½ per cent. of the taxes.

During the past year the average daily supply of water has reached 18,738,153 gallons, being an increase of 1,428,835 of such previous average. New water pipes have been laid to the length of 67,293 feet, exceeding the extent in any former year.

The receipts of the Water Department in 1858 amounted to \$457,518 48, and its expenditures to \$186,570 58, leaving a profit of \$270,947 90, applicable to the general expenses of the city.

The profits of this department have always exceeded those of any other branch of the government, and have since consolidation been steadily increasing. They amounted in 1855 to \$131,141 35; 1856, \$212,981 64; 1857, \$224,820 29; 1858, \$270,947 90.

The entire amount of unredeemed loan issued for the construction of water works is now but \$672,700.

The total valuation of real estate and of personal property assessed for taxation for municipal purposes for 1859, is \$155,697,669, of which the personal property amounts to \$2,697,433.

The number of taxables in the entire city is stated at 103,850.

The rental of property belonging to the city and not used for public purposes, together with other revenue collected by the Commissioner of City Property, has amounted during the past year to \$27,618 63. The various expenditures for repairs and improvements of the public buildings and squares have been \$82,434 65.

The probable receipts from the rental of markets and wharves, is estimated for the present year at about \$105,000.

Sixth Avenue Railroad.

At the election of the Sixth Avenue Railroad, held on the 2d inst., the following gentlemen were chosen Directors: Messrs. Sidney Mason, Frederick de Peyster, George R. Howell, Samuel S. Bowman, Waldo Hutchins, John B. Hall, A. Goldsborough Jones, John Q. Jones, Wm. H. Marcy, Chas. H. Marshall, Richard Mortimer, Lorillard Spencer and Francis A. Livingston.

Finances of Kansas.

EXTRACT FROM THE GOVERNOR'S MESSAGE.

The estimated value of the taxable property of the Territory is \$25,000,000.

The Commissioner of Claims, arising from the enforcement of the Territorial laws, reports that claims to the value of \$301,225 11 were presented for examination, on which \$254,279 28 were awarded, \$38,942 90 of this being on public, and \$215,311 38 on private claims.

On the 23d of December last, the debt of the Territory was \$19,000, and the assets \$33,946, including the assessments for five counties for the year 1858.

About three million acres of land have been sold and pre-empted in the various districts; of this amount, 1,196,127 59 acres were located in the Delaware, and 1,195,442 68 in the Lecompton Land District, the remainder in other districts.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of line	Capital paid in	Debt	Total cost of road & equip't	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of shares	NAME OF COMPANY.	Length of line	Capital paid in	Debt	Total cost of road & equip't	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of shares
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,923,911	545,762	150,224	6	---	Brunswick and Florida, Ga.	30	161,887	463,645	538,649	In progr.	238,771	9	---
Androscog. & Kennebec	66	457,909	1,835,304	2,293,213	159,518	83,368	6	---	South Western	143	1,393,100	441,292	2,267,323	865,214	238,771	9	---
Kennebec & Portland	72	1,107,628	1,783,738	2,891,366	213,255	120,909	6	98	Tennessee and Alabama	89	809,754	636,889	679,906	63,776	29,408	---	---
Portland, Saco, & Portsmouth	51	1,390,400	1,369,373	2,759,773	263,717	120,909	6	98	Tennessee and Mississippi	61	757,401	611,812	1,161,152	161,001	99,883	---	---
Boston, Concord, & Montreal	93	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Memphis and Charleston	247	2,228,177	3,495,288	5,672,470	642,022	334,604	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Mobile and Ohio	305	6,784,899	2,066,459	10,701,428	554,382	278,428	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Miss Central	89	1,576,474	926,796	2,503,098	115,679	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	South (Ill.)	82	1,000,000	1,400,000	2,400,000	284,276	150,748	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	N.O. Opelousa & G.W.	80	2,800,000	750,000	3,550,000	284,178	127,450	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	N.O. Jack-on & G.W.	206	4,076,000	1,815,610	7,142,561	190,008	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Vicksburg, Shreveport, & Tex.	21	853,706	100,285	992,051	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	East Tennessee and Ga.	111	1,192,974	1,735,669	2,703,429	227,363	104,992	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	East Tennessee and Va.	130	626,076	1,728,664	3,203,138	61,34	39,062	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Nash. and Chattanooga	169	2,263,905	1,626,992	3,896,701	641,532	219,25	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Covington & Lexington	95	1,344,580	3,045,917	4,091,604	4,48,008	220,908	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Lexington and Frankfort	29	430,665	1,667,899	2,655,255	95,807	47,717	6	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Lexington and Danville	13	694,444	71,000	765,500	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Louisville and Frankfort	65	744,039	625,210	1,502,095	245,760	109,050	6	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Atlantic & Gt. Western	---	866,939	77,494	613,231	---	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Bellefontaine and Ind.	118	1,874,395	1,315,237	2,993,392	348,552	120,836	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Clev., Col., and Cin.	141	4,746,2	90,400	4,762,700	1,149,741	511,740	9	68
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Cleveland and Toledo	200	3,333,712	4,225,558	7,191,016	930,282	413,700	30%	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Clev. and Mahoning	65	---	---	1,920,951	---	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Clev. and Pittsburgh	133	2,780,744	3,043,992	6,537,466	681,877	309,518	8	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Clev. P. & A. & B.	95	3,000,000	1,495,518	4,040,978	1,251,539	581,454	15	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Cin., Hamilton & Dayton	60	2,155,800	1,626,992	3,130,316	487,427	260,763	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Cin., Wm. & Zanesville	131	2,421,176	3,782,040	6,096,210	233,506	30,298	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Columbus and Xenia	55	1,490,450	149,000	1,632,475	403,212	181,688	10	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Dayton, Xen. & Belpre	63	437,838	422,658	860,496	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Dayton and Michigan	140	1,076,602	893,011	1,185,826	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Dayton and Western	35	310,000	700,481	1,036,173	125,940	65,253	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Easton and Hamilton	42	499,762	832,669	1,176,164	140,936	50,008	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Little Miami	65	2,981,292	1,266,000	3,925,157	77,442	290,123	10	62
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Jacksonville, Dayton & Cin.	171	2,697,090	3,368,006	6,065,096	682,614	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Central Ohio	138	1,279,907	6,224,660	4,046,822	760,092	164,697	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Pittsb. & Wayne & Chicago	123	6,247,040	9,822,550	14,279,704	1,646,359	677,787	15	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Pittsb. & Wayne & Cin.	50	371,350	81,000	390,353	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Sandy, Mans. & Newk.	127	1,350,000	2,206,357	3,552,357	328,958	164,479	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Scioto & Hocking Valley	56	403,976	699,050	888,858	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Spring, Mt. Vernon & P.	113	1,000,000	950,000	2,194,000	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Tol., Wash. & St. Louis	242	2,965,100	7,577,600	10,542,600	Recently opened.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Cin., Log. and Chicago	255	4,196,679	1,060,125	2,080,433	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Evansville & Crawfordsv.	109	998,081	1,270,872	2,158,713	249,868	124,140	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Ind. and Cincinnati	88	1,096,809	1,564,584	3,029,989	491,748	245,622	7	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Indiana Central	66	612,350	1,261,179	1,909,911	398,189	204,685	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Ind., Clev. & Pittsburg	83	836,791	977,694	1,824,425	253,19	86,248	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Jeffersonville	74	1,014,252	694,000	1,839,676	222,737	94,318	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Madison and Indianapolis	17	1,647,700	3,386,816	2,941,516	260,214	118,628	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	New Albany and Salem	288	2,535,121	8,281,948	7,029,494	645,827	371,402	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Peru and Indianapolis	73	---	658,314	2,000,000	150,000	90,000	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Terre Haute and Ind.	73	1,361,450	250,145	1,635,499	481,272	206,079	10	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Chicago and Rock Island	182	6,244,000	1,734,318	6,628,272	1,886,196	500,039	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Chicago, Burl. and Quincy	210	4,611,540	3,852,970	8,042,426	1,605,167	81,767	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Chic. St. Paul & P'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Galena and Chicago	259	6,023,800	3,899,076	9,936,455	2,313,768	1,102,042	8	63%
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Illinois Central	704	6,646,435	20,311,425	25,377,609	5,293,966	555,972	---	66%
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Peoria and Ogawika	181	1,569,899	2,200,000	4,400,000	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Oh. & Miss. (Wat. Div.)	147	1,780,295	2,322,403	4,870,556	Recently opened.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Terre Haute, Alt. & St. Louis	208	3,011,150	9,125,927	7,276,764	823,767	247,767	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Detroit and Milwaukee	155	838,000	1,928,964	1,966,069	Recently opened.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Mich. Central	282	6,087,840	3,866,639	12,847,238	2,743,758	744,946	8	49%
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Mich. South. & N. Ind.	475	8,874,400	10,459,69	19,336,044	2,809,487	544,311	18%	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Green Bay, M. & Ch.	40	1,000,000	780,000	1,780,000	In progr.	---	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	32,767	174,026	16	---	Milwaukee and Miss.	235	3,440,673	4,016,638	8,051,255	882,818	372,691	---	---
Quebec	51	1,104,586	2,844,977	3,949,563	3												

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	Jan. Jan. 1st July	N.Y.	1872	80	80
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	94	94
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	75	75
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do. do.	500,000	2d do. convertible	7	March, Sept.	"	1865	50	55
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	90	92
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	76	77
Oincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Oincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, August.	"	1861	95	96
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August.	"	1860	67	76
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	10	55
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August.	"	1863	75	80
Chicago and Mississippi	800,000	Do. convertible	7	April, October	"	1862-72		
Do. do.	1,200,000	Do. conv. till 1867	7	April, October	"	1862-72		
Covington and Lexington	400,000	Do. do.	7	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	89	98
Florida Railroad	1,500,000	Do. do.	7	March, Sept.	"	1861	77	78
Fort Wayne and Chicago	1,250,000	Do. not convertible	7	Jan'y, July	"	1873		72
Gaines and Chicago	2,000,000	Do. conv. till 1863	7	Feb'y, August.	"	1863	98	99
Do. do.	2,000,000	Do. convertible	7	May, Novemb.	"	1875	90	100
Great Western (Illinois)	1,000,000	2d mortgage, do.	7	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	1st mortgage, do.	7	April, October	"	1863	87	94
Jeffersonville	300,000	Do. convertible	7	April, October	"	1873		
Indiana Central	600,000	Do. 2d sec. conv.	7	May, Novemb.	"	1866		85
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianap. & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	77	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	7	May, Novemb.	"	1874	73	74
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1859	7	Feb'y, August.	"	1865	81	82
Little Miami	1,500,000	Do. conv.	7	2 May, 2 Nov.	"	1863	93	94
Michigan Central	1,000,000	No mortgage, convertible	7	April, October	Boat	1860	91	93
Do. do.	600,000	Do. do.	7	March, Sept.	"	1869	64	65
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	7	Jan'y, July	N.Y.	1862	70	77
Do. do.	650,000	Do. 2d do.	7	April, October	"	1863		
Do. do.	1,250,000	Do. 3d do.	7	June, Decemb.	"	1877	75	78
New Albany and Salem	500,000	Do. 1st section	7	April, October	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	7	May, Novemb.	"	1864-75		90
Northern Cross	1,200,000	1st mortgage, convertible	7	Jan'y, July	"	1873		75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867		85
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66		75
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872		60
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	101	102
Racine and Mississippi	680,000	Do. conv. sink'g f'd	6	Feb'y, August.	N.Y.	1875		75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1862-77	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	84	85
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	92	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	87	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1868	75	76
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1880	69	60
Do. do.	4,000,000	Not conv. Sink Fund \$420,000	7	Feb'y, August.	"	1875	43	44
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August.	"	1871	40	41
Do. do.	3,500,000	Convertible Inscription	7	Jan'y, July	"	1862	40	41
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	101	102
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	94	95
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	73	74
Illinois Central	17,000,000	Mortgage, Inconvertible	7	April, October	"	1870	87	89
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shar's	7	March, Sept.	"	1860	90	91
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	87	88
New York and Harlem	1,900,000	Do. do.	7	May, Novemb.	"	1861-72	91	92
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	96	98
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	85	86
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	74	76
New York Central	8,237,000	No mortgage, do.	6	May, Novemb.	"	1883	91	92
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec	"	1864	101	102
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	115	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	1,300,000	Do. convertible	6	Jan'y, July	"	1870	83	83
Do. do.	3,469,000	Do. inconvertible	6	April, October	"	1866	71	74

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES	Int't payable.	Off'd	Ask'd
New York, 5 per ct. 1858-60	98	99		Milwaukee, 7 per ct. coup.	X	Divers	50
Do. 6 do. 1870-75	92	94		New Orleans, 6 per ct. cp. R.R. X		Do.	72
Do. 6 do. 1883	102	103		N. Orleans, 6 per ct. cp. municip. X		Jan'y, July	87
Do. 6 do. 1890-99	91	92		Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	99
Albany, 6 per ct. coup. 1871-81 X	105	105		Pittsburgh, 6 per ct. coup.	X	Divers	50
Allegheny, 6 per ct. coup. X	55	70		Quincy, 8 per ct. coup. 1858 X		Jan'y, July	62
Baltimore, 6 per ct. coup. 1879-90 X	98	100		Racine, 7 per ct. coup. 1873 X		10 Feb'y, Aug	60
Booston, 6 per ct. coup. Long X	100	101		Rochester, 6 per cent. coup. X		Divers	90
Brooklyn, 6 per ct. cp. W.W. 1879 X	101	102		St. Louis, 6 per ct. coup. Long X		Do.	85
Clev'Pd, 7 per ct. cp. X	100	103		Do. do. Municipal X		Do.	87
Cincinnati, 6 per ct. coup. 1873-77 X	90	96		Sacramento, 10 p. ct. cp. 1862-74 X		Do.	37
Chicago, 6 per ct. coup. 1880 X	85	86		S. Francisco, 7 p. ct. cp. 1865, pay. N.Y. X		May, Novemb.	60
Do. 7 per ct. coup. W.W. 1873-78 X	98	99		Do. 10 p. ct. cp. 1871 X		Do. do.	89
Detroit, 7 per ct. cp. Long X	100	100		Do. 10 do. pay. N.Y. X		Jan'y, July	56
Dubuque, 8 per ct. cp. Long X	99	99		Do. 6 per ct. pay. N.Y. 1875 X		Do. do.	56
Jersey City, 6 p. ct. cp. W.W. 1877 X	72	73		Whessing, 6 per ct. coup. X		Divers	50
Lowville, 6 per ct. cp. 1880-83 X	65	65		Do. 6 p. ct. Mnn. 1874 X		March, Sept.	80
Memphis, 6 per ct. coup. 1882 X				Zorville, 7 do. X		April, October	81

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending February 7, 1859

BONDS	Per cent.	and int.
Little Miami, 1st Mort.	68	3
Covington and Lexington, 1st Mortgage	68	65
Do. do. 2d do.	68	40
Ohio & Miss., E. D., Construction	78	20
Cinc. Ham. and Dayton, 1st Mortgage	78	40
Do. do. 2d do.	78	75
Indianap. & Cincinnati, do. do.	78	80

STOCKS.

Cincinnati, Hamilton & Dayton	84	84
Columbus and Xenia	81	
Indianapolis & Cincinnati	83	
Little Miami	83	
Ohio and Mississippi (E. D.)	83	

Bank Statements.

The Bank movement in the four principal cities of the Union, in which weekly reports are made, as shown by their last statements, is as follows:

LOANS	DEPOSITS	SPECIE	CIRCULAT'N
N. Y., Feb. 5	\$120,412,176	\$91,935,766	\$25,991,441
Boston, " 7	59,120,000	20,815,800	7,114,000
Philad., " 7	26,472,869	17,007,167	5,979,439
N. Ori., Jan. 29	21,837,911	24,344,761	10,101,158

Total	\$237,872,655	154,104,984	55,836,638
Last week	236,438,105	156,601,766	58,032,898

Railroad Earnings.

The receipts of the Harlem Railroad for Jan'y are as follows:

1858	\$79,123 71
1859	91,990 20

Net increase.....\$12,866 49

The business of the Illinois Central Railroad for January was as follows:

Land Department.

Acres Construction Lands sold	3,546.94	for \$40,804 99
Acres Interest Fund Lands sold		for
Acres Free Lands sold	788.56	for 12,826 32

Total sales during the month	4,335.50	for \$53,631 31
To which add Town Lot sales		508 90

Total of all	\$54,140 21
*Acres s'd priv'sly, 1,229,835.38	for 15,637,148 96

Total.....1,234,170.83 for \$15,691,289 16

Cash received in January, 1858	\$35,677 98
Do. do. 1859	54,155 98

Construction Bonds canceled in January, 1859	\$36,000
Do. canceled previously	927,000

\$963,000

Free Land Bonds canceled in January, 1859	\$4,000
Do. canceled previously	123,000

127,000

Total Bonds canceled up to January 31, 1859	\$1,090,000
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Traffic Department.

Receipts from passengers	\$53,953 52
Do. freight	63,424 86
Do. mails	6,358 33
Do. rent of road	5,633 38
Do. other sources	2,356 87

Total receipts in January, 1859	\$131,736 41
Do. do. 1858	127,861 27

* Total net sales, after deducting cancellations made previous to January 1, 1859.

The traffic of the Great Western Railway of Canada, for the week ending 28th of Jan'y, 1859, was as follows:

Passengers	\$13,842 49
Freight and live stock	12,651 64
Mails and sundries	1,373 02

Total	\$27,867 15
Corresponding week, 1858	38,991 46

The following figures show the receipts of the Long Island Railroad for January, 1859:

Passengers	\$10,347 00
Freight	9,115 98
Mail	685 4

Total	\$20,148 87
January, 1858	18,113 91

Increase	\$2,034 86
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The receipts of the New York and New Haven Railroad for January, 1859, were as follows:

Passengers	\$71,115 38
Freight	13,000 00

Total	\$84,115 38
Due other roads	18,897 28

Total	\$65,278 10
Receipts for January, 1858	55,151 87

Increase	\$10,126 29
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The receipts of the Grand Trunk Railway of Canada for the week ending January 22, were

.....	\$39,932 58
Week ending January 23, 1858	41,911 55

Decrease	\$1,979 02
Total traffic from July 1st.	\$1,285,106 75
Same period last year	1,384,410 72

Decrease	\$99,303 97
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The following is a comparative statement of the earnings of the Little Miami and Columbus and Xenia Railroad for Jan.:

1859	\$83,007 45
1858	67,794 31

Gain	\$15,213 14
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This does not include the receipts from the Dayton, Xenia and Belpre Railroad Co., now worked by the Little Miami Co.

The business of the Michigan Southern road in January was:

January, 1858	\$106,737 18
January, 1859	104,179 19

Decrease	\$2,557 99
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The earnings of the Galena and Chicago Railroad Company for January were:

	1858.	1859.	Decrease.
Freight	\$55,225 09	\$38,085 25	\$17,139 84
Passengers	26,866 59	23,171 33	3,695 26
Mails, &c.	3,328 26	3,000 00	328 26

Total	\$85,319 94	\$63,256 58	\$21,063 36
Corrected earnings for the previous month	\$87,082 22		

The earnings of the Cincinnati, Hamilton and Dayton Railroad Co. were:

January, 1859	\$42,646 72
January, 1858	37,600 11

Increase	\$5,046 61
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This Company have paid off their floating debt in full from the earnings of the road, and expect to be able to resume cash dividends by April next.

The following are the earnings of the North Pennsylvania Railroad:

For January, 1859	\$22,802 07
For January, 1858	19,138 86

Increase	\$3,663 21
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The earnings of the first two months of the fiscal year were

.....	\$48,219 38
Same time last year	40,812 94

Increase	\$7,406 41
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The Hudson River Company earned in January \$192,161 against \$178,572 same month last year.

The gross receipts of the Erie road in January were \$493,000, showing a large nominal falling off—some \$130,000.

The January earnings of the Chicago and Fond du Lac road, were \$18,568 51, against \$20,446 82 in January, 1858, and \$15,790 75 in January, 1857.

American Railroad Journal.

Saturday, February 13, 1859.

Delano's New Method of Burning Coal.

We had an opportunity, last week, of visiting Messrs. Corning & Winslow's iron works, at Troy, in company with a party of iron manufacturers, for the purpose of witnessing the working of *Delano's improved method* of burning coal.

Without describing the manner in which he introduces the coal into the furnace or combustion chamber, we will merely say that it is supplied from *beneath*, by a very simple and effective contrivance. Assuming this part to be accomplished, the following are some of the advantages that have been always predicated of such an improvement, but which has never been successfully effected, until the use of Mr. Delano's contrivance.

The first thing gained by this mode of feeding, is the combustion of the gaseous matter which all coal contains, which we will assume to be 20 per cent. of their heating or evaporating power. To burn these gases, great heat, and a free supply of oxygen, are necessary. In the ordinary mode of feeding upon the *top*, these conditions can only partially concur. In supplying the raw coal, it is necessarily thrown with considerable force upon the ignited mass, packing it to a greater or less extent, thereby cutting off the free supply of air. Just in proportion as this is shut off, is combustion imperfect. In supplying raw coal in any manner to a fire, the first process is a distillation of its gases. The carbon which may be said to form the basis of the coal, cannot be brought into a high state of combustion till these are completely expelled. The fact may be familiarly illustrated by reference to the experience of any person who uses a furnace in warming his house. On the supply of new coal, a free draft must be allowed through the smoke-pipe, or the inmates will almost instantly be choked with coal gas. Very little heat results, or in other words, only partial combustion takes place till the gases are expelled. This is not thoroughly accomplished till the whole mass is brought to a white heat. The draft may be then shut or checked with impunity.

The gases thrown off, and which are so offensive when allowed to find their way into the house, are well known to be highly combustible. Could they be burnt, or, to state the process in a different manner, could they be decomposed into their constituents, and allowed to form new combinations, they would be not only innocuous, but the whole power of the coal would be utilized. This statement, however, does not express the entire loss from the *non-consumption* of the gases. The process of distillation or evaporation is well known to be the most cooling in nature, as any one can readily demonstrate by dropping a little ether into his open hand. The first duty the fire beneath the raw coal is called upon to perform, is to distill it. The next to expel the product in vapor. These duties consume a certain portion of the effective power of coal fed in the ordinary

manner, and diverts so much from the object to which it is directed.

Now it is easy to see that this waste might, to a considerable extent, be saved, if coal could be supplied to a fire from *beneath*. By this process the grate would be kept clean, and allow the free passage of air. The gases evolved would ascend with the air, through the super-incumbent mass of intensely ignited carbon, and the conditions requisite to the perfect combustion of the gases—a high degree of heat and an abundant supply of oxygen—would meet. They are fully supplied by Mr. Delano's improvement, as a slight inspection of its working demonstrates. Assuming, therefore, that he does accomplish the result claimed, a result better by 20 or 30 per cent. than the ordinary one of feeding *upon*, instead of *underneath*, the burning mass, is secured. In the old process, constant attention and labor is required to keep the grate bars and fire sufficiently clean to allow combustion to proceed at all. In puddling furnaces and in steamships, the fire has to be drawn every given number of hours, for the purpose of removing the cinders and earthy matter that have accumulated. All the incombustible matter the coal contains, settles upon the grate, and unless removed, would soon form a compact and impervious bed. But by feeding from beneath, all this foreign matter very soon ascends to the surface of the fire, whence it can be readily drawn. The body of the fire never has an amount of cinder or ashes mixed with it, sufficient to check free combustion. By Mr. Delano's process, a fire may be continued uninterruptedly for six months, if desirable. The owners of puddling furnaces and rolling mills will readily appreciate this advantage. Such is the result obtained at Messrs. Corning & Winslow's works. The fires are at all times in good order, always in condition for the most effective duty required of them. Two additional heats, therefore, are obtained every 24 hours, increasing the daily product over the old process some 20 per cent.

Another advantage gained in the Eastern States by the use of Delano's improvement, is the substitution of *anthracite* for *bituminous* coal. The former, we believe, is preferred at the works of Messrs. C. & W., at the same price for the two. To most of the iron establishments in the Eastern States anthracite comes all the way from one to two dollars cheaper than bituminous. We are informed that at the works referred to, a careful comparison of the product of furnaces working with bituminous coal on the old plan, and with anthracite coal with Mr. Delano's improvement, showed a saving equal to 2-80 per ton in favor of the latter in the cost of coal alone.

Another advantage claimed and admitted to a certain extent, is the superior quality of the iron produced. One of the difficulties in using anthracite in the ordinary way, is the *scaling* of the coal when first thrown upon the fire. The scales are taken up by the draft, and carried into the puddling chamber, and mix with the melted iron, and, of course, affecting its purity. By Delano's process this is entirely prevented. In his furnace the raw, or black coal, never finds its way to the top of the fire. The heat descends to it so slowly that it does not fly or disintegrate. The mass, or lump fed, preserves its form, and does not get to the top of the fire till thoroughly ignited. The

fire, consequently, always works clean, and very little enters the puddling or heating chamber, but the pure caloric, which is the only agent required in the manufacture of iron—all other ingredients brought by the blast into contact with the iron being positively injurious.

Such are some of the advantages that seem inferable from the successful application of any process that supplies coal from *beneath*. We believe the result on Messrs. Corning & Winslow's works have demonstrated that all of them have been obtained by the use of Mr. Delano's contrivance. These gentlemen have *nine* fires at work with it, and are introducing it upon others as fast possible. We believe we may say that the result obtained has not only far exceeded their expectations, but that it gives entire satisfaction. We think we may safely say that the introduction of this improvement constitutes an era in the history of the iron manufacture, as it is equally useful with bituminous as with anthracite. It is very easily applied, the whole apparatus being composed of cast iron, and costing for the largest class furnaces, not over \$100. A model drawn to a scale may be seen at the office of the JOURNAL, and further information obtained by addressing Mr. Delano, either at this city, or Syracuse, in this State.

The Commercial Bearings of the Treaty between "the Four Great East and West Lines."

It is well known that the N. Y. Central, Erie, Pennsylvania, and Baltimore and Ohio Railroads, have mutually entered into agreements to charge uniform rates between Boston and New York, and all points in the Western States. Without discussing the wisdom of such an agreement in the abstract, it certainly threatens to work great mischief to the trade of these cities. The four roads, for instance, charge the same rates on merchandise taken over either of them, or the lines of which they are a part, between New York and Indianapolis; but the Pennsylvania Company is the sole judge of what it shall charge between Philadelphia and Indianapolis. The difference in the rates between this point, and Philadelphia and New York, is just so much discrimination against the merchants of the latter city.

Such discrimination is now being made use of with great effect against its trade. Whatever effect it may have, it is well calculated to create a widespread discontent among our own merchants. But if it be injurious to them, it is equally so to the New York roads. If a premium be offered to the Philadelphia merchants, equal to the difference in the cost of transportation, an equal premium is offered to the Philadelphia road. Only place the rates from New York sufficiently high, and its merchants and roads would be without any business, as far as the West is concerned. When a compact like the one referred to borders so nearly on the absurd, there will be likely to be some fallacy in it, however applied.

Competition for business may be a very bad thing, but it will always be found difficult to prevent it by *compacts*, where a large number of roads compete. They are impossible among merchants and carriers, generally. Merchants thrive by reducing expenses when business is dull. The action and necessity of one can be no rule for another. It is so with manufacturing establishments.

Each goes on its own hook. It would be one of the most fatal things in the world should they enter into an agreement that for any article manufactured, a stipulated price should be asked. It would be the stepping-stone to indolence, prodigality and unthrift. Under such an agreement, there would be an end to all progress and enterprise. Yet manufacturers prosper without seeking to protect themselves against each others' imprudence and necessities.

But if competition is to be avoided by compacts, we certainly think that these should be between companies that are strictly rivals, as are the New York Central and Erie. To these the Baltimore and Ohio, and Pennsylvania Railroads, are rivals only to a very limited extent. But if the latter choose to come here, and bid for our trade, all the better for our city. This is to be regarded as well as our railroads. But admitting all to be rivals of each other, the better way in the end will be to leave each company to follow out its own policy. None of them will, in the long run, do business at a loss. If they have sense enough to make contracts with other, to keep rates at a living point, they will soon discover sense enough to act up to such a standard without such contract. If managers can be trusted in one case, they can in the other. By leaving each company free, this will be the result in the end—fair rates of charges, founded on experience of what it should be, to be remunerative. This is the necessary standard to which all must come at last. It is the natural one. A costly experience may be necessary to establish it; but the sooner the experience be entered upon the better. Artificial standards, having no reference to the absolute cost of transportation, are just like false principles, and not only must be abandoned in the end, but are mischievous while in practice. It is simply putting all roads on the same footing, making the strong carry the weak. But if a road have no inherent strength of its own, it ought to go down, and not, like a drone, be a needless tax upon public industry. Let each road act in view of its own necessities and strength, and it will not be long before a policy will develop itself, which will produce the best possible result for each line.

London Correspondence.

26, THROGMORTON STREET,
LONDON, 21st January, 1859.

To the Editor of the AM. RAILROAD JOURNAL.

SIR—You will see by the London daily papers that our political horizon is greatly overcast, but as the Austrian Government has wisely deferred to the opinions of other European Councils, in one important event, and there can be little sympathy between a liberal constitution and the Emperor of the French, Austria will probably retain her influence and power in Italy; at least for the present. Yet the uncertainty as to the result has had a great effect upon the English Money Market, and has checked the improving enquiry for good investments—paying a fair rate of interest, which was noticed upon the reduction of the Bank rate of interest. Sound American Securities were receiving a fair share of attention; and but for the depreciated price of Illinois Central Securities, some of the United States Railway Bonds would have materially advanced. The British public does not understand American Railways, nor does it seek to form an opinion founded only upon sim-

ple truths. The opinion of any great talker is readily adopted, and great talkers being seldom deep thinkers, a superficial knowledge is all that is obtained. Another Illinois Central, or Grand Trunk of Canada, Railway may be introduced, and as eagerly supported and as generally condemned, as the Illinois Central with its extensive land grant has been, within the past two years. Who, with any sound knowledge of the character of the Illinois Central Railway, could have felt satisfied in recommending the purchase of the company's shares, when the Directors were carrying a floating debt of over \$3,000,000, and received but an insignificant amount from sales of land, and when it was known there must be an annual loss in working the line, assuming interest to be a charge upon that working, and when a large amount of money had to be provided to complete the road. Yet, then, the shares were eagerly sought for at over 30 premium. Now, the true position of the company is making itself known, and the stockjobbing scheme of creating new shares for increasing the payment of the higher call is better understood. Yet there is lesser difference in the financial position of the company. The floating debt, which, one day or another, must be paid, has been paid, and the interest saved;—the completion of the road, which was indispensable, has progressed, and the receipts from land sales appear to have equaled 50 per cent. of the amount due, which, in the opinion of many well informed persons, is as much as might have been expected, considering the nature of many of the early sales. Only one unforeseen event has occurred, and that was the crisis of 1857; but as its effect cannot have reduced the estimated improving traffic, or prevented payment of bills for land more than equal to the sum received, it cannot be supposed that if such an event had not occurred, the traffic of 1857 and 1858 would have netted \$3,000,000 more than has been realized; or that the Land Notes would have produced more than an additional \$1,500,000; and yet the differences in the present market value of the share capital of the company, as compared with the selling price of the shares in March, 1857,—about the time when 1856 report was issued,—is over \$64 per share, and that upon 255,000 shares is more than \$16,000,000.

I am aware of using the increasing capital for estimating the total difference, but assumed the decrease of shares would be greater if a smaller number had been affected by pressure of sales. Either the high premium or the heavy discount must be wrong. The premium was not justifiable in connection with the financial position of the Company at that time, and the present discount indicates a want of knowledge of the prospects of the Company, as indicated by the most reliable reports. On Wednesday last I read a paper before a meeting of shareholders of this Company, showing that the cost of the road had not been excessive, although I fear it is at present far from completed for a heavy traffic; particularly from want of ballast;—that, provided the later sales of land have averaged, in locality, the sales up to 1st April, 1857, the sales of land were extremely satisfactory, as a fair proportion of out-lying lands from the road had been sold; so that the unsold land may be expected to realize a return equal to that for the lands sold; and that the traffic of 1857, as compared with 1856, presents most favor-

able features, particularly in those sections in which the Company has the greatest quantity of land. This undertaking is a land scheme, and one not of the very highest order; or the lands near to and along the Main line, would not have been excluded from the grant to the Company. It was doubtless pre-empted when the authorities made over the number of acres required by the charter, but how much earlier? It must have been an ill-judged design to project a line through pre-occupied land, when, from the sale of the lands through which the line was to pass, the cost of building the road was to be obtained; or the line was projected to further the view of speculation in land which, in knowledge of its location, had been already secured. Yet the land the Company has is valuable, and as the bonded debt of the Company could be supported by a call of \$5 per share per annum, if all shareholders paid up, the future prospect of the road is of a higher value than that indicated by the price of the shares, provided we have faithful reports; and upon analysis, they appear to be correct.

The London committee of shareholders are reported to have borrowed £150,000 for one year, at 7 per cent. commission; but had they made a call, the value of the shares would probably have advanced. The loan being made known, they declined in value.

The market for American securities is very quiet; the depositors in the Joint Stock Banks are growing tired of the low rate of interest they obtain, but American securities are not obtaining even a fair share. State Stocks are more in request than the best of railroad bonds; and in shares there is a far greater disposition to sell than to buy, the only exception being in favor of New York Central. Six per cent. United States Bonds are 100a102, and the five per cent. bonds 94a95; Maryland 5 per cent. sterling bonds are quoted 95a97; Ohio 5 per cent. stock, 95a97; Pennsylvania 5 per cent. bonds, 85a86 ex-coupons; Virginia 6 per cents, 84a86. In Railway bonds, Illinois Freeland have advanced 1 per cent.—they are 81a83; and Michigan Central bonds are firmer, without much doing in them; the 1860 and 1869 are 85a87; Michigan Southern sinking fund bonds are 65a70; New York 7 per cents. continue 93a95; sinking fund bonds, 90a92; Erie 8d mortgages have been done at 70, and are quoted 69a71; Pennsylvania Central 1st mortgages are 90a92; 2d mortgage sterling, 92a94; Philadelphia and Reading 1st, 86a88; 2d, 76a78. The quotations for shares are as follows:—Illinois Central, 35a33; Michigan Central, 45a50; Michigan Southern, 20a25; New York Central, 79a80; New York and Erie, 15a17; Pennsylvania Central, 38a40; Philadelphia Reading, 23a25; Consols close at 95a1a.

Yours truly, &c.,

WILLIAM LANCE.

In speaking of the land grant of the above road, our correspondent makes a mistake, which we will correct. The general government granted to the road one-half of *all* the unsold lands within 15 miles of the road. The Company adopted, as far as possible, the route that could give them the greatest amount of land. A considerable portion of the public lands in the State had been sold before the grant to the Company was made. If the scheme is a land speculation, it is of the *highest* order, when compared with similar schemes, as

the full complement of lands was obtained; and these are of the most fertile description, remarkably favorably situated.

Railroads in the United Kingdom.

The number of miles of railroad in operation in the United Kingdom, on the first day of January, 1859, from which returns were received, were 9,016. The total gross earnings for the past seven years have been as follows:

Years.	Mileage.	Earnings.
1852.....	6,915	£15,150,310
1853.....	6,944	16,845,531
1854.....	7,308	18,541,855
1855.....	7,692	20,243,151
1856.....	8,404	22,493,601
1857.....	8,676	20,682,465
1858.....	9,016	23,263,764

To the above mileage should be added 552 miles of road from which no returns were published. The cost of the 9,016 miles of road was £306,950,000; of the 552 miles, £9,900,000—making a total of £315,950,000, equal to \$1,529,198,000.

Northern Central Railroad.

The annual meeting of the stockholders in this road was held in Baltimore on the 2nd inst. The fourth annual report of the Company was presented by the President, ZENUS BARNUM, Esq. From this we learn that the receipts from operations of the road for the fiscal year ending December 31st, were:

From Passengers	\$212,912 08
" Freight	575,004 34
" Mails, etc.	27,456 96
	<hr/> \$815,373 38

And the working expenses were:

Transportation expenses.....	\$230,863 53
Repairs of cars	24,862 53
Do. engines	39,316 31
Do. machinery	20,647 06
Do. road	76,073 15
Do. bridges	5,494 07
Do. engine and station houses, etc.	3,981 39
Salaries	10,519 70
General expenses	11,064 20
	<hr/> 422 821 94

Net revenue.....\$392,551 44

To which add—

Int. on bds. of W. Y. & G. R. R. 3,195 00	
" debt " " 1,969 39	
Div. on stock " " 3,490 30	
	<hr/> 8,654 49
	<hr/> \$401,205 13

Less disbursements, viz:

Int. on Co's bonded debt.....	\$282,915 00
Interest on bonds and debt of W. Y. & G. R. R.	5,964 39
Dividends on stock, do.	6,975 10
Sinking fund for do.	8,896 42
Accidents, etc.	8,041 34
	<hr/> 311,992 25

Leaving as surplus profits

The receipts of the road show an increase of \$79,068 23 as compared with the previous year.—This increase is altogether attributable to the facilities offered to trade and travel, by the opening of the road to Sunbury, while the working expenses of the road for the same period are at the rate of 51.85 per cent. on the gross income, showing a decrease of 9.43 per cent. as compared with those of the past year.

The balance sheet shows that the company has expended during the past year for the completion

and improvement of the road, the following sums:

For completion of road.....	\$565,485 21
" rolling stock	115,654 22
" real estate at Sunbury	1,500 00
" sinking fund Wrightsville road ...	17,000 00

Total.....\$719,639 43

Derived from the following sources:

Loan No. 7, issued during the year ...	\$458,500 00
Increase of outstanding liabilities....	121,487 51
Decrease of funds	16,141 02
" investments	21,436 00
" materials on hand	2,861 02
Surplus revenue	89,243 88

\$719,639 43

The work of constructing the Sunbury and Erie Railroad to the city of Erie is now progressing rapidly. The President of that company gives assurance of their ability to open the entire line from Sunbury to Erie in about twenty months, and that ample means are in hand to accomplish so desirable a result. When this event takes place an entire new source of revenue will be added to the receipts of this company from the trade of the lakes, and the vast country which that work will open up to commerce—a country rich in minerals and the products of the forest, and which must find their outlet through this road to Baltimore and Philadelphia, diverging at Harrisburg over the Reading and Pennsylvania Railroads, to the latter city.

The importance of a perfect system of telegraph on the line of a railroad, is no longer a question of doubt. Thus impressed, the Board authorized the construction of a line from Bridgeport to Sunbury, which will be completed by the first of March. This, working in connection with the line in operation from the former point to Baltimore, gives the company all the telegraphic facilities required.

Since the organization of this company, a period of four years, no accident has occurred whereby a passenger has lost his life, nor has any passenger suffered an injury, not attributable to his own negligence.

The President states that the obstacles to the completion of the Canton Division of the road passing to tidewater will be shortly removed, so far as the grades of the street are concerned. The Mayor of the city has taken such steps as must bring the difficulties to a successful conclusion, and that too without compromising the interests of the city or the rights of the company. The Philadelphia Turnpike Road claimed \$20,000 damages for permission to the railroad to cross the turnpike below Canton, and subsequently the claim was increased to \$45,000. A jury of condemnation fixed the damages at \$3,500; this sum was offered but declined by the turnpike company. In the meantime measures were adopted for the completion of the wharves at Canton, and that part of the track adjacent thereto, in order to connect the same with the Philadelphia, Wilmington and Baltimore Railroad, and with the company's city track, and thus secure an outlet for coal, so important to both the city and the company.

The work connected with, and necessary to perfect this substitute, will be finished in a few days, when cars can be run daily from the mines to the Company's wharves; and it is confidently be-

The gross receipts from passenger transportation

General Sup't and Engineer—A. B. Warford.
Treasurer—J. S. Leib.

This company, who have kept their works in operation during the panic, have 11 steam engines, in the aggregate 10.31 horse power—3 water wheels of 90 horse power, make altogether 1, '21 horse power. They have at the time 54 single puddling furnaces, and foundations for 8 more. 20 heating furnaces; 9 trains of rolls, with 20 pair of rolls; 3 rotary squeezers and an alligator. They are prepared to make styles and weights of rails, from 20 pounds to 75 pounds per yard. Girders for houses, from 6 inches to 10 inches deep. Round iron from 5-16 to 6½ inches in diameter. Square iron from 5-16 to 4½. Flat iron from 5 8 to 11½ inches wide. Also T, angular and irregular shaped iron. In addition to the rolls mentioned in trains, they have at least 200 pairs of rolls on hand ready for use, and make a larger range of sizes, and a greater variety of shapes than is made at any other mill in the United States. The company are now getting housens cast that will weigh 7 tons each, for erecting three high rolls, for making girders, railroad iron, &c. They are also going to enlarge and increase the power of the engines, sufficient to drive the increased power of the works. Independent of the above, the company have three blast furnaces in successful operation, driven by a powerful engine.—*Phoenix.*

Railroad Dividends.

The Third Avenue Railroad Company has declared a dividend of \$2 50 per share, payable on the 9th inst.

The New York and New Haven Railroad a dividend of three per cent., payable on the 16th inst.

The Oswego and Syracuse Railroad Company usual half-yearly dividend of four per cent., payable on the 20th inst.

The Pennsylvania Coal Company has declared a semi-annual dividend of 3½ per cent., payable on the 15th inst.

The New York Central Railroad Co. a semi-annual dividend of 4 per cent. payable on the 21st inst.

Insurance Dividends.

The St. Nicholas Insurance Company have declared a semi-annual dividend of five per cent., payable on demand.

The Irving Insurance Company a semi-annual dividend of 7 per cent. payable on demand.

The Northwestern Insurance Company a semi-annual dividend of ten per cent., payable on the 15th inst.

The New York Fire and Marine Insurance Company a semi-annual dividend, payable on demand.

The Lorillard Fire Insurance Company a semi-annual dividend of eight per cent. payable on demand.

The Mercantile Mutual Insurance Company, a dividend of 11 per cent., payable on the 14th inst.

The Niagara Insurance Company, 10 per cent. payable on demand.

The Indemnity Fire Insurance Company, a semi-annual dividend of 5 per cent. payable on demand.

Interest on Bonded Indebtedness.

The Coupons on Clinton County, Ohio, Bonds will be paid by presenting them at the Clinton County Bank, in Wilmington, Ohio, on the first Monday in March, 1859, with current rate of exchange on New York on that day, so far as the funds for that purpose will go.

Holders of the First Mortgage Bonds of the Sackets Harbor and Ellisburg Railroad are informed that the dividend arising from the sale of said railroad, will be paid on demand, upon the presentation and surrender of the Bonds and Coupons to the Trustee at the office of Messrs. Schuchardt & Gebhardt, No. 21 Nassau st.

Bank Dividends.

The United States Trust Company a semi-annual dividend of three and a-half per cent., payable on the 10th inst.

The City Bank of Brooklyn a semi-annual dividend of three and a-half per cent. payable on the 12th inst.

The Oriental Bank a semi-annual dividend of 3½ per cent., payable on the 10th inst.

The Citizens' Bank has declared 4 per cent., payable on the 12th inst.

Banks of All the States.

The reports of the Banks of the United States made nearest to Jan. 1, 1859, show numbers, specie and circulation as follows:

No. of Banks.	Specie.	Circulation.	Deposits.
1854..1,208	69,410,253	204,689,309	188,188,744
1855..1,307	53,944,545	186,952,223	190,400,342
1856..1,398	59,314,063	195,747,950	212,705,662
1857..1,416	58,349,838	214,778,822	230,351,352
1858..1,433	74,412,832	155,208,344	185,932,049
1859..1,560	102,974,127	156,143,897	278,411,697

Bank of England.

The return from the Bank of England for the week ending the 19th January, gives the following results, when compared with the previous week:

Public deposits.	£6,260,269	Increase ...	£741,527
Other deposits.	14,948,727	Decrease ..	777,081
Rest.....	3,248,430	Increase ..	34,329

On the other side of the account:

Gov. Sec'urities.	£10,698,807	Unchanged.	
Other Securities.	16,507,901	Decrease ...	£56,293
Notes unempl'd.	12,044,485	Increase	83,550

The amount of notes in circulation is £20,991,185, being an decrease of £88,980; and the stock of bullion in both departments is £19,186,269, showing a decrease of £6,081, when compared with the preceding return.

ISSUE DEPARTMENT.

Notes issued	£33,035,670
Government debt	£11,015,100
Other securities	3,459,900
Gold coin and bullion	18,560,670
	£33,035,670

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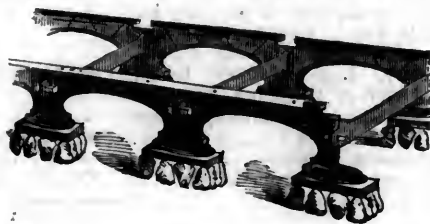
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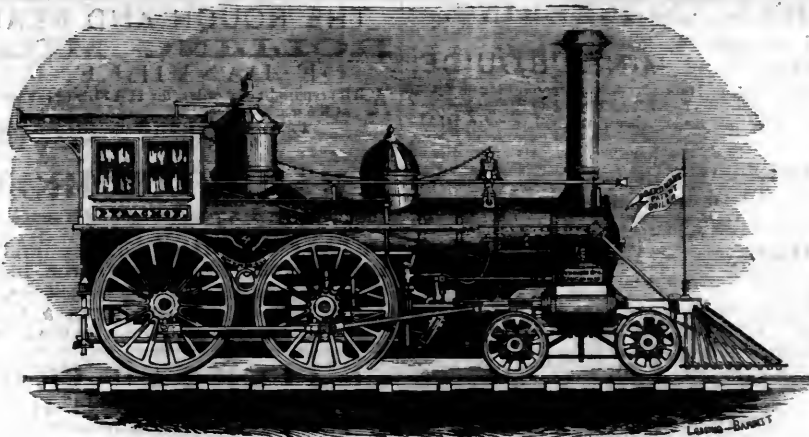
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J. H. BOARDMAN, Secretary.

THE principal advantages of the BOARDMAN Coal
 Burner over wood engines and other "Coalers," are
 the economical use and perfect consumption of coal without
 smoke or sparks and without injury to the fire box or tubing
 —having a large portion of the weight near the track—the
 tubing by its vertical posit on and downward draft can never
 clog and the introduction of a rim a manner causing a perfect
 mixture and combustion of the smoke and combustible
 gases. They are no more expensive than other Coalers,
 but little exceed the cost of Wood Engines, and can be had
 through this Company of Wm. MASON, Taunton, Mass., or
 other builders, if preferred. Outside connected Engi-
 nes can be altered to this Coal Burner at an expense of
 from \$800 to \$1,200—thereby saving from \$1,500
 to \$2,500 per annum, or a saving of 50 per cent. where
 a ton of coal and a cord of wood are about the same price.
 The average duty of a locomotive is 25,000 miles per annum.

OFFICE OF THE NEW JERSEY R. R. & TRANSP. CO.,
 June 1, 1858.

J. P. JACKSON, Esq.

DEAR SIR:—I am able to report that the two BOARDMAN
 BOILER COAL BURNING ENGINES, the PENNSYLVANIA and
 A. O. ZABISKIE continue to be operated successfully. The
 PENNSYLVANIA, the first introduced, has run 40,602 miles, averaging
 6 to 7 heavily loaded cars and run at a high rate of speed.
 Average cost per mile 11.2 cents. The A. O. ZABISKIE has
 now run 11,304 miles, all with the heavy Mail Express train,
 averaging 7 to 8 cars. Average cost per mile 10.1 cents. The
 GOV. PENNINGTON, a first class wood burning engine (the most
 economical ever run on this road), is running the alternate trips
 with the A. O. ZABISKIE, with the same train of cars. Aver-
 age cost per mile 19 cents. The entire average cost per mile
 for the wood engines, for the year 1857, is 20.1 cents. The
 average cost of coal engines, thus far 10.6 cents.

The saving has, therefore, been 95 cents, or 47 per cent. All
 of which is respectfully submitted.

J. B. GADDIS, General Assistant.

NOTE.—In above coal and wood are estimated on the tender
 at \$3 each.

Mr. J. VAN RENSSELAER, formerly executive assistant on this
 road, says in his certificate, "the consumption of smoke and
 gas is very perfect, and I believe there is less annoyance from
 cinders than from our wood burning engines. The engine I
 think has less lateral motion on the track than any other I ever
 rode on. I have yet to learn that the boiler is more injured
 than from the use of wood. There has been no difficulty in main-
 taining from 85 to 100 lbs. of steam, while running our heaviest
 and fastest mail and express trains."

BOSTON & LOWELL AND NASHUA & LOWELL RAILROADS, }
 Superintendent's Office, March 6, 1858.

I have been acquainted with the Boardman Coal Burning
 Locomotive Boiler for the last three years. I consider it supe-
 rior to any other Coal Burning Locomotive that I am acquaint-
 ed with. The one that we have in use has given entire satis-
 faction in all respects. The following is the cost per mile for
 running with coal for the months of December, 1857, and Jan'y,
 1858. The coal costs per 2,240 lbs. on the tender \$3. Decem-
 ber cost per mile for fuel, 10.61 cents; January cost per mile
 for fuel, 9.56 cents. The wood locomotive to perform the
 same labor (it runs the freight) costs from 18 to 21 cents. The
 wood on the tender costs \$3.75 per cord.

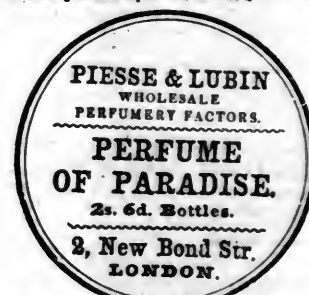
JOHN B. WINSLOW, Supt.

Statements from other Roads show similar
 facts.

The BOARDMAN BOILER is also used for stationary
 and steamboat purposes, showing durability, safety and a
 saving of 40 to 50 per cent. in fuel. Its expense
 is no greater than that of other Boilers, and with a brick fur-
 nace it is less than that of common Cylinder Boilers.

CAUTION.

As there are numerous imitations of our FRANGIPANNI
 purchasers are requested to see that the names of PIESSE
 and LUBIN are impressed upon the bottles.



Sold by all Fashionable PARFUMERS and DRUGGISTS in the
 World.
 WHOLESALE AGENT FOR THE UNITED STATES:
 Mr. JONAS PHILLIPS, 87 Pearl st., New York

T. A. HOWLAND & CO., BROKERS IN RAILROAD IRON

AND

EQUIPMENTS,

54 WILLIAM ST., NEW YORK,

ARE prepared to furnish either Foreign or American
 Rails, and Equipments of every kind desired, on
 the most favorable terms.

REMOVAL.

W. D. STARLING, Metal Broker and Rail Inspector,
 from Lawrence Pountney Lane, to the Vestry House,
 Lawrence, Pountney Hill
 LONDON, 1857.

Patents for Inventions.

T. D. STETSON, Agent for procuring patents, No. 5 Tryon
 Row, (near City Hall). A circular with full information
 sent free by mail.
 American correspondent *Prac. Mechanics' Jour.* from 1854

MINE ENGINEERING.

JUST PUBLISHED.

PRACTICAL MINER'S GUIDE,

A TREATISE on Mine Engineering comprising a set of Trigonometrical TABLES adapted to all purposes of Abutment, diagonal, vertical, horizontal and traverse DIALING, with their application to the dial exercise of Shafts, Adits, Drifts, Levels, Slopes, Levelling, etc. Also, a treatise on ASSAYING METALS, with tables, which exhibit at one view the value of Assayed Ores; rules for calculating the power of Steam, Water, and Cornish Pumping Engines; quality, manufacture and choice of Cordage and Wire Rope for Mine service; on Gases, Ventilation and Lighting of Mines; Boring Artesian Wells, etc.; together with a collection of essential Tables, Rules and Illustrations, exclusively applicable to Mining Business. Price \$2.25 by mail. Can be ordered of any Bookseller. Published by GEO. M. NEWTON, At the office of the Mining Magazine, No. 1 Spruce St., N.Y.

ENGINEERING PRECEDENTS.

JUST PUBLISHED—8vo, 127 pp., \$1.25. Sent free on receipt of the price. FISHERWOOD'S (B. T. Chief Engineer U. S. Navy) ENGINEERING PRECEDENTS for STEAM MACHINERY, embracing the Performances of Steamships' Experiments with Propelling Instruments, Condensers, Boilers, etc., accompanied by Analysis of the same; the whole being a logical matter and arranged in the most practical and useful manner for Engineers. H. BAILLIÈRE, No. 290 Broadway.

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A treatise on the Mechanical Engineering of Railways; embracing the Principles and Construction of Rolling and Fixed Plant, in all departments. Illustrated by a Series of Plates on a large scale, and by numerous Engravings on Wood. By DWIGHT KINSEAR CLARK, Engineer. 2 vols. half-morocco, \$24.

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Ninth edition. Bound, \$2.25.

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Sixteenth edition. Bound, \$1.35.

THE ENGINEER AND MACHINIST'S DRAWING-BOOK;

Illustrated by numerous Engravings on wood and steel. Half-morocco, \$10.50.

"A complete and reliable Work on the draughting of machinery in all its details, exhibiting a high style of art. We are confident that this book will form an important element in the education of our young mechanics."—*Scientific American*.

BLACKIE & SON,
117 Fulton St.,
NEW YORK.

2m4

TO MANUFACTURERS OF CEMENT.

OFFICE OF THE COMMISSIONER OF THE U. S. R. R.,
Corning, Allegany County, Va., Jan'y 3rd, 1859.
PROPOSALS will be received, at this office, until the 14th of February, 1859, inclusive, to manufacture one hundred and fifty thousand bushels of hydraulic cement, within a distance of five miles of this place, for use in the masonry now under contract on the line of the C. V. and O. R. R. Railroad.
Further information may be had by persons desirous of forming proposals, on application at this office on and after the 21st inst.

By order of the Board of Public Works,
CHARLES R. FISK,
Chief Engineer.

5t3

PROPOSALS

WILL be received until the 12th of February next for the construction of 3,600 lineal feet of wooden bridging, on the line of the Lynchburg Extension, of the Orange and Alexandria Railroad. The plans are now ready for inspection, at the office of the Company, in ALEXANDRIA, Virginia.
Detailed information will be sent to any parties desiring it.
H. W. VANDEGRIFT,
Engineer and General Sup't.

3t3

American Railroad Iron.

THE undersigned is prepared to contract for delivery of American Railroad Iron at points on the Mississippi, Ohio and Tennessee Rivers. Rails can be furnished 20 to 30 feet long when required.

JAMES HENDERSON,
13 Cliff St., New York.

Railroad Iron.

500 TONS 56 lbs. and 1,500 tons 60 lbs. best Welsh make, Erie pattern, now in port, for sale.
T. A. HOWLAND & CO.,
54 William St., New York.

THE ROUGH AND READY ROLLING MILLS OF DANVILLE, PA.,

ARE prepared to fill orders for RAILS of the best quality at the market price.

T. A. HOWLAND & CO., Agents,
54 William St., NEW YORK.

RAILROAD IRON.

The undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES, ARE PREPARED TO CONTRACT FOR DELIVERY

On board ship at Liverpool, or Welsh port.

G. CONGREVE & SON,
18 Cliff St., N. Y.

RAILROAD IRON. CONTRACTS FOR RAILS, AT A FIXED PRICE OR ON COMMISSION, DELIVERED AT AN ENGLISH PORT,

Or at a Port in United States,

WILL BE MADE BY THE UNDERSIGNED, **THEODORE DEHON,**
10 Wall St., near Broadway, New York.
500 tons T rails on hand 64 to 67 lbs. per lineal yard.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER,
BALTIMORE.
And 17 Nassau St., New York.

6m35

IRON BOILER FLUES.

Lap-Welded Boiler Flues, 1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes, from ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.
Warehouse—209 South Third St.,
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STEPHEN MORRIS, **CHARL WHEELER, JR.,**
THOS. T. TASKER, JR. **STEPHEN P. M. TASKER.**

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.
MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
Agents for the United States,
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BALTIMORE.
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MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.**IRON AND STEEL**

IN ALL THEIR VARIETIES.
BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
OUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mill Furnaces and Forges in this State, orders for any description of iron can be executed.

August 16, 1854

1v33

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other near OASWELL & PERKINS, Brokers, 69 Wall St.

New York, January 1, 1859.

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,
President of the Incorporation.
February, 1855.

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The Crescent Manufacturing Company, WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address
N. WILKINSON, Sec'y,
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RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

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The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER Free on Board at Shipping Ports in England, or At Ports of Discharge in the United States, RAILS OF SUPERIOR QUALITY, And of Weight or Pattern as may be required.

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RAILROAD IRON. WOOD, MORRELL & CO.,

Having leased the extensive Works of the

Cambria Iron Company,

Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

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RAILROAD IRON AND COMMON BARS.

THE UNDERSIGNED,

Sole Agents to Messrs. GUEST & CO.,

The Proprietors of the D. Walsley Iron Works,

Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad St.

RAILROAD IRON.

THE RENSSELAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

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MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS,

OF EVERY DESCRIPTION,

64 COURTLANDT ST., NEW YORK.

RAILROAD AXLES, WHEELS AND CHAIRS,
SPIKES, BOLTS,
 NUTS, WASHERS,
CAR, SHIP AND BRIDGE BOLTS.
 IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.
 STEEL AND RUBBER SPRINGS,
 LOCOMOTIVE AND HAND LANTERNS,
 PORTABLE FORGES AND JACK SCREWS,
 COTTON DUCK FOR CAR COVERS,
 BRASS AND SILVER TRIMMINGS.

Also, Sole Agents for the Manufacturers of Car Head Linings.
 Orders for the purchase of goods on commission, aside from
 our regular business, respectfully solicited.

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F.W. Rhinelander, James A. Boorman, Edwin A. Post.
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 RAILWAY AGENTS

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 SUPPLY ALL MATERIAL AND ARTICLES USED IN THE
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WILLIAMS & PAGE,
 No. 44 Water, between Congress and Kilby Streets,
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Iron Rails, Chairs, & Spikes,
 FREIGHT AND COAL CARS,
 (on hand or made at short notice.)

Wheels and Axles of all kinds,
 LOWMOOR, AMES, BOWLING, AND NASHUA TIRES,
IRON AND STEEL,

Of all kinds for Shops and Tracks.

Car Trimmings, Paints, Oil, Varnish, Car and Switch
 Locks, Ventilators, Lanterns, Head-Lights, Gauges, Rubber
 Springs, Chairs, Hose and Belting, Ash, Pine and other Tim-
 ber, and ALL MATERIALS USED IN Equipment and Repairs of
 Railroads, Engines and Cars, at lowest prices.

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RAILWAY SUPPLIES GENERALLY.

ALSO

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 IRON AND STEEL OF ALL KINDS.
 BOILER, TUBES AND FELTING.

BOLTS, NUTS & WASHERS.
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Car Trimmings of all descriptions. Sperm, Whale,
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 nishes; Steam and Water Gauge; C. R. and Switch Lock-
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 Signal Belts, Machinists' Tools. Gauge Cocks, Oil Cups, etc. etc.
 Sole Agent for T. M. Y. Co.'s celebrated "A" LAMP GLASSES.
 and PACKER'S IMPROVED RATCHET DRILL.
 Orders promptly filled at the lowest prices.

W. H. HOLT.

W. H. GILSON.

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GILBERT, MURDOCK & CO.,
 No. 9 NASSAU STREET,
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ARE agents for, and prepared to furnish at manu-
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RAILROAD IRON,
LOCOMOTIVE ENGINES,
RAILROAD CARS,
 CAR WHEELS,
 AXLES, CHAIRS,
 SPIKES, TOOLS,
ETC., ETC.

All inquiries in reference to the above articles will
 receive immediate attention.
 New York, January, 1859.

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 STEAM GAUGES, COCKS AND WHISTLES,
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 ENGINE, STATION, AND SIGNAL BELLS,
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AGENCY OF THE KEROSENE OIL COMPANY.

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 AND ALL MATERIALS NECESSARY FOR THE
 Construction, Equipment & Operating of Railways.

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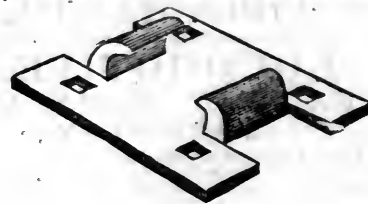
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SUCCESSORS TO THE

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Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the
 Patent Rights owned by the late New York Wrought
 Iron Railroad Chair Company, and also the entire machinery
 for manufacturing their improved Wrought Iron Railroad
 Chair, we are now fully prepared to receive and fill all orders
 from responsible parties, to any extent, with promptness and
 dispatch.

The thickness of the lips of our Chair increases through the
 bend, where the greatest strength is required, and diminishes
 towards the edge; so that a less weight of metal may be used,
 and a strength acquired equal, if not superior, to that of a
 heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought
 Iron Chair now in market, to our works for a supply; believ-
 ing they combine qualities superior to any others now manu-
 factured.

The Chairs weigh from seven and a-half to fifteen pounds,
 according to the thickness of the Iron and size of the Chair.
 To enable us to give you a perfect fit, it will be necessary al-
 ways to send a section of the Rail. We cannot undertake to
 make Chairs without a proper pattern, as it is impossible to
 make a perfect fitting Chair from a drawing.

Our manufacture of Chairs are used on a large number of
 Roads, of which the following list comprises some of them, viz

Galena and Chicago Union Railroad Company,
 North Carolina Railroad Company,
 New Jersey Central Railroad Company,
 Panama Railroad Company,
 Buffalo and State Line Railroad Company,
 New York and New Haven Railroad Company.

Messrs. M. K. JESUP & CO., 44 Exchange
 Place, New York, are the only parties authorized to act
 as our Agents.

**THE ROGERS
 Locomotive & Machine
 WORKS,**

SUCCESSORS TO

ROGERS, KETCHUM & GROSVENOR,
PATERSON, N. J.,

HAVING extensive facilities, are now prepared to furnish
 promptly, of the best and most improved description, either

COAL or WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER VARIETIES OF

RAILROAD MACHINERY.

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THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.,

HAVING large facilities, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and dispatch.

BRASS and IRON CASTINGS; LOCOMOTIVE TYRES welded and blocked to exact sizes, and every thing connected with the building or repairing of Locomotives furnished on short notice.

These Works being located on the New York Central Railroad, near the centre of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN, Superintendent.

RICHARD NORRIS. HEARY LATIMER NORRIS.
RICHARD NORRIS & SON,

LOCOMOTIVE STEAM ENGINE
BUILDERS,

SEVENTEENTH STREET, ABOVE CALLOWHILL,

PHILADELPHIA,

ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

LOCOMOTIVES,

RAILWAY TOOLS AND
MACHINERY.

MANUFACTURE to order, Locomotives of any Arrangement, Weight or Capacity. In Design, Material and Workmanship, the Locomotives produced at these Works, are equal to, and not excelled by any.

Locomotive Engines.

DANFORTH, COOK & CO.,
PATERSON, N. J.,

HAVING created an extensive Shop, with the most approved Machinery and Tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various Tools suitable for Locomotive Repairing.

The business of Machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1749

UNION WORKS, BALTIMORE.

POOLE & HUNT,

Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TYRES, equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for expressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description. SHAFING, PULLIES and HANGERS.

WEST POINT FOUNDRY.

R. P. PARROT, Lessee.

Manufacturer of Marine and Stationary

ENGINES,

Sugar Mills, Saw Mills, Iron Bridges, Cannon, WATER PIPES, BOILERS, IRON BUILDINGS.

CASTINGS & FORGINGS OF ALL KINDS

W. M. KEMBLE, Agents,

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MACHINERY OIL.

REFINED NEAT'S FOOT OIL
WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all kinds of machinery use.

PETER COOPER,

17 Burling Slip,
New York.

IMPROVED PATENT METALLIC OIL,

MANUFACTURED UNDER THE PATENT OF

J. & W. W. CUMBERLAND,
And under the personal Superintendence of the Inventor.

THE NEW YORK
CUMBERLAND METALLIC OIL
WORKS,

FOOT OF 24th STREET, EAST RIVER.

OFFICE, 205 BROADWAY,
NEW YORK.

WE respectfully call the attention of those interested in the running of

RAILROADS,
STEAMSHIPS,

Machine Shops, Factories,

and Machinery of all kinds, to the valuable qualities of our Oil.

1. It is entirely free from Gum, cools heated journals quicker than water, and keeps them cool by its superior anti-friction properties.

2. By its use less motive power is required than in using any other oil yet known. It will move machinery with very perceptibly less motive power than Sperm Oil.

3. The same quantity will last at least 33% per cent. longer than Sperm, or any other Oil, and the quality is always strictly uniform in its season. We make Summer and Winter Oil.

4. Having largely increased the capacity of our works, we have been enabled to reduce the prices below those of last year; and it is our intention to keep it at all times below the price of Sperm.

The prejudice existing against Oils has very properly grown up, and we are fully aware of the deceptions which have been and still are practised by unscrupulous persons; but we are prepared to substantiate all the foregoing statements relative to the superiority of our Oils, at

OUR OFFICE, 205 BROADWAY,

by large numbers of certificates of the best managed lines of

Railroads, Steamships, Machine Shops, & Factories

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In no case has it failed to meet the approval of the consumer. The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, February 19, 1859.

Railroad Management.

To the Editor of the AM. RAILROAD JOURNAL.

SIR:—I notice in your valuable JOURNAL of Feb'y 5th, a communication relating to the management of the New York and Erie railroad, to which you invite careful attention, as you say the writer is one of the most experienced and successful railroad men in the country.

The writer in order to show an incompetent management of the road, draws a comparison of its operations with the line from Buffalo to Cincinnati. He says the two lines are of about the same length; one being 465, and the other 462 miles: that the mileage made on each line during the last year was about the same. The gross receipts of the two, were \$5,151,616 43 for the Erie, and \$4,350,131 77 for the Buffalo Line; those of the Erie being \$801,484 66 more than the other. He then states the expenses for operating the Erie road for the same year to have been \$3,791,457 92, or 75 per cent. of its gross earnings, and the expenses of operating the Buffalo and Erie line for the same year to have been \$2,139,767 13, or less than fifty per cent. of its gross earnings, showing that it cost \$1,651,690.79 more to make the same

mileage on the Erie road than upon the Buffalo & Cincinnati line.

It should be remembered, however, in making this mileage the Erie road earned, or received, \$801,484 66 more for the work it did than was received by the B. & C. line. The writer does not state what proportion of gross receipts of either line was from passengers or freight; nor does he show what expenses, by either line, was charged to construction account. He tells us their construction accounts were open. He does not inform us whether the sums expended by either party in operating their roads left them in as good or better condition at the end of the year as they were at the beginning. These things may have had much to do with the reported cost of working the two lines. Railroad men know very well how convenient it is to have construction books open, when it is necessary or desirable to make a good show in an annual report.

It is also understood that the Erie road charges to its expense account the cost of moving on its own line the materials for its own consumption, and credits the same to gross receipts.

Your correspondent, however, seems to think the difference in cost of mileage upon the two lines is owing to the fact that the New York and Erie road is operated under a single management, while the Buffalo and Cincinnati line is operated under four independent and distinct managements. These conclusions I think are for the most part very erroneous.

The effect of operating the several railroad corporations composing the line from Boston to Wilton, N. H., under one management, instead of two, as formerly, has resulted very favorably for the net productiveness of the property, the shares of which have, under the single management, risen rapidly in the market, this line is certainly operated at a much less cost for mileage than it was under the two managements. The property is also maintained in a better condition than it was before. I do not, however, attribute these results so much to a single management as I do to the qualifications and fitness of the persons composing it. The line instanced is a short one compared with the Erie, or Buffalo and Erie line. But to account for the difference in expense of mileage, in operating these two lines, it should be borne in

mind that the one from Buffalo to Cincinnati is comparatively a very straight and level road, while the Erie line has numerous and heavy grades, with a large amount of curves: that locomotives of the same weight will draw nearly two tons on the Buffalo and Erie line to one upon the Erie road. Therefore assuming the cost of fuel and labor to be the same on each line, neither passengers nor freight can ever be transported at as small a cost per mile on the Erie road as upon the other. It should also be stated that the Erie road during last summer carried passengers at a very low rate, while their cars, it was said, were quite empty at that.

The truth is, the ill success of the Erie road is not so much owing to its being operated by one management as it is that the management is not of the right sort. It is admitted that the President is a man of integrity and ability as a financial officer, and that he has the best interests of the corporation at heart. But this is not all that is required to make the road prosperous. The President should be aided by a Directory who are qualified and able to understand and contend with all the great difficulties encountered. If a few able and true men, living on the line of the road, could be persuaded to sit in the Board, they would render very important services. The President should also be supported by the most able and experienced man that can be found, as a General Superintendent. He should have three or four of the best qualified men that can be had, as Division Superintendents. The mechanical and road departments should be put into the hands of men whose judgment, experience and skill will enable them to operate and maintain the machinery at the minimum cost. The sum annually expended in these departments is too vast to place them in the hands of weak or inexperienced men. But it must not be supposed that such men would allow themselves to be converted into "machines," and worked under the "iron will" of any man. They must have power and position, and be consulted upon, and made responsible for, all matters connected with their respective departments.

Such a management would be strong and effective; it would work harmoniously, and the road could not fail to be prosperous under such a government. It would be far more effective and eco-

nomical than half a dozen weak ones, constantly in conflict with each other as is most generally the case, where there are several independent and distinct governments. In support of this view, the lines from Philadelphia to Pittsburg and Chicago, and from Baltimore to Wheeling and Parkersburg might be cited. These roads have each a very able management which embraces great practical skill. There is reason to hope, with such examples around them, the owners of the Erie railroad will yet develop such a management. But if they expect to fill all these important posts in the person of Mr. MORAN, or any other one man, though they were to give him a \$100,000 salary, they will be disappointed. Such an administration would be a failure and the property continue to depreciate from year to year. *

The Trade, &c., of Havana in 1858.

From a highly interesting table in a late number of the *Diario de la Marina*, we take the following items, which will be read with interest by our business men generally:

There arrived in the port of Havana for the year 1858, 132 American merchant steamers, against 167 in 1857. Sailed in same time 130, against 165 in 1857.

The number of passengers arrived from the United States in 1858, was 4,887. The total number of passengers from all points, 31,555.

The number of vessels touching at the port of Havana in 1858 was 958, of 393,572 tons, against 909 vessels, of 406,873 tons in 1857. Vessels from all points during the year, 1,949, of 679,815 tons; against 1,953 of 696,366 tons in 1857.

The total exports of sugar from Havana and Matanzas for the year 1858, was 1,268,150 boxes, against 1,116,696 boxes in 1857; of which to the United States 349,135 boxes, against 302,112 boxes in 1857.

The total exports of coffee from Havana in 1858, 20,483 arrobas (25 lbs.) against 19,609 arrobas in 1857; of which to the United States 7,734 arrobas against 31 arrobas in 1857.

Total exports of molasses from Havana, in 1858, 21,545 hhds., against 30,160 hhds. in 1857, of which 18,765 to the United States, against 23,804 in 1857.

Total exports of rum for the year, 18,415 pipes, against 14,058 in 1857; of which to the United States 919 pipes against 250 pipes in 1857.

Total exports of cigars 106,231,000, against 146,720,000 in 1857. Of unmanufactured tobacco 6,046,896 lbs., against 3,590,135 lbs. in 1857.

Total exports of honey, 1,679 tierces, against 1,640 in 1857; of which to the United States 234 tierces against 264 tierces in 1857.

Total exports of wax 37,015 arrobas, against 49,732 arrobas in 1857; of which to the United States, 373 arrobas against 80 arrobas in 1857.

Total imports of rice for the year—from the United States 76,877 quintals (100 lbs.) from Spain 72,486 quintals, and from India 115,273 quintals.

Debt of Tennessee.

The whole Public Debt of Tennessee, by the late return, was about as follows:

Old debt for Banking, State House, &c. \$4,017,000
Loans to Railroads (the regular bonds). 6,100,000
Indorsements for railroads. 2,550,000

Total \$12,667,000

The regular 6 per cents. sold in our market constitute a first and only mortgage lien upon 610 miles finished railway, or \$10,000 per mile. The indorsed bonds of the Nashville and Chattanooga Company, the East Tennessee and Virginia Company, and the City of Memphis, constitute a first mortgage lien upon 255 miles of finished railway, besides the faith of the companies and city, principles to the bonds, and a Sinking Fund of 2 per cent. a year, which runs after five years from the date of issue.

Illinois Central Railroad.

We publish below a report made by James Caird, Esq., to the Chairman of the Committee of English bondholders, in reference to the lands owned by this company. Mr. Caird visited this country the past year, and spent many weeks in a careful and minute examination of these lands. He is well known to be a leading authority in England in agricultural matters, both in his judgment of, and in the successful culture of the soils of that country. His report, therefore, cannot fail to interest the public generally, as well as the parties interested in the Illinois Central Railroad.

To George Moffatt, Esq., M. P., Chairman of the London Committee of the Illinois Central Railway Company.

SIR—Having undertaken in August last to visit Illinois and examine the lands of the Illinois Central Railway Company, and as circumstances may prevent me from being present at the meeting of the Company on the 6th inst., I beg to report to you, for their information, my opinion of their landed property. Having traversed nearly their whole line on three different occasions, and spent many days besides in driving through the country from numerous points, I had very ample opportunity for inspecting the nature and quality of the soil, and the condition and prospects of the settlers upon it.

The whole extent of the lands of the Company is 2,595,000 acres, which is more than the fourteenth part of the entire State of Illinois, and nearly equal to the fourteenth part of all England. Of this vast territory 1,244,000 acres have been sold, and 1,351,000 remain on hand. It would seem to me a very moderate estimate to value these at \$11,420,000, which, with the price of the lands already sold, would leave \$6,500,000 of a balance after the redemption of the whole mortgage debt.

In offering this moderate valuation, which is less than what has been previously put upon them, I do not say that the unsold lands may not yet realize the full sum at which they have been hitherto valued. The gradual rise in the value of land which the annual accumulation of gold is bringing about, and the increasing population of Illinois, are circumstances that may more than counterbalance those which weighed with me in reducing the generally received valuation; and if the company were capitalists who had no other object than to wait till time developed the value of their lands, there can be no doubt but that the first valuation would be realized; their main object however is to create traffic for the railroad, and I believe it can be demonstrated that every acre of good land along their line which remains unbroken, or in the hands of people who are unable to cultivate it, is an annual loss to the company of at least one dollar an acre. For that reason it is certainly their policy to encourage early sales.

With regard to the lands already sold, you are aware that a majority of the purchasers are persons of very small means, who were encouraged by the credit system to buy more land than they could use, and who were dependent on the produce of the land itself for the means of paying it. I am convinced, from personal observation and inquiry among them, that the general failure of the last wheat and oat crop has crippled them most seriously, and that few of them can have any fund from which to pay their land notes before at least one good harvest. But I am also convinced that they are anxious to redeem their obligations, and that they reckon their farms of considerably more value than the price at which they bought them from the company. For, though they often offered to sell their farms to me, it was invariably at a price which was meant to include both the first cost and reimbursement to themselves for "improvements;" that is, for the building, fences and cultivation they had put upon them.

I cannot, however, agree with the policy which has been hitherto adopted of permitting persons to become the purchasers of any extent of land for which they could pay a deposit of 6 per cent.; the company neither knowing, nor caring to know,

whether they had adequate means to cultivate the land. Such a system was sure to lead to over speculation; for though the sales in 1855, 1856, and 1857, which were so enormous in extent, may not have been forced by any undue exertions of the land department of the company, they were, undoubtedly, encouraged by the facility offered by the credit policy. The consequence is, that a vast extent of fine land is locked up in the hands of persons who are unable to make a profitable use of it, and whose poverty and complaints deter others from becoming purchasers.

The sudden demand which arose for the company's lands in 1855, and which was followed by such seemingly prosperous and extensive sales, was the result of a general and great rise in the price of all agricultural produce, and was by no means confined to the lands of the company. The price of wheat was 100 per cent. higher in Illinois in 1855 than in 1853, and in consequence of this, the public sales of land by the American Government rose from one million acres in 1853 to fifteen million acres in 1855. It is not to be wondered at that the company's sales should have risen in an equal proportion, especially when it is considered that met. with very little cash in their pockets could purchase from the company a farm near a railroad and good markets, and of rich land, for an absolutely smaller deposit of cash than must have paid down for public lands in the remote regions of the West. But if the company's policy had then been to demand—in addition to advance interest—a deposit equal to the price of the public lands, their sales would have been very little diminished, and the purchasers would have given better security for the regular and progressive cultivation of the country. I feel convinced that one-fourth part of the land that has been sold, if well cultivated, would bring a larger produce traffic on the line than the whole does under its present management.

With these views, whilst I would advise, as a matter of necessity, every consideration to be given to the persons already on the lands, even though that should include an extension of their present long credits, I think that the company should adopt a different policy for the future. They might with great propriety demand a deposit of \$1½ an acre over and above whatever credit terms they may deem it right to grant. It can be no hardship to any man who is qualified to become a purchaser, that the company ask so very moderate a guaranty as five shillings an acre, which, in the case of an 80 or 160 acre lot, would be a cash payment in either case of only £20 or £40.

The great body of settlers upon the lands of the company are farmers and tradesmen from the Eastern States. There are also some colonies of French Canadians. And the tide of emigration had likewise set in from Ohio, the temptation of open rich prairie land being an inducement to the woodland farmer to go farther west. This is a fact of much interest to the owners of prairie land, as it shows beyond question the higher value which a working farmer places on such lands. In the Ohio State Report for 1857, this fact is referred to at some length; and it is there shown, that in many counties a decrease in the agricultural population had taken place, and that in five townships named in one of the best wheat counties of the State, the farming population had decreased 6 per cent. by the emigration of small farmers seeking a better home on the virgin soil of the West. It is not to be supposed that the movement undoubtedly going on of the American farming population from east to west, will stop at Illinois. There are vast prairie countries west of the Mississippi, to which many are attracted. But having visited Iowa and Minnesota, the States which most compete with Illinois, I have not seen any lands of equal quality, and with the same facilities of railway access, which can be bought in these States on lower terms than the lands of the Company, while your lands have besides the immense advantage of being from 300 to 500 miles nearer the eastern market. This is an advantage equivalent to the whole price of the land in the diminished expense of transporting a single crop, a superiority so obvious, that

it cannot be overlooked by men who have really the means to buy and cultivate land. We must otherwise imagine men of sense, with their eyes open, preferring to buy land 300 miles away from a market at the same price for which they can obtain it close to a market; and granting that the distant soil and climate were equally favorable, which they are not.

The rapid increase of the population of Illinois—now said to be 1,600,000—which is ten times what it was in 1830, is of itself a proof that this natural advantage which the State possesses has been fully appreciated by the Americans themselves. The fertile character of her soil is so proverbial, that it has obtained for Illinois the distinctive appellation of the "Garden State of the Union. Though not a tenth of her soil is yet cultivated, she already produces more grain than both Ireland and Scotland, and possesses twice as many horses, cattle and pigs as the latter country. The knowledge of such facts is sufficient proof of the rich and fertile quality of the prairie soil of Illinois. But an evidence not less convincing is to be found in the character of the soil itself, as explained by chemical analysis. I brought home with me four samples of the prairie soils, taken from the Company's lands at different points, so distant from each other as to afford an average of the country. I sent these to Professor Voelcker, consulting chemist of the Royal Agricultural Society of England, requesting a complete analysis to be made, but without giving any intimation of the country whence the soils had been brought. The analysis has occupied several weeks, and has been made with great care, and the results are now before me. I annex for your information a copy of the Professor's letter, with the analysis, and, for the sake of comparison, columns showing the composition of some of the most fertile soils in this country. It will be found on examination, that in almost every element of fertility these prairie soils excel our best lands. They are especially rich in nitrogenized organic matter, that nitrogen which yields the same ammonia for which we send millions sterling annually to Peru. Professor Voelcker says, "I have never analyzed before, soils which contained so much nitrogen, nor do I find any record of soils richer in nitrogen than these." He adds, "In the least fertile of these four soils, there is more nitrogen than in the Carse of Gowrie soil." It is the large amount of nitrogen and the beautiful state of division that impart a peculiar character to these soils, and distinguish them so favorably." It only wanted this to confirm the favorable opinion I had already formed of the remarkable fertility of Illinois. Underlaid as nearly the whole state is with coal, with abundance of limestone, and rich in other mineral sources of wealth, this State, the nearest point to the Atlantic of that rich American western country, which is destined ere long to become the most populous part of the Union, must increase rapidly in wealth and population. With scarcely any part of its territory fifteen miles from a railway, and with the advantage of both river and lake navigation, the uncultivated land of Illinois will soon be taken up. Holland and Belgium put together are not equal in extent to one-half of Illinois, nor are they equal to her in natural quality of soil or mineral resources. Yet the population of these countries, which is chiefly agricultural, is nearly six times that of Illinois. If we were to estimate the future by the past of this State, we should expect her to double her present population in the next ten years, and then she would have room to go on for a long time at the same rate of progression. But every time the population doubles, wealth is said to quadruple, so that the land which is worth £2 an acre now should in ten years be worth £8. To the capitalist seeking a safe and profitable investment, I know none so promising as the soil of Illinois, at the present low rates of price. If his lots were judiciously selected and placed under prudent skillful management, they could not fail to

return a handsome annual dividend; and, in the course of a few years, by the mere lapse of time and the progress of wealth and population, to double in value. There are only two classes of persons to whom I would recommend emigration from this country to Illinois, first, young farmers of activity and intelligence, and with some capital at their command; and, second, intelligent, hard-working farm laborers, not exceeding 35 or 40 years of age. I do not at present advise people from towns, who are unacquainted with country labor, to go there, for the labor market is overstocked, and our people of that class cannot adapt themselves to the hardships and first difficulties of a settler's life so readily as an American. If a considerable number could go together in an organized plan it might be different, and great facilities are now offered by the Grand Trunk Railway of Canada for conveying British emigrants in bodies from the Atlantic to the Western States. But I think nothing of this kind is likely to be successful without an united plan and arrangements made for the arrival and settlement of the party. But the advantages offered by such a country to the two classes to whom I have previously referred are very important. I will only say here that, to the young farmer who has to face keen competition at home, with rising rents and increasing wages, both good things to the country at large, but both likely to be accompanied by diminished profits to himself, the change will be this—that he may become the owner of better land in Illinois for the same sum as he would have to pay as a year's rent here; that though manual labor is dearer it is greatly economized by machinery; and that the soil is so fresh and inexhausted that it requires no outlay for manures. Moreover, in the present state of that country, he need not purchase more land than he can crop, as he is free to graze his stock on the uncultivated prairie. It is this that constitutes one great advantage of settling on the prairie in comparison with a woodland country. In the latter, the settler can use no land until he conquer it from the forest; in the former, he not only can at once put under crop all the land he purchases, but he is at liberty to pasture his stock and cut his hay without hindrance on all the uncultivated and fertile prairie which stretches around him. The grass and hay for his cattle thus cost him nothing, and though manual labor is dearer, horse-keep, which in England is such a heavy charge on the farmer, is very cheap. The skillful stock manager could not fail to make money, whether by cattle or sheep. Merino sheep are found very profitable. And, in regard to corn farming, if he considers that the average price of wheat in Illinois for the last ten years has been more than half that of England during the same period, whilst land of equal quality can be bought at less than one third of the English price, he will see in a moment the immense disproportion between the value of the produce and that of the land in two countries,—and the chances which he thus has of an immediate profit besides the farther great probability of such an early rise in the value of the land he buys as will tend to equalize the respective rates of profit in the two countries. The advantages which are offered to this class of purchasers by your credit system are very obvious. A young man cannot enter an arable farm of 300 acres in this country without a capital of nearly £2,000. Half that sum in Illinois will make him owner of the same extent of land, fenced, ploughed, and all under wheat. And if he avails himself of the Company's credit system, little more than £500 will be necessary to start him. But no man can expect to reap such advantages without some drawbacks. A settler in any of the Western States need not look for the comforts of an old country. He must make up his mind to endure exposure, hard work if need be with his own hands, and many disappointments and unexpected annoyances before he finds himself successful. He must also be prepared to face the risk in certain years of fever and ague, to which all rich new countries south of the 45° parallel are subject, after seasons of great humidity and great heat—com-

plaints for which, however, medical skill has discovered remedies and alleviations, which greatly diminish their danger. While young constitutions soon become acclimated, old people ought not to emigrate at all to such countries.

In conclusion I would say, that I cannot see any circumstances that should prevent a gradual but certain rise in the value of the Company's lands in Illinois. If I were a large shareholder, it would not disturb me much to hear that some considerable body of the inexperienced and poor purchasers had abandoned their farms. It would seem to me rather an advantage for the Company to hold the land themselves, and receive the benefit of increasing value, than to resign all the benefit to parties who are unable to use the land so as to increase the traffic of the railroad, and yet wish to avail themselves of the Company's credit.

I beg to express the obligation which I feel to Mr. Osborn, the President of the Company, for the aid which he gave me in prosecuting my enquiries, and to Captain McClellan and the officers of the Company for their valuable assistance.

I am, sir, your most obedient servant,

JAMES CAIRD.

LONDON, 6 Sergeants' Inn, Fleet Street,
January 3, 1859.

The following is the analysis by Prof. Voelcker of the composition of several specimens of the soil of Illinois, compared with several specimens of English and Scotch soil.

	Prairie Soils from Illinois Central Railway Lands.				Soil from Old Red Sandstone of England.	Wheat Soils from Scotland.			
	No. I.	No. II.	No. III.	No. IV.	Mid Lothian.	East Lothian.	Pertshire.	Berwickshire.	
072. Matter & Water of Com.	7.51	5.76	9.77	9.05	4.38	10.19	6.82	8.55	
Ammonia	6.67	6.55	8.58	8.74	4.51	6.93	5.51	7.35	
Acid of Soda	4.35	2.57	4.13	4.39	3.15	5.17	4.41	4.87	
Acid of Potash	3.37	3.37	3.37	3.37	3.15	3.15	3.15	3.15	
Acid of Lime	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	
Acid of Magnesia	1.63	1.40	1.29	1.29	1.29	1.29	1.29	1.29	
Acid of Soda	1.82	1.82	1.82	1.82	1.82	1.82	1.82	1.82	
Acid of Potash	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	
Phosphoric Acid	0.08	0.05	0.12	0.10	0.08	0.08	0.08	0.08	
Sulphuric Acid	0.07	0.05	0.14	0.08	0.08	0.08	0.08	0.08	
Silica	75.91	60.98	71.75	74.11	85.11	71.55	74.39	63.19	
Water	75.91	60.98	71.75	74.11	85.11	71.55	74.39	63.19	
Carbonic Acid and Loss	7.4	5.3	8.2	9.9	3.1	2.58	4.42	2.70	
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
Containing Nitrogen	.30	.26	.33	.34	.18	.22	.13	.21	
Equal to Ammonia	.36	.31	.40	.41	.22	.22	.13	.21	

* NOTE.—Farms in this district, which is the celebrated wheat tract of Scotland, let at from £3 to £4 an acre.

Abstract of the several Returns of the Railroads of Massachusetts, for 1858.

NAME OF CORPORATIONS.	Capital paid in.	Cost of road and equipment.	Debt.	Length of road.	Length of Branches.	Total Income.	Expense of work'g road.	Per cent. of Dividends.
Agricultural Branch [1]	\$171,822	\$329,921	\$126,774	28.36	.....	\$12,288	.....	6†
Berkshire [2]	600,000	600,000	None.	21.20	.....	42,000	.....	7†
Boston and Lowell	1,830,000	2,422,598	451,025	26.75	1.87	407,400	\$217,621	6
Boston and Maine	4,076,975	4,219,326	None.	74.26	8.79	754,788	431,888	6½
Boston and Providence	3,160,000	3,524,982	195,220	43.50	12.00	537,764	278,590	6
Boston and Worcester	4,500,000	4,689,099	560,774	44.62	24.00	923,224	545,816	6
Cape Cod	681,690	1,031,625	259,017	46.10	1.04	106,846	57,363	...
Cheshire	2,085,925	3,080,832	829,296	53.64	.....	297,333	188,814	...
Connecticut River	1,591,100	1,801,914	251,000	50.00	2.35	238,390	117,513	||
Danvers [3]	65,120	216,779	162,102	9.20	.....	.....	.....	...
Dorchester and Milton Branch [4]	73,340	136,789	41,550	3.25	.....	.....	.....	...
Eastern	2,853,400	4,590,742	2,277,718	44.20	30.51	616,784	332,267	...
Easton Branch [5]	49,325	55,894	5,262	3.78	.....	5,155	2,400	4
Essex [6]	299,108	747,009	475,389	19.86	1.32	57,961	45,665	...
Fairhaven Branch	288,507	395,105	249,077	15.11	.....	43,053	31,361	...
Fitchburg	3,540,000	3,540,000	100,000	50.93	16.85	572,968	294,112	6
Fitchburg and Worcester [7]	210,256	275,000	65,735	13.99	.....	36,476	18,994	6
Grand Junction Railroad and Depot Company [8]	792,292	1,381,455	1,249,949	9.00	.....	.....	.....	...
Hampshire and Hampden [9]	292,651	598,300	305,649	24.96	.....	23,295	.....	...
Hartford and New Haven [10] .....	.....	.....	964,000	5.87	.....	.....	.....	...
Horn Pond Branch .....	.....	.....	.....	0.73	.....	.....	.....	4
Lexington and West Cambridge	241,200	251,258	2,400	6.63	.....	21,183	13,286	...
Lowell and Lawrence	200,000	363,158	100,000	12.35	.....	42,785	24,244	3
Marlborough Branch [11]	56,726	156,185	82,988	3.90	.....	.....	.....	...
Medway Branch [12]	29,000	32,579	3,579	3.60	.....	.....	.....	...
Midland .....	.....	.....	.....	74.50	.....	.....	.....	...
Middleborough and Taunton	147,020	153,827	7,627	8.03	.....	21,068	22,885	...
Nashua and Lowell	600,000	654,603	None.	14.43	.....	186,085	114,580	8
New Bedford and Taunton	500,000	544,965	12,600	20.13	1.48	137,914	108,108	6
Newburyport	220,240	629,183	419,835	26.98	.....	44,975	35,717	...
New London, Willimantic and Palmer	510,900	1,573,569	1,052,000	66.00	.....	104,485	73,973	...
New York and Boston, in Massachusetts	223,176	.....	673,210	32.00	.....	16,606	14,959	...
Norfolk County, (Trustees of,) .....	.....	.....	.....	.....	.....	40,657	31,302	...
Norwich and Worcester	2,122,300	2,613,694	775,280	59.00	7.00	283,556	183,190	...
Old Colony and Fall River	3,015,100	3,362,949	173,600	79.50	7.75	551,399	283,755	6
Peterborough and Shirley [13]	263,700	265,327	16,100	14.08	.....	22,373	.....	2½
Pittsfield and North Adams	450,000	443,678	.....	18.65	.....	47,035	24,129	6
Providence, Warren and Bristol	287,917	436,256	146,076	13.60	.....	23,006	21,218	...
Providence and Worcester	1,510,200	1,789,476	300,000	43.41	.....	270,403	160,058	6
Salem and Lowell [14]	243,305	449,530	225,900	16.88	.....	50,856	52,418	...
South Reading	209,533	299,210	.....	8.15	0.22	19,330	20,513	...
South Shore	259,685	501,593	163,872	11.50	.....	57,788	41,275	...
Stockbridge and Pittsfield [15]	448,700	448,700	None.	21.93	.....	31,409	.....	7
Stony Brook	267,300	267,384	None.	13.16	.....	50,519	34,177	...
Stoughton Branch	85,400	99,394	None.	4.04	.....	29,829	23,079	6½
Taunton Branch	250,000	313,156	3,000	11.10	0.52	134,184	112,283	8
Troy and Greenfield	288,428	.....	178,854	42.55	.....	.....	.....	...
Vermont and Massachusetts	2,214,225	3,268,166	1,010,175	69.00	8.00	225,080	120,042	...
Western	5,150,000	10,881,282	6,276,320	173.38*	.....	1,700,294	890,931	8
West Stockbridge [16]	39,600	39,600	None.	2.75	.....	1,697	.....	4½
Worcester and Nashua	1,141,000	1,328,898	200,766	45.69	.....	285,128	112,514	4
Totals	\$18,136,165	\$64,805,018	\$20,394,720	1,506.23	123.60	\$8,974,865	\$5,081,041	5.18-23

HORSE RAILROADS.

Boston and Chelsea [17]	\$140,000	\$140,000	None.	1.48	.....	.....	.....	...
Cambridge [18]	460,000	816,777	\$150,000	4.82	1.08	.....	.....	...
Dorchester Avenue	69,160	148,478	.....	4.08	.....	\$3,081	\$9,952	...
Dorchester Railway Company [19]	87,900	132,024	None.	4.08	.....	13,793	11,399	3
Madlen and Melrose [20]	200,000	242,548	31,847	3.41	.....	63,375	56,057	...
Metropolitan	450,000	444,984	55,879	2.65	4.61	285,796	221,052	8
Middlesex [21]	295,100	295,080	132	3.49	1.50	20,629	629	8
Newton [22]	25,250	22,959	None.	2.87	.....	.....	.....	...
Somerville [23]	68,000	68,000	450	3.89	.....	4,421	4,143	...
Union Railway Company [24]	160,000	159,988	60,476	.....	.....	154,819	135,121	10½
Waltham and Watertown [25]	17,200	19,700	.....	2.13	.....	.....	.....	...
West Roxbury [26]	40,400	53,787	None.	2.54	.....	2,690	.....	8
Totals	\$1,643,850	\$1,895,798	\$298,784	31.36	7.19	\$548,603	\$438,353	7.20

[1] Operated by the Boston & Worcester Railroad Company.

[2] Operated by the Housatonic R. R. Co.

[3] Operated by the Boston & Maine R. R. Co.

[4] Operated by the Old Colony and Fall River R. R. Co.

[5] Operated by the Providence R. R. Co.

[6] Operated by the Eastern R. R. Co.

[7] The Capital Stock of this Company has heretofore appeared in these Reports as \$500,000,

but by vote of directors, Dec. 27, 1857, it was fixed at \$275,000.

[8] This railroad is leased, and not worked by the G. J. R. R. Co.

[9] Operated by the New York and New Haven R. R. Co.

[10] Operated by the H. and N. H. Railroad in Connecticut, in which the capital stock has been merged.

[11] Operated by the Fitchburg R. R. Co.

[12] Leased to East Thompson R. R. Co., at ten per cent. and repairs, and worked by them from Dec. 1, 1857, to March 17, 1858. Road not worked from 17th to July 22; run by Trustees of Norfolk County Railroad from July 22d.

[13] Operated by the Fitchburg R. R. Co.

[14] Operated by the Boston and Lowell R. R. Co.; doings during 10 months.

[15] Operated by the Housatonic R. R. Co.

[16] This road is under a lease to the Hous-

tonic and Hudson and Boston Railroad Companies.

* Including Hudson and Boston Railroad, 17.33 miles.

† On \$60,000 guaranteed.

‡ 7 per cent., payable quarterly.

§ 2 per cent. on common; 8 per cent. preferred.

[17] Leased to the Maiden and Melrose R. R. Company. Opened for travel November, 1858.

[18] Leased to Union Railway Company.

[19] The Dorchester Railway Company represents what was the Dorchester Avenue; consequently the items enumerated in the return of the latter, with the exception of number of passengers, income and expense, are not included in the footings of this table. The Dorchester Railway Company was organized under the provisions of chapter 279 of the Acts of the year 1856, having purchased the corporate property of the Dorchester Avenue Railroad Company at a sale ordered by decree of the Supreme Judicial Court, in Jan'y, 1858. The cars were run upon the road by the Corporation during the months of February, March, April and May; and since the first day of June, the lessees, Messrs. Gore, Rose & Co., of Boston, having purchased the entire equipment, have run the cars and the line of coaches connected therewith, on their own account, paying to the Corporation a rent equal to eight per cent. per annum on the amount of stock outstanding.

[20] This Company commenced business April 1, 1858, leasing the Middlesex Railroad and Boston and Chelsea Railroad in connection with their own road. This return embraces the returns of these roads as well as their own. The Malden road was opened for travel July 19, 1858, and the Chelsea road November 20, 1858.

[21] This road is leased to the Malden and Melrose Railroad Company, who pay a semi-annual rental equal to 4 per cent., (or 8 per cent. per annum,) on each share of the capital stock of the Middlesex Railroad Company; also other necessary expenses.

[22] Commenced running November 15, having been in operation but fifteen days, and is leased.

[23] Four and two-third months.

[24] The roads operated by this Company being owned by the Cambridge Railroad Company and the Waltham and Watertown Railroad Company, reference is made to the returns of those Companies for replies to the interrogatories included in the blank form of return received from the Secretary of the Commonwealth, under the headings of "Cost of the Road," and "Characteristics of the Road."

[25] This road is leased to the Union Railway Company, at \$1,500 per year, payable semi-annually.

[26] Leased to the Metropolitan Railroad Co.

Coal Fields of Pennsylvania and Their Outlets.

We present our readers below a brief sketch of the various outlets from the Pennsylvania coal fields to the tide-water markets.

SCHUYLKILL REGION.

Schuylkill Navigation.—The Schuylkill Canal extends from Port Carbon, 2 miles above Pottsville, Schuylkill County, down the Schuylkill Valley to Philadelphia. Its length is 108 miles, and its depth of water is 9 feet. It possesses lockage of 620 feet, size 18 by 100 feet, and will pass canal boats of 190 tons capacity.

The navigation company own no coal estates, and are not interested in the mining of coal. The Boat Loan Trust Company furnish cars to the operators for the transportation of coal from the collieries to their ports of shipment, and the entire revenue of the Navigation Co., is derived from the toll on the canal tonnage.

Boats loaded with coal destined for the Delaware front at Philadelphia, are towed by steam tugs belonging to the Navigation Company, free of charge to the mouth of the Schuylkill River, whence to the Greenwich wharves the charge for towage both ways is about ten cents per ton,

To NEW YORK, cargoes of 190 tons may be passed from the Schuylkill Coal Region, without trans-shipment, by the following route:

From the Schuylkill Navigation Company's outlet lock into tide-water at Fairmount Dam, Philadelphia, to Bordentown *via* Schuylkill and Delaware rivers, 43 miles; Bordentown to New Brunswick, by canal, 43 miles; New Brunswick to New York city, by tide-water, 34 miles; total from Schuylkill at Philadelphia to New York city, (77 miles of tide-water, and 43 miles of canal,) 120 miles.

Philadelphia and Reading R. R.—The Reading Railroad Company is a common carrier; they own no coal lands, and have no mining operations. Their road commences at Mt. Carbon, one mile south of Pottsville, and thence descends down the Schuylkill Valley, with a slightly descending grade, to the terminus at Richmond, Philadelphia, a distance of 93½ miles. The grade between the Schuylkill and Delaware rivers is about 38 feet in a distance of 1½ miles against the trade, and the company employ two assistant engines at this point to secure the full capacity of the road. The Mine Hill Railroad leading out its various extensions connects with the Reading at Schuylkill Haven. The Mt. Carbon and Port Carbon, with its tributaries the Mill Creek Railroad and the Schuylkill Valley Railroad, as does also the Mt. Carbon Railroad, connect with the Reading at Mt. Carbon. The Little Schuylkill Railroad connects at Port Clinton.

To NEW YORK.—From the Reading R. R. Company's coal wharves, at Philadelphia, to Bordentown, tide-water, 26 miles; Bordentown to New Brunswick, Delaware and Raritan Canal, 43 miles; (size of locks 24x220 feet, depth of water 6 feet 11 inches, will pass boats of 400 tons); New Brunswick to New York, tide-water, 34 miles; making of tide-water free navigation, 60 miles, and of canal or toll navigation, 43 miles; total from railroad terminus at Philadelphia, to New York city, 103 miles.

From the Reading Railroad Company's wharves at Philadelphia, to New York City, colliers of four hundred tons can pass *via* the Delaware and Raritan Canal (inter-tide-water) route. And *via* the Delaware river and bay to the sea, steam and sail craft of large tonnage have an open and free navigation to Boston and all other Atlantic ports.

LEHIGH REGION.

Lehigh Valley Railroad and North Pennsylvania Railroad.—Lehigh Valley Railroad, Mauch Chunk to Bethlehem, 34 miles; North Pennsylvania Railroad, Bethlehem to Master street, Philadelphia, 64 miles; maximum gradient against the trade 58 8-10 feet in the mile on N. P. R. R.; total from Mauch Chunk to Philadelphia, 88 miles.

Upon the Lehigh Canal the distance from Mauch Chunk to Easton is 46 miles; Easton to Bristol, State Canal, 60 miles; lockage from Mauch Chunk to Bristol, 625 feet; Bristol to Philadelphia, 124 miles.

The Lehigh Navigation Company own coal lands at and near Mauch Chunk, and mine and sell coal; a part of their coal lands are worked under lease; they carry the coal in their own cars from their mines to their canal, whence it is sent to market subject to the same freight charges as coal from other openings, worked by individuals and other companies and shipped an equal distance on the Lehigh Navigation.

Mauch Chunk to Bristol, by canal, 106 miles; Bristol to Bordentown, 9 miles; Bordentown to New York, canal and tide-water, 77 miles; total from Bristol to New York, 86 miles, and from Mauch Chunk to New York, by canal and tide-water, *via* Bristol and Bordentown, 192 miles; Mauch Chunk to New York, by canal and tide-water, *via* New Hope, Lambertville and Trenton, 167 miles.

Mauch Chunk to Trenton, via Lehigh Valley and Belvidere Delaware Railroads.—Mauch Chunk to Easton, Lehigh Valley Railroad, 45 miles; Easton to Trenton, Belvidere Delaware

Railroad, 51 miles; total, Mauch Chunk to Trenton, level and descending grades, 96 miles. From Trenton to New Brunswick, Delaware and Raritan Canal, 37 miles; New Brunswick to New York city, tide-water, 34 miles; Trenton to New York, 71 miles; total from Mauch Chunk *via* Trenton to New York city, 167 miles.

Mauch Chunk to Elizabethport, via Lehigh Valley and New Jersey Central Railroads.—Mauch Chunk to Phillipsburg, Lehigh Valley R. R., 46 miles; Phillipsburg to Elizabethport, N. Jersey Central Railroad, 63; Elizabethport to New York city, tide-water, 12 miles; total from Mauch Chunk to New York city, 121 miles.

Mauch Chunk to New York, via Lehigh Navigation and Morris Canal.—Mauch Chunk to Phillipsburg, Lehigh Valley Railroad, 46 miles; Phillipsburg to Jersey City, Morris Canal, 102 miles; Jersey City to New York city, tide-water, 1 mile; total from Mauch Chunk to New York city, 149 miles.

The Morris Canal, at the summit level, is 915 feet above tide-water, and at Phillipsburg 161 feet above tide-water. The total rise and fall is 1,674 feet, of which 235 feet are overcome by 24 locks, and 1,439 feet by 22 inclined planes.

WYOMING REGION.

Wilkesbarre, Wyoming Valley, to Philadelphia, via Railroad, Canal and Tide-water.—Wilkesbarre to White Haven, Lehigh Canal Company's Railroad, 20 miles; White Haven to Easton, Lehigh Canal, 70 miles; Easton to Bristol, State Canal, 60 miles; Bristol to Philadelphia, tide-water, 18 miles; total from Wilkesbarre to Philadelphia, 168 miles.

Scranton, Lackawanna Valley, to New York City.—Delaware, Lackawanna and Western Railroad, including Warren Railroad, Scranton to New Hampton, 84 miles; New Hampton to Elizabethport, 48 miles; Elizabethport to New York city, tide-water, 12 miles; total Scranton to New York city, 144 miles.

The Delaware, Lackawanna and Western R. R. Company mine, carry and sell coal. Besides the product of their own mines, they derive coal from operators in the Lackawanna Valley.

Pittston, Wyoming Valley, to New York City.—Pennsylvania Coal Company's Railroad, from Pittston to Hawley, 45 miles; elevation 2,550 feet, overcome by 22 inclined planes, with gravitating grades between; Hawley to Rondout, Delaware and Hudson Canal, 100 miles; Rondout to New York city, Hudson river, 85 miles; total Pittston to New York city, 230 miles.

The Pennsylvania Coal Company own coal lands about Pittston, mine their own coal, and carry it over their own road to Hawley, where it is transferred from their own cars to boats on the Delaware and Hudson canal, and passed thence to market at tide-water.

Carbondale, Lackawanna Valley to New York City.—Delaware and Hudson Canal Company's Railroad from Carbondale to Honesdale, 16 miles—elevation 2,123 feet overcome by 14 conjoint inclined planes, with intermediate roads worked by gravitation; Honesdale to Rondout, Delaware and Hudson canal, 109 miles—lockage 1,126 feet; Rondout to New York, Hudson River, 85 miles; total Carbondale to New York City, 210 miles.

The Delaware and Hudson Canal Company own coal lands in and about Carbondale, work their own mines, and carry the coal in their own cars to Honesdale, whence it is passed in boats over their canal to tide-water on the Hudson river. The summit of the mountain which parts the tributaries of the Delaware and Susquehanna rivers is 1,600 feet above the former at the water-gap, and 1,366 feet above the latter at Pittston. To carry coal across this summit, which is about 1,000 feet above the canal, the system of inclined planes and gravitating roads is worked with more satisfaction and economy than locomotive roads with high grades.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY	Length of Road	Capital paid in	Debt	Total cost of road & equip't	Gross Earnings for last official year	Net Earnings for do.	Dividend for do.	Price of Shares	NAME OF COMPANY	Length of Road	Capital paid in	Debt	Total cost of road & equip't	Gross Earnings for last official year	Net Earnings for do.	Dividend for do.	Price of Shares
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,023,911	445,762	150,224	6	---	Brunswick and Florida, Ga.	30	161,857	463,648	538,649	In progr.	---	---	---
Androscoog & Kennebec	55	457,909	1,838,304	2,210,947	159,518	83,368	none	---	South Western	143	1,399,100	441,292	2,269,323	865,214	298,771	9	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	213,255	---	none	---	Tennessee and Alabama	30	899,754	626,889	679,006	63,776	29,405	---	---
Portland, Saco & Portland	51	1,396,400	---	1,396,378	263,717	120,909	6	93	Tennessee and Missouri	61	737,400	611,612	1,161,152	161,001	99,883	---	---
Boston, Concord & Montreal	93	---	1,104,586	2,844,977	324,767	174,025	16	---	Memphis and Charleston	257	2,228,177	3,495,289	5,572,470	642,022	334,504	---	---
Onondaga	51	1,050,121	899,313	1,170,687	355,629	113,077	6	---	Mobile and Ohio	308	6,784,879	2,069,450	10,701,428	564,382	278,428	---	---
Concord	36	1,600,000	8,242	1,412,576	317,055	125,664	6	60%	Miss. Central	59	1,674,474	926,799	2,603,098	116,879	---	---	---
Northern, N. H.	82	3,068,400	406,286	3,068,400	305,830	156,904	4	47%	Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	284,235	150,749	---	---
Concord & Passumpsic Riv.	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	N.O. Opelousas & G.W.	80	2,800,000	750,000	3,777,825	284,178	127,450	---	---
Katand & Burlington	117	2,233,376	4,158,768	6,484,008	332,215	41,688	none	---	N.O. Jackson & G.N.	206	4,035,000	1,815,610	7,142,563	189,003	---	---	---
Vermont and Canada	47	1,350,000	---	1,350,000	130,695	127,399	6	80	Vicksburg, Shreveport & Tex.	21	853,746	109,286	992,051	In progr.	---	---	---
Vermont Central	122	5,000,000	6,276,299	8,402,064	705,588	127,399	6	91	East Tennessee and Ga.	111	1,192,974	1,735,669	2,708,429	227,363	104,992	---	---
Boston and Lowell	29	1,830,000	438,920	2,412,251	435,863	171,382	6	---	East Tennessee and Va.	130	626,075	1,728,664	3,208,138	61,374	39,062	---	---
Boston and Maine	74	4,076,974	---	4,229,281	770,802	305,502	6	93%	Nash. and Chattanooga	159	2,263,905	1,832,797	3,896,703	641,552	219,267	---	---
Boston and Providence	43	3,160,000	339,700	3,534,458	594,176	245,154	6	93%	Ogontown & Lexington	98	1,814,850	3,065,917	4,091,604	436,408	220,908	---	---
Boston and Worcester	44	4,600,000	599,974	4,844,779	1,019,149	388,513	6	95	Lexington and Frankfort	29	430,055	156,899	658,255	95,807	46,717	6	---
Cape Cod	47	681,690	291,907	1,031,625	122,960	39,899	49%	---	Lexington and Danville	13	694,444	71,000	765,500	In progr.	---	---	---
Connecticut River	50	1,591,110	275,772	1,801,244	267,710	65,096	3	69%	Louisville and Frankfort	65	741,039	625,216	1,502,995	245,750	109,059	6	---
Eastern, Mass.	60	2,583,400	2,441,873	5,032,607	616,156	272,470	6	93%	Atlantic & Gt. Western	118	1,874,895	1,316,237	2,999,392	348,535	120,836	none	---
Eastern, Mass.	21	3,840,000	100,000	3,872,821	668,974	250,438	6	---	Belleville and Ind.	141	4,744,212	90,404	4,742,370	149,741	61,740	9	91%
Fitchburg	21	500,000	none	541,580	168,925	27,827	6	---	Cleveland and Toledo	200	3,333,712	4,225,658	7,192,016	930,292	413,790	30%	---
N. Bedford and Taunton	77	3,015,100	260,100	3,262,949	683,357	305,140	6	100%	Cleveland and Mahoning	65	---	---	1,920,935	In progr.	---	---	---
Old Colony and Fall River	69	2,332,441	1,019,148	3,241,975	240,133	62,267	none	14%	Cleveland and Pittsburgh	133	2,780,744	3,043,992	5,824,736	581,877	309,518	8	---
Vermont and Mass.	160	5,150,000	6,839,400	10,495,906	4,117,982	889,763	8	106	Clev. & Ashland	95	3,000,000	1,495,548	4,040,973	1,251,539	681,454	15	---
Western, Mass.	46	1,141,000	205,566	1,351,271	216,888	82,720	4	46	Clev. & Hamilton & Dayton	60	2,155,000	1,628,092	3,029,316	487,422	260,763	53	---
Worcester and Nashua	43	1,510,020	344,000	1,781,018	344,773	155,044	7	87	Cin. & Wm. & Zanesville	131	2,421,176	3,782,046	5,699,210	233,504	39,248	---	---
Providence and Worcester	72	2,359,700	944,000	3,329,602	789,065	384,816	10	1-4	Columbus and Xenia	65	1,490,459	149,000	1,639,459	360,499	---	---	---
Hartford and N. Haven	124	1,936,246	2,192,632	4,205,976	274,428	112,325	none	---	Dayton, Xenia & Belpre	63	437,838	422,658	860,496	---	---	---	---
Hartford, Prov. and Fishkill	72	2,000,000	423,685	2,423,547	318,475	109,344	none	---	Dayton and Michigan	140	1,076,602	303,011	1,385,829	126,940	55,253	---	---
Housatonic	57	1,031,800	524,244	1,580,728	237,416	114,237	---	---	Dayton and Western	35	210,000	700,481	1,038,731	126,940	55,253	---	---
Housatonic	62	2,980,830	2,833,240	5,814,070	1,575,055	564,569	3	45	Easton and Hamilton	62	469,763	832,669	1,302,432	60,008	29,123	10	65
Yonkers and N. Haven	60	738,255	1,671,462	2,409,717	38,007	30,318	none	---	Little Miami	65	2,981,242	1,266,000	5,248,157	775,442	300,123	10	65
N. Haven and N. London	60	510,700	702,000	1,203,200	120,571	61,444	none	---	Madison, Dayton & Cin.	171	2,697,000	3,368,000	6,065,000	682,614	164,697	none	---
N. London, W. & Palmer	32	1,222,300	724,188	2,698,671	265,417	44,547	---	28	Pittsb. & Wayne & Chicago	135	1,227,907	6,228,656	14,276,704	1,646,369	577,767	10	---
Norwich and Worcester	66	439,005	1,625,098	1,840,696	117,716	9,904	---	---	Pittsb. & Wayne & Cin.	123	6,247,040	9,822,550	18,069,593	1,646,369	577,767	10	---
Albany Northern	35	643,330	317,455	974,325	In progr.	---	---	---	Sand'y, Mans. & Newk.	127	1,350,000	2,204,357	3,552,357	328,958	164,479	none	---
Black River and Utica	100	1,487,871	1,601,183	3,189,054	172,476	66,333	none	---	Scioto & Hocking Valley	56	403,975	509,060	888,858	In progr.	---	---	---
Buffalo, Conn. and N. Y.	100	798,439	2,587,849	3,401,868	288,492	31,898	---	---	Spring Mt. Vernon & P.	113	1,000,000	500,000	2,194,000	---	---	---	---
Buffalo and N. Y. City	99	1,800,000	1,040,000	2,494,364	679,750	355,763	10	---	Tol. & Wash. & St. Louis	242	2,965,100	1,577,500	10,542,600	Recently opened.	---	---	---
Buffalo and St. Line	47	434,111	922,399	1,275,796	174,089	69,506	---	---	Cin. Log. and Chicago	265	4,195,078	1,906,126	2,089,453	In progr.	---	---	---
Canandaigua and Elmira	98	1,815,000	2,275,854	3,495,832	135,433	48,649	none	---	Evansville & Crawford	109	984,061	1,270,872	2,158,713	249,869	124,140	---	---
Canandaigua & Niagara F.	35	697,000	950,389	1,647,389	1,902,826	688,580	none	32%	Ind. and Cincinnati	86	1,698,509	1,561,581	3,029,989	491,743	245,022	7	---
Cayuga & Seneca	144	3,758,466	9,250,362	12,737,599	3,758,466	1,040,393	10	71%	Indiana Central	86	612,500	1,261,179	1,909,911	368,189	204,685	---	---
Hudson River	95	3,000,000	647,193	2,555,986	325,131	50,126	none	11%	Ind., Gt. & Pittsburg	83	835,791	1,077,604	1,826,426	258,191	85,248	none	---
Long Island	556	24,182,400	14,400,000	38,582,400	6,545,413	3,041,120	8	79%	Jeffersonville	74	1,014,262	694,000	1,539,576	222,737	94,318	none	---
New York Central	494	11,000,000	28,091,466	39,092,466	742,007	1,444,932	none	13%	Madison and Indianapolis	87	1,647,700	1,836,616	2,941,511	260,214	118,628	none	---
New York and Erie	134	6,717,100	4,824,498	11,541,598	1,640,393	324,891	none	18%	New Albany and Salem	238	2,636,121	691,248	7,029,494	645,827	371,402	none	---
New York and Harlem	118	6,033,022	4,404,874	10,437,896	520,153	135,754	8	---	Penn. and Indianapolis	73	---	588,314	2,000,000	150,000	30,000	none	---
Northern, N. Y.	35	804,130	213,025	751,035	In progr.	---	---	---	Terre Haute and Ind.	73	1,361,450	250,135	1,685,409	481,272	206,079	10	---
Oswego and Syracuse	29	487,200	234,199	749,683	211,149	82,600	7	---	Chicago and Rock Isl.	192	5,245,000	1,731,318	6,028,272	1,884,190	806,039	60%	---
Potomac and Watertown	25	610,000	140,000	890,423	71,909	21,099	none	---	Chicago, Burl. and Quincy	210	4,631,840	3,855,970	8,042,424	1,606,167	81,767	43	---
Rensselaer & Saratoga	48	500,000	895,000	1,395,000	1,187,599	440,230	182,037	50	Cin. & St. Paul & Fd. du Lac	176	2,300,000	1,325,970	3,025,000	In progr.	---	---	---
Saratoga and Whitehall	80	788,369	1,675,804	2,464,173	1,117,589	454,542	12	120	Galena and Chicago	269	6,024,800	3,899,015	9,394,455	2,815,786	1,102,042	8	6%
Saratoga & Binghamton	27	437,830	737,073	1,174,903	1,117,589	454,542	12	120	Illinois Central	704	6,546,436	2,911,179	25,437,699	2,915,965	665,972	60%	---
Troy and Boston	97	1,500,000	700,979	2,200,979	243,390	114,833	3%	---	Peoria and Q. & W.	181	1,669,889	2,200,000	4,400,000	In progr.	---	---	---
Watertown and Rome	64	1,000,000	1,019,000	2,019,000	1,840,714	694,114	12	---	Ohio & Miss. (Wat. Dr.)	147	1,780,295	2,292,403	4,870,686	Recently opened.	---	---	---
Belvidere Delaware	94	3,000,000	11,407,200	14,407,200	1,117,589	454,542	12	---	Terre Haute, Alt. & St. Louis	208	3,011,150	1,925,927	5,728,734	823,767	247,737	---	---
Camden and Amboy	80	848,000	1,738,171	2,586,171	117,589	45,454	12	---	Detroit and Milwaukee	198	838,000	1,128,964	1,968,969	Recently opened.	---	---	---
Camden and Atlantic	80	848,000	1,738,171	2,586,171	117,589	45,454	12	---	Mich. Central	292	8,037,840	8,568,639	12,847,235	2,249,768	764,914	6	49%
New Jersey Central	68	2,000,000	3,692,828	5,692,828	231,760	101,542	3%	---	Mich. South. & N. Ind.	475	8,874,400	10,469,639	19,334,044	2,805,487	644,311	18%	---
Morris and Essex	44	1,577,900	340,048	1,917,948	35,000	45,000	---	---	Green Bay, M. & Ch.	40	1,000,000	780,000	1,780,000	---	---	---	---
Allegheny Valley	62	1,018,900	213,509	1,232,409	136,469	77,922	---	---	Milwaukee and Miss.	238	3,440,673	4,010,553	8,061,254	682,518	372,691	14	---
Cataw. Wil. & Erie	170	3,294,772	6,191,511	9,486,283	810,768	41,139	6	43	Milwaukee & Watertown	72	354,881	132,000	514,233	In progr.	---	---	---
Umbagog Valley	20	500,000	150,000	650,000	89,536	53,335	---	---	Milwaukee and Horicon	42	1,101,200	918,757	2,0				

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$833,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	50	50
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	93 1/2	95
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	75	75
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. Cl. Col. & Cin.	7	Div's	"	1861-64	60	70
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	41	45
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 30 July	"	1867	90	92
Do. do.	445,000	2d do. do.	7	May, Novemb.	"	1869	76	77
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	97 1/2	98
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	87 1/2	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	60	55
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	30	55
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	40	55
Covington and Lexington	400,000	Do. do.	8	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	87 1/2	89
Florida Free Land	1,500,000	Do. not convertible	7	March, Sept.	"	1861	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	98	99
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	90 1/2	90 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90 1/2	90 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	April, Oct. 10 Oct.	"	1863	87 1/2	93
Jacksonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	86	86
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianap. & Cin'ti (for Lawd. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	77	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	7	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	73	74
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	82 1/2	84
Michigan Central	1,000,000	No mortgage, convertible	6	April, October	Bost.	1869	95	97
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	91 1/2	93
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862		
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	77 1/2	78
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877		
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-76		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	75	75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	80	80
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	75	75
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	65	65
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	101 1/2	102
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875		
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	62	66

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	92 1/2	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	88	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	77	77 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1860	67	60
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	40	43
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	40	41
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	40	41
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	100	101
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	94 1/2	95
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	75	76
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	88 1/2	89 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shares	7	March, Sept.	"	1860	90	91
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	87	88
New York and Harlem	1,200,000	Do. do.	7	May, Novemb.	"	1861-72	62	92 1/2
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	96	91
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	81	82
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	71 1/2	73
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	91 1/2	92 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	99 1/2	100
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	114	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1868	90	91
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	1,800,000	Do. convertible	6	Jan'y, July	"	1870	82 1/2	83
Do. do.	3,469,000	Do. inconvertible	6	April, October	"	1866	72	73

CITY SECURITIES.	Int't payable.	Off'd.	Ask'd.	CITY SECURITIES.	Int't payable.	Off'd.	Ask'd.
New York 5 per ct. ....1858-60		98	99	Milwaukee 7 per ct coup. X	Divers	45	70
Do. 5 do. ....1870-76	May, August, November, Feb'y, August, Jan'y, July, Quarterly, April October Jan'y, July, Do. do., Divers Jan'y, July, Jan'y, July, Feb'y, August, March, Sept., Jan'y, July, Divers Jan'y July	92 1/2	94 1/2	New Orleans 6 per ct. ep. R.R. X	Do.	72	77 1/2
Do. 6 do. ....1883		101 1/2	102 1/2	N Orleans 6 per ct. ep. municip. X	Jan'y, July	87	90
Do. 6 do. ....1890-93		92	94	Philadelphia 6 per ct. 1876-98	Jan'y, July	99 1/2	99 1/2
Albany 6 per ct. coup. ....1871-81 X		59	101	Pittsburgh 6 per ct coup. X	Divers	50	52 1/2
Alleghany 6 per ct. coup.		55	70	Quincy 8 per ct. coup. ....1868 X	Jan'y, July	67	75
Baltimore 6 per ct. ....1870-90		99 1/2	100	Racine 7 per ct. coup. ....1873 X	10 Feb'y, Aug	80	80
Boston 6 per ct. coup. ....Long X		102	102 1/2	Rochester 6 per cent. coup. X	Divers	90	97 1/2
Brooklyn 6 per ct. coup. Long X		100	103	St Louis 6 per ct. coup. ....Long X	Do.	84 1/2	86 1/2
Clev'rd. 7 per ct. ep. W.W. 1878 X		100	103	Do. do. Municipal X	Do.	86 1/2	87 1/2
Cincinnati 6 per ct. coup.		92	95	Sacramento 10 p.ct. ep. 1862-74 X	Do.	37	45
Chicago 6 per ct. coup. ....1873-77 X		95	96	St.Fr'isco,7p.ct.1865,pay.N.Y. X	May, Novemb.	60	70
Do. 7 per ct. coup. ....1880 X		97 1/2	99 1/2	Do. 10 p. ct. ep. ....1871 X	Do. do.	68	91
Detroit 7 per ct. ep. W.W. 1873-78 X		100	102	Do. 10 do. pay. N. Y. X	Jan'y, July	56	60
Dubuque 8 per ct. ep. ....Long X		99 1/2	100	Do. 6 per ct. pay. N.Y. 1876 X	Do. do.	56	60
Jersey City 6 per ct. ep. W.W. 1877 X		99 1/2	101	Wheshg. 6 per ct. coup.	Divers	50	50
Louisville 6 per ct. ep. ....1880-83 X		71 1/2	72 1/2	Do. 6 p.ct. ep. Mun. 1874 X	March, Sept.	50	51 1/2
Memphis 6 per ct. coup. ....1882 X		64	66 1/2	Zanesville 7 do. X	April, October		

Cincinnati Stock Sales.
By KIRK & CHEEVER.

For the week ending February 14, 1859.

BONDS.	Per cent.
Little Miami, 1st Mort.	68 1/2% and int.
Covington and Lexington 1st Mortgage	68
Do. do. 2d do.	68
Ohio & Miss. E. D. Construction	78 1/2
Cinc. Ham. and Dayton, 1st Mortgage	78 1/2
Do. do. 2d do.	78 1/2
Indianap. & Cincinnati, do. do.	78 1/2
STOCKS.	
Cincinnati, Hamilton & Dayton	85
Columbus and Xenia	82
Indianapolis & Cincinnati	83 1/2
Little Miami	83 1/2
Ohio and Mississippi (E. D.)	83

Bank Statements.

The Bank movement in the four principal cities of the Union, in which weekly reports are made, as shown by their last statements, is as follows:

LOANS	DEPOSITS	SPECIE	CIRCULATION
N. Y., Feb. 12, 1859	\$108,318	\$49,546	\$18,419,088
Boston, " 14	59,687,000	19,130,000	6,671,640
Phila., " 14	26,527,364	16,344,047	5,991,541
N. Y., Feb. 5	21,849,608	24,763,331	16,362,653
Total	\$236,530,230	149,676,636	64,444,281
Last week	237,872,793	154,104,701	64,886,638

Ohio Banks.

The Independent Banks, that receive their circulation from the Treasury Department are as follows:—Western Reserve Bank, Warren; Bank of Geauga, Painville; Mohoning County Bank, Youngstown; City Bank, Cleveland; City Bank, Columbus; Dayton Bank, Sandusky City Bank, Commercial Bank, Cincinnati; and Franklin Bank, Zanesville. The total amount of the circulation of these Banks is \$635,967, to secure which they have deposited in the Treasury, Stocks of this State to the amount of \$645,255. Three Banks belonging to this Department have failed to redeem their bills, viz., City Bank of Cincinnati, Canal Bank of Cleveland, and Seneca County Bank. The Franklin Bank of Zanesville, always one of the safest and best Banks of the State, has given notice of its intention to surrender its franchise, and is withdrawing its notes from circulation. It had outstanding only \$9,000 on the 15th Nov., and these are secured by \$9,000 of Ohio 6 per cent. stocks.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of February 16th.

[TRANSLATED.]

New York, Tuesday, Feb. 15, 1859.
Our last advices are dated 1st instant. The movements on our Stock Exchange have not since then been of special importance; transactions have been on a moderate scale, and prices irregular. The most marked general impression was on the 2nd inst., and was caused by a more active inquiry for money; later, the demand having slackened, the Stock Market assumed a firmer tone. To-day it is again weak, under the influence of the news from Europe per America. Orders from Europe for the new Government Loan are quite limited. State Stocks—Missouri 6s, after having dropped to 83 1/2, close at 84 1/2—no change. Virginia 6s have risen 1/2, and California 7s 3/8 per cent., Tennessee 6s have declined 3/8, North Carolina 6s, 1/2, and Indiana 5s, 1 per cent.; United States 5s of 1874 have been sold at 102 3/4 to 102 1/2. City and County Bonds—There has been a little activity in City Bonds, and we record sales of Brooklyn 6s at 102 1/4 to 102 1/2; Buffalo 7s at par; Cleveland Water Loan 6s at 90; and of Detroit 7s, Chicago Water Loan 6s, Memphis Guaranteed 6s, St. Louis City 6s, and San Francisco 10s at prices indicated by our quotations. Railroad Bonds have been inactive, and for the greater part, prices are lower. Erie Sinking Fund Bonds have declined 1 1/2, Calena and Chicago Second Mortgage, 1, Michigan Central 8s, 1, and Hudson River Second Mortgage, 1 1/2 per cent.; Illinois Central Construction 7s have risen 1/2, and Erie Third Mortgage 1 per cent.; sales of Little Miami 6s at 82 1/2 to 83; Indiana Central 7s at 77, and of Burlington and Missouri First Mortgage 6s at a

decline on previous prices. Railroad Shares—With few exceptions prices have slightly improved. New York Central have advanced $\frac{3}{8}$, Illinois Central, $\frac{1}{4}$, Chicago and Rock Island, $\frac{1}{8}$, and Milwaukee and Mississippi $1\frac{1}{2}$ per cent.; Galena and Chicago have declined $\frac{3}{4}$, and Reading $\frac{3}{4}$; Harlem Preferred Shares close at 39. Money is somewhat dearer, but the change is slight, except on long paper. We quote loans on call, 4 to 6; indorsed paper, 6 to 7½ per cent. per annum. Exchange on Europe is in moderate supply, especially bills on Paris, which have advanced. Sterling has been sold principally at 109½ to 109¾; Francs at 5.13¼ to 5.12½.

American Railroad Journal.

Saturday, February 19, 1859.

Macon and Western Railroad.

The earnings of this road for the financial year terminating November 30th, were:

	1857.	1858.
From passengers.....	\$91,590 01	\$103,540 34
" freights.....	190,118 02	211,410 05
" mails.....	10,271 10	10,242 03
	\$291,979 12	\$325,192 42

The expenses for the same period were:

Repairs of road.....	\$41,284 49	\$50,138 28
" engines.....	14,707 00	14,036 62
" cars.....	23,138 52	10,293 50
" buildings and machinery..	6,691 36	4,952 24
Conducting transportation	42,452 19	51,656 19
Salaries.....	8,650 02	7,899 96
Fuel.....	9,034 61	9,851 97
Oil.....	3,298 30	2,840 31
Miscellaneous.....	10,377 07	10,399 17
	\$159,633 56	\$162,068 24

Net earnings.....\$132,345 57 \$163,124 18

To which add:

Interest received.....	1,272 87
Balance from last report.....	101,518 98
Amount received on new stock.....	240 00

Total.....\$266,156 03

Disbursed as follows:

Dividends, Feb. and Aug.....	\$115 104 00
Interest on bonds.....	6,370 00
Balance due Atlanta passenger depot.....	1,964 98
	123,438 98

Leaving in hand a balance of...\$142,717 05
—to be appropriated to dividends and reserved fund.

The gross receipts of the past exceed those of the previous year, \$33,213 29; the net earnings, \$30,778 61—with an increase in expenses of only \$2,434 68.

It will be seen that the present year's earnings show a fair increase over the previous year, although still below those of the two preceding. Whether this increase will be sustained by the coming year, depends much on the results of the new roads now opening through Virginia and Kentucky. It is to be feared that they will divert some portion of the business now passing over the Georgia Roads.

The bonds of the Company fall due as follows:

September 1, 1859.....	\$46,000
October 1, 1859.....	5,000
November 1, 1859.....	10,000
January 1, 1860.....	30,000
April 1, 1862.....	5,000
	\$96,000

BALANCE SHEET.

Close of Business, November 30, 1858.

Construction.....	\$1,500,000 00
Atlanta Passenger depot.....	1,964 98
Expenses.....	162,068 24
Dividends, 23 and 24.....	115,104 00
Interest on bonds.....	6,370 00
Assets.....	149,472 65

	\$1,934,979 87
Capital Stock.....	\$1,438,800 00
Bonds.....	96,000 00
Profit and loss.....	66,958 98
Earnings.....	326,465 25
Liabilities.....	6,755 60

\$1,934,979 87

Commencement of Business, December 1, 1858.

Construction.....	\$1,500,000 00
Assets.....	\$149,472 65
Liabilities.....	6,755 60

142,717 05

	\$1,642,717 05
Capital Stock.....	\$1,438,800 00
Bonds.....	96,000 00
Profit and loss.....	107,917 05
	\$1,642,717 05

The annual meeting of the stockholders of this Company was held in Macon on the 6th of January, at which the reports of President and Superintendent were read and approved. The above is a brief abstract. After which the following gentlemen were elected directors for the ensuing year:

President, ISAAC SCOTT.

Directors—Charles Moran, Drake Mills, Adam Norrie, N. C. Munroe, Robert Collins, J. B. Ross, Andrew Low, J. C. Levy, Edward Padleford, Wm. A. Ross, Hendly Varner, S. Mowry, Jr.
Superintendent—ALFRED L. TYLER.

Thompson's New Sleeping Car.

We give below a notice of this improvement from the *Scientific American*:

A few weeks ago a patent was issued to Nathan Thompson, Jr., of this city, for a railroad car entirely different in its nature and construction from any that has heretofore been brought before the public. A full-sized model has been publicly exhibited by him for the past three weeks, and we have taken some pains to give it a careful examination. It is designed for both a night and day car—sitting, waking, walking, lounging, and sleeping. Viewed for use during the day, each seat appears like that of a comfortable sofa for four persons. In two minutes it can be transformed to allow one person to sleep in an upper berth, like that of a steamboat, while the other three have the same freedom as before, either to sit or recline. In about the same space of time as it took to make the first change, all the passengers can arrange the appliances and occupy as many several berths; and this can be done with perfect liberty to each, so as to permit every passenger to sit, or go to rest when he chooses. Each sofa seat may be considered a separate apartment, as it is arranged with sliding partitions, to screen the occupants from public gaze.

By the use of such railroad cars, families and parties may have their separate apartments for rest during night, or quiet intercourse during the day; and if there were a line of railroad to the Pacific, an army might be transported perfectly fresh in a few days, by one continual trip, from New York to California. It is the most compact and convenient day and night car which has been exhibited in this city. One is about to be furnished to the Emperor of Russia for military purposes on the great Moscow Railroad.

In this connection we give the following letter

from T. W. Wason, the well-known builder at Springfield, Mass:

Springfield, February 5, 1859.

NATHAN THOMPSON, JR., Esq.,

Dear Sir,—I have had the pleasure of examining your newly contrived day and sleeping car, and I am free to say that I believe it possesses greater advantages, and will afford more comfort to the traveling public than any other yet produced, having the same object; and that it need only to be seen to come into general use. I think your car can be so constructed as to weigh not much more than the ordinary passenger car, while one upon your plan will be much stronger, and will carry its load much steadier than any other, for the reason that the load carried will be near the centre of the car, where are also the supports that give it strength. Very respectfully,

T. W. WASON.

The attention of Railroad Companies, and others interested, is invited to the advertisement of Messrs. HOLT, GILSON & CO., in another column, in which they announce themselves prepared to execute orders for locomotives, cars, rails, chairs, spikes, wheels, axles, etc., etc., at the lowest prices, and with dispatch.

Pittsburg, Fort Wayne and Chicago R. R.

Messrs. M. K. JESUP & Co., No. 44 Exchange Place, have been appointed Financial and Transfer Agents of this Company in this city; and all coupons and other obligations of the Company, payable in New York, will hereafter be presented for payment at their office, where, also, the stock of the Company will be transferable. The Vice President, J. K. EDGERTON, Esq., under the new organization of the Company, is to take charge of its legal business, his office to be at Fort Wayne, Indiana.

Coal Burning on the New Jersey Railroad and on the Hudson River Railroad.

110, BROADWAY, N. Y.
Feb'y 14th, 1859.

HENRY V. POOR, Esq.

Dear Sir:—I have before me a printed statement, bearing date Nov. 8th, 1858, purporting to be made by Mendes Cohen, Assistant Superintendent on the Hudson River Railroad, in which he professes to show a comparison between coal and wood engines on that road, and the great saving in the use of coal. I also have before me the last Annual Report of the New Jersey Railroad Company, to its stockholders, in which is published a statement showing the saving in the use of coal on that road. Now for the purpose of removing an erroneous impression that seems to prevail with many, I wish to show to your readers, taking these two statements as a basis, and giving the Hudson River road the advantage of an engine having a 17 inch cylinder and 20 inch stroke, averaging 5 cars against an engine on the N. J. road, having a 15 inch cylinder by 22 inches stroke, averaging 7½ cars; and also the advantage of a very level grade, against a grade on the N. J. road, rising in some parts 45 feet to the mile, and saying nothing about the smoke and cinders on the H. R. road, about which the passengers so much complain, that the cost per mile for fuel is greater on that than on the New Jersey road. In

the first place, in the statement of Mr. Cohen, coal (which was furnished by the Cumberland Coal and Iron Company, and, therefore, it cannot be said to be of inferior quality), is estimated on the tender at \$4.80 per gross ton, while the New Jersey Railroad Company estimate the same kind of coal at \$6 per ton, or just 25 per cent. more than the estimated cost on the H. R. road. By what means the officers of the H. R. road can furnish their engines with coal at \$1.20 per ton less than the officers of the N. J. road do theirs, is a matter best known to themselves.

In the second place, Mr. Cohen's statement makes no allowance for the wood used in starting the fires in the coal engines, while the New Jersey Railroad Co. allow in their estimate over one cent per mile for kindling wood. As a matter of course the short trips of 63 miles on the N. J. road, require more kindling wood and more waste of coal than the much longer ones of 145 miles on the H. R. road, but it certainly requires kindling wood for all coal engines, and it should not have been left out of Mr. Cohen's estimate.

In the third place the statement of Mr. Cohen shows that the coal engine "Sam Sloan" having a cylinder 17 inches diameter by 20 inches stroke, which gives a capacity of 4,539 cubic inches, averaging only 5 cars, while the Boardman boiler coal engine "A. O. Zabriskie" on the N. J. road, having a cylinder of 15 inches diameter by 22 inches stroke, which gives a capacity of 3,887 cubic inches, therefore requiring the steam to be of much higher pressure and consequently an increased consumption of fuel, averages $7\frac{1}{2}$ cars, besides which the cars on the N. J. road, being very large and heavy, have six-wheel trucks, while those on the H. R. road have four-wheel trucks.

The difference in the estimated cost of the coal added to the 5.2 cents, which Mr. Cohen in his statement claims that the engine "Sam Sloan" is running for, makes $6\frac{1}{2}$ cents. If to this amount one cent per mile be added for kindling wood, which as herein stated is less than the amount allowed on the N. J. road for that purpose; the result is $7\frac{1}{2}$ cents per mile for 5 cars or just $1\frac{1}{2}$ cents per mile per car.

As shown by the Report of the N. J. Railroad Company, the "A. O. Zabriskie" averages $7\frac{1}{2}$ cars at an expense of 10.1 cents per mile, or 1.34 cents per mile per car, which is .16 of a cent per car per mile less than on the H. R. road, and which for the Zabriskie's train is 1.2 cents per mile. Therefore as the average duty of a locomotive is 25,000 miles per annum, giving the engine "Sam Sloan" on the H. R. road the advantages of a level track, a large engine doing light duty and long trips with one new fire; she still falls behind the "A. O. Zabriskie" to the amount of \$305 per annum, or a difference of \$3,050 in ten years, the estimated life of a locomotive.

Most of the coal engines on the H. R. road are wood engines altered. Two or three are new one of which, and for aught I know all of them, cost \$11,000, and the manufacturer stated that he lost \$1,000, even at that price. The "A. O. Zabriskie" cost but \$9,000, and others of the same make have varied from \$8,500 to \$10,000.

Yours respectfully,

J. H. BOARDMAN.

Railroad Earnings.

The earnings of the Chicago, Burlington and Quincy Railroad Line between Chicago and Burlington, a distance of 210 miles, were in January, 1859:—

From freight.....	\$33,294 79
" passengers	26,107 18
" mail and miscellaneous	1,793 68
Total	\$61,195 65

—being at the rate of \$291 41 per mile.

The earnings of the Quincy and Chicago Railroad Company between Galesburg and Quincy, a distance of 100 miles; were in January, 1859:

From freight.....	\$11,718 21
" passengers	9,028 71
" mail and miscellaneous	855 33
Total	\$21,602 25

—being at the rate of \$216 02 per mile.

The receipts of the Baltimore and Ohio Railroad for January were:

<i>Main Stem.</i>	
Passengers.....	\$42,818 00
Express	8,264 93
Mails.....	7,833 33
Tonnage	208,439 76
Total	\$267,356 02

<i>Washington Branch.</i>	
Passengers.....	\$27,271 87
Express	1,300 00
Mails.....	1,000 00
Tonnage	7,405 37
Total	\$36,977 24

<i>North-Western Virginia Road.</i>	
Passengers.....	\$2,711 80
Express	2,063 35
Mails.....	862 75
Tonnage	17,205 47
Total	\$22,843 37

Total.....\$327,176 63

Compared with the same month of last year the following result is shown:

	Jan'y, 1859.	Jan'y, 1858.	Inc., 1859.
Main Stem.....	\$267,356.02	\$261,397.12	\$5,958.90
N. W. Va.	22,843.37	19,035.39	3,707.98
Wash. Br.	36,977.24	37,081.22	*103.98
Totals.....	\$327,176.63	\$317,513.73	\$9,662.90

* Decrease.

The financial year of the Company commenced with October. The receipts of the first 4 months of the present year compare with those of the previous year as follows:

	1858.	1857.
October	\$392,503 02	\$396,191 85
November	383,159 22	361,443 38
December	336,861 01	379,259 02
January	327,176 63	\$317,513 73
Total	\$1,439,699 88	\$1,457,407 98

Decrease present year \$17,708 10

The earnings of the New York and Erie Railroad for January were as follows:—

1859	\$304,707 85
1858	376,356 64

Decrease.....\$71,648 79

The earnings of the New Jersey Central Railroad for the month of January were—

1859	\$61,145 28
1858	53,764 84

Increase (14 per cent.).....\$7,380 44

The earnings of the Buffalo and State Line Railroad for January, 1858 and 1859, were as follows:

	1858.	1859.
Passengers	\$24,512 84	\$22,469 33
Freight	61,843 22	45,292 18
Other sources	1,150 00	1,223 00
Total	\$77,505 56	\$68,984 51

The expenses were:	
Construction	\$2,053 56
Maintenance of road	10,623 40
Repairs of machinery	6,251 92
Operating	19,585 35
Total	\$38,514 23

Net earnings	\$38,991 33
Total	\$34,347 49

The traffic of the Great Western Railway of Canada, for the week ending 4th of Febr'y, 1859, was as follows:

Passengers	\$15,923 90
Freight and live stock	14,151 36
Mails and sundries	3,228 77
Total	\$33,304 03

Corresponding week, 1858

31,840 19

The receipts of the Grand Trunk Railway of Canada for the week ending January

29, were

\$40,126 84

Week ending January 30, 1858.....

38,872 67

Increase

\$1,254 17

Total traffic from July 1st.

\$1,325,233 59

Same period last year

1,423,283 39

Decrease.....

\$98,049 80

The earnings of the Pennsylvania Railroad for January were:

Gross Earnings.	Expenses.	Net Earnings.
1859..\$376,860 14	\$223,887 01	\$151,973 13
1858.. 342,776 42	220,776 72	121,999 70
Inc. \$34,083 72	\$4,110 29	\$29,973 43

For the purpose of contrasting these figures

with those of the New York and Erie and Baltimore and Ohio Railroad, we subjoin the following:

JANUARY EARNINGS.		
	1858.	1859.
Penna. R. R.	\$372,776	\$376,850
N. Y. & Erie.	376,357	304,708
Balt. & Ohio.	317,513	327,176
Inc. \$34,083 72	\$4,110 29	\$29,973 43

The following were the earnings of the Worcester and Nashua Railroad:

December, 1857	\$10,077 70
" 1858	14,764 61
January, 1858	\$9,917 30

" 1859

12,877 09

Total increase in December and Jan'y..

\$7,646 70

—being an increase of nearly forty per cent.

The earnings of the Norwich and Worcester road for the month of January were as follows:

1859	\$21,683 30
1858	13,540 86

Increase.....

\$8,142 44

The earnings of the Terre Haute and Alton Railroad for January were:

1859	\$67,011 13
1858	57,128 86

Increase.....

\$9,882 27

The receipts of the Michigan Central Railroad in January were:

	1858.	1859.
Passengers	\$55,611 30	\$50,090 06
Freight	62,756 94	46,059 58
Miscellaneous	6,012 66	5,236 86
Total	\$122,380 95	\$101,386 50

Decrease.....

\$20,994 45

The earnings of the Stonington Railroad Company in January were:

1859	\$13,946 96
1858	12,393 33
Increase	\$1,553 63

During half the month but one boat was running on this route, which reduced the receipts very materially. The first week in February shows a gain of about \$1,400, compared with same week last year.

Land Mail Routes Across the Continent.

The following is a description of the principal routes, both in operation and proposed, for carrying the United States mails, between the Atlantic and Pacific.

1st. From St. Paul or Fort Snelling, up the Mississippi, to Sauk Rapids; thence west by north to Moose river, a branch of the Red River of the North; thence west to Fort Union at the mouth of the Yellow Stone; thence along Milk River to Fort Benton; thence to the Blackfoot fork of Bitter Root River of the Columbia; thence to the great forks of the Columbia, where this route unites with the route from Great Salt Lake, after which union they pursue their course down the Columbia to Fort Vancouver, where they again fork, and branch north to Astoria and Olympia, and the other south to Cereales and Albany. We are not informed of all this mail route being as yet in operation. On the map is shown also its Eastern connections, by Prescott, to La Crosse and Fort Winnebago, to Milwaukee and Chicago.

Mail route No. 2 starts from St. Joseph, Mo., thence to Fort Kearney, thence up the South Platte, until it reaches a point opposite Fort Grattan, thence along the North Platte to Fort Laramie, and until it strikes the Sweet Water, whence it skirts around the south-eastern point of the Wind River Mountains to Fort Bridger, and to Great Salt Lake City. Here the line forks, one going off north, as we have stated under route No. 1, feeling on to the Lewis fork of the Columbia, near Fort Hall, and pursuing its route down the Columbia to its intersection with route No. 1. The other branch, or rather the main route, after leaving Great Salt Lake City, strikes west to the Humboldt, which it follows through the mountains, until it falls on to the Sacramento River, thence by Placerville and Sacramento to San Francisco. This mail has for some time been in operation, and is a great public convenience.

Its eastern connections, as laid down on the map, are from St. Joseph east via Hannibal and St. Joseph Railroad to Hannibal, and by North Missouri Railroad to St. Louis, and from Dubuque, Iowa, via Fort Des Moines and old Fort Calhoun to Fort Kearney.

Route No. 3 is from Independence, Missouri, west by Fort Atkinson to Santa Fe, New Mexico. This line has also been put into operation, and is very regular; its Eastern connections are from Independence by stage and Missouri river to Tipton and Pacific Railroad to St. Louis.

Route No. 4 is from Springfield, Missouri, to Neosho, thence west up the Canadian River to San Antonio and Albuquerque, thence West via Zuni and Rio Puerco to Chiquota and Rio Colorado, thence to the Mojave River to Fort Tejon, where it intersects Route No. 5, St. Louis and Memphis to San Francisco. From Albuquerque, a short route connects routes 3 and 4 to Santa Fe, and from Springfield, Missouri, the eastern connection is by stage to Tipton and Pacific Railroad to St. Louis.

Route No. 5 is known as the Great Overland Mail Route to the Pacific, and from its regularity, and the time in which the trips are performed, as also the distance traveled, may be regarded as the most successful stage enterprise of this wonderful age. This route leaves St. Louis and Memphis twice each week. The routes unite at Fort Smith, thence south-west, it crosses Red River near Preston, thence to Fort Belknap, Fort Chadbourne, to

the crossing of the Concho River, thence to the Rio Pecos, thence to El Paso, thence up the Rio Grande to Fort Fillmore and Mesilla, and thence west to Fort Buchanan, thence along the Rio Gila to Fort Yuma, thence to Los Angeles, with a short branch to San Diego. From Los Angeles by Fort Tejon to Yaisago, Santa Cruz and San Jose, to San Francisco.

The connections of this route are, coming east, first, from El Paso by San Ignacio to Fort Davis, thence to Camp Lancaster, thence by Fort Clarke and Fort Inge to San Antonio, where it forks, one going to Indianola, on the Gulf, and the other by Gonzales, San Felipe and Houston to Galveston. The next is from Fort Smith eastward by Little Rock to Memphis, and from Fort Smith northward by Springfield to Tipton and St. Louis.

These are the great routes laid down on this map. The connection of New Orleans with Galveston and Indianola, Texas, is also shown, also the route by water from New Orleans via Tehuantepec to San Francisco.

Bank Circulation, 1859.

The returns of the banks of the United States nearest to January, 1859, gives results in regard to what is called currency, as follows, as compared with former years:

Banks of the United States—January 1.

No. of Banks.	Specie.	Circulation.	Deposits.
1854..1,208	59,410,253	204,689,309	188,188,744
1855..1,307	53,944,545	186,952,223	190,400,342
1856..1,398	59,314,063	195,747,950	212,705,662
1857..1,416	58,349,838	214,778,822	230,351,352
1858..1,422	74,412,832	155,208,344	185,932,049
1859..1,560	102,974,127	156,143,897	278,411,697

That which is most mark-worthy here is the increase of specie and the decline of circulation or bank notes. If we were to deduct from this amount of circulation the "notes on hand" in the several banks, the amount outstanding would barely exceed the amount of specie held. In other words, the aggregate bank note circulation is really a gold currency, since it is dollar for dollar, and the banks hold in addition \$50,000,000 of State stocks, which are pledged to the redemption of the notes outstanding. Although this result is presented in the aggregate, it is, of course, not uniform, since in some localities the bank note currency is large. Thus, if we take Louisiana and South Carolina, the comparison is as follows:

	Specie.	Circulation.	Specie.	Excess
S. C.	\$2,561,293	8,957,783	.....	6,396,440
La.	16,258,107	9,581,114	6,676,993	.....

\$18,819,400 18,538,847

In the two States together the specie exceeds the circulation, and if we were to deduct the notes on hand, the excess of specie would be over \$1,000,000. In the Northern States, the States of Massachusetts and New York compare as follows:

	Specie.	Circulation.	Specie.	Excess
Mass	\$10,393,477	19,993,103	.....	9,599,626
N. Y.	29,905,295	26,605,407	3,299,888	.....

\$40,293,772 46,598,510

Thus, in the State of New York the circulation was as follows, at the last report:

Bank notes outstanding	\$26,605,407
Less notes on hand	2,106,653
Net circulation	\$24,498,754
Specie in bank	29,905,295

Excess specie

In addition, there were \$25,031,000 of State stocks deposited with the Comptroller to secure these note issues. From all these facts it results that the bank circulation of the Union is very small, and has been diminishing for a number of years. On the other hand, the "deposits" have increased very rapidly, and now present an ex-

traordinary figure. These are mostly in the cities, and form the basis of credits on which most of the business is conducted, independently of bank notes. If we compare the banks of the leading cities with the country banks, we observe the change, as follows:

	Circulation.	
	City.	County.
Boston	\$6,678,970	14,043,416
New York	7,496,080	19,109,327
Philadelphia	2,738,490	5,722,536

Total	\$16,913,540	38,875,279
Ex. country .....	.....	21,961,739

	Deposits.	
	City.	Country.
Boston	\$21,756,302	\$8,382,493
New York	86,081,897	25,609,085
Philadelphia	16,760,023	8,542,476

Total	\$124,593,822	\$42,534,054
Ex. city	82,064,168	.....

The operation of railroads and telegraphs, quicker conveyance and quicker communities, has been to concentrate business in the cities, to make bank notes circulate quicker, or to keep out a less time, and also to cause to circulate bank checks between neighboring towns and cities more than formerly. In other words, the operation has been to cause a far larger amount of business to be done on deposit credits by means of bank notes. This operation has been aided by the supply of specie, which has filled the smaller channels of trade, and by the increasing trouble and risk of paper money, caused by the multiplication of counterfeiters, as well as by the increased trouble and expense of putting notes into circulation under the security system. All these have tended eminently to make checks and deposit credits supplant bank note currency. This tendency causes a rapid increase in the sum of deposits. If we compare former years in this respect, we observe a great change:

Circulation.	Deposits.	
1834..\$91,839,570	\$75,066,986	Good business.
1837..149,185,890	127,397,185	General failure.
1847..58,563,608	56,168,628	Lowest depression.
1848..128,506,091	103,226,177	Corn exports.
1854..204,689,207	188,188,744	Great activity.
1857..214,778,822	230,351,352	Panic.
1859..156,143,899	278,411,797	Very dull.

In the earlier years the circulation always largely exceeded the deposits, because the former were the means of internal speculation, and commercial notes were made payable at the local banks. Of late years notes are payable in New York, and remittances are made by checks and drafts against produce, which become deposits. It was not, however, until the close of 1854 that the deposits began to exceed in the aggregate the amount of bank notes in circulation, and that period marks a growing change in the character of business done. In the State of New York, from June, 1852, to June, 1857, there was no increase in circulation, but the deposits increased from \$65,034,804 to \$104,350,426, or 67½ per cent. These figures indicate the means by which the credits of late years have been inflated, and they have been the greater by reason of the policy of the banks, which tacitly require those seeking discounts to leave a large portion of the proceeds on deposit, by which means both deposits and discounts are swollen to an inordinant sum. It is evident when this progress of credits is observed, and attention is paid to the results it produces, that some reform like that proposed by the Bullion Bank has become imperative, since it is the lending of credits that produces the evils that so frequently afflict the public. The amount of deposits on hand is now enormous, and a creation of business paper to an extent which should absorb them in loans on the old plan, could exist only in times of the greatest speculative excitement. Thus if 230 millions of deposits allowed 684 millions of discounts, or 3 for 1, as in 1857, the present amount of deposits would allow of 835 millions of discounts, or 60 per cent. beyond the

wildest figure of 1857. The tendency of this, under the competition of the banks and the desire to lend, will soon be rapid, unless some check is imposed. The principle of the Bullion Bank seems to be the most feasible, since it applies a law of trade which can alone be effective in regulating matters of trade.—*United States Economist*.

Panama Railroad.

Mr. President Hoadley, of the Panama Road, has written a letter to Mr. Isaac Townshend, giving the following not generally known facts in regard to that road:

For four years daily trains have been run, and 121,820 passengers transported, without a case of sickness occurring among them. It has carried of specie:

Gold	\$171,157,421 25
Silver	21,403,793 49

Total \$200,561,214 74

—of which \$135,135,093 came to the United States, and \$65,426,120 went to England. In the same time, 55,000 bags of mail matter have been carried. The total losses paid for damages to freight are not \$5,000.

The freight movement for three years of British merchandise received at Aspinwall has been as follows:

	Pounds.	Cubic feet.
1855	423,669	34,151
1856	691,999	87,337
1857	3,160,155	95,338

Of all the freight transported over the Panama Railroad, not more than 1-10th has any connection with California, 9-10ths, at least, consisting of British manufactured and other goods, shipped to South America and Central America, and of the produce of those countries in return, such as indigo, cochineal, India rubber, coffee, cocoa, deer skins, goat skins, hides, orchilla, pearl shells, tobacco, balsams, Peruvian bark, ores, straw hats, &c.

Nothing is shipped from California by the Panama route, except a few cases of silks sent there from China, small parcels of ores and occasional lots of whalebone. Shipments to California consist mainly of valuable goods, which will bear a high rate of freight, which between New York and San Francisco now amounts to from \$2 25 to \$6 per cubic foot.

Erroneous impressions in regard to the sources of the business of the Panama Railroad prevail extensively, even among intelligent business men and members of our national councils, many regarding it simply as a sort of appendage to California. The fact is overlooked that while California has a population estimated at only 500,000, the population of Central America is over 2,000,000, and that portion of South America whose only means of communicating with the Atlantic is either by the Isthmus of Panama or around Cape Horn contains nearly 8,000,000. Trade with South America and Central America has been carried on heretofore almost exclusively by England, that between the United States and those countries being estimated at not more than ten per cent. of the whole.

The following are the ocean connections with the Panama road:

A line of British mail steamers each month between Southampton and Aspinwall, connecting with the British mail line running between Panama and Valparaiso, touching at fifteen immediate ports.

An English screw steamship line between Liverpool and Aspinwall.

A line of sailing vessels between London and Aspinwall.

A line of sailing vessels between Liverpool and Aspinwall.

A line of sailing vessels between Bordeaux and Aspinwall.

A line of sailing vessels between Bremen and Aspinwall.

A line of sailing vessels between New York and Aspinwall.

A steamship mail line, fortnightly, between New York and New Orleans and Aspinwall, connecting with the California mail steamers between Panama and San Francisco.

Journal of Railroad Law.

LIABILITY OF COMMON CARRIERS FOR LOSS OF BAGGAGE.

In the fourth volume (just published) of E. D. Smith's Reports of Decisions in the New York Common Pleas, we observe two cases on the liability of common carriers for loss of baggage belonging to passengers, which are of interest as applicable to railroads. They are briefly as follows:

SILVER WARE NOT BAGGAGE.

Bell vs. Drew and Newton.

The defendants in this cause were owners of the steamboat 'Hendrick Hudson', running upon the Hudson river. One Jeanette Miller took passage on the boat. She had a trunk which was received as the ordinary baggage of the passenger, and without extra charge. The trunk was lost; and the owner assigned her claim to the plaintiff who brought this suit.

On the trial it appeared that the contents of the trunk consisted in part of silver ware in household use valued at \$100, in addition to wearing apparel. One question on the appeal was, whether the owners of the boat were liable for silver ware carried in a trunk under such circumstances. We give so much of the opinion of the court as applies to this question.

INGRAHAM, J.—Articles not necessary for traveling and money beyond what was necessary for a traveler's expenses, have been held not to be recoverable from a carrier. I see no difference between silver ware and silver money. Such articles form no part of a traveler's baggage, and there is no more propriety in excluding the one than the other. The mere fact of coining and stamping the silver cannot alter the rule applicable to this kind of property, in connection with the liability of the carrier.

THROUGH TICKET. JEWELRY IN TRUNK.

McCormick vs. the Hudson River Railroad Co.

This was also an action upon an assigned claim. A passenger purchased a ticket at Chicago to come to New York. It was a *through ticket* consisting of coupons; that is, there were four tickets upon one piece of paper, so arranged as to admit of each ticket being cut off and delivered up when demanded at various points along the route. Three of the coupons were delivered between Chicago and Albany, and the fourth between Albany and New York. *This last part of the route only was over the Hudson River Road*; the rest being on other roads.

At Buffalo the passenger delivered up his baggage and received a Hudson River Railroad check. The baggage consisted of a trunk and a carpet bag. The bag came on safely to New York, and was delivered to the passenger; but the trunk was lost.

Among the articles in the trunk were a gold watch and a chain and some finger rings.

Two questions were discussed in this case; 1st, whether the Hudson River Railroad Company could be made liable for the loss when it did not appear but that the trunk might have been lost before arriving at Albany; and 2nd, whether the jewelry was "baggage." The judges agreed that

the company were liable. A majority thought that they were liable even for the jewelry.

The following is the substance of their opinions. DALY, J., (after stating the facts.) These facts were sufficient to entitle the plaintiff to recover. The ticket which McCormick received in Chicago, passed him over the defendants' road; and that they took charge of his baggage at Buffalo appears by their delivering their check for it, and by their transporting a part of it safely to New York. It may be assumed that the ticket sold to McCormick in Chicago was sold by the defendants or their agent, and that they or their agents took charge of the baggage in Buffalo.

A gold watch is an article of wearing apparel, and when not worn about the person, but in a trunk while traveling, is to be deemed baggage.

WOODRUFF, J.—I concur in the opinion that the liability of defendants was sufficiently established.

But I must dissent from the conclusion that their liability extended to the loss of the watch and chain and finger rings. The liability of carriers has often been declared to extend only to "ordinary baggage." To extend it to the travelers watch and chain and finger rings assumes that such articles are usually carried in his trunk; while, on the contrary, they are ordinarily carried upon the person, and so notoriously if not universally thus carried that in my opinion they can no more be termed baggage than could any description of goods which in a particular instance a traveler might place in his trunk.

INGRAHAM, J.—I do not feel willing to decide as matter of law that a traveler may not put his watch or other articles usually worn about his person into his trunk while traveling, and claim the protection for them which the law gives him for his ordinary baggage. It is true that a watch or a ring if worn, is so used about the person; but there may be times and especially in traveling, when the traveler may prefer to keep them in his trunk. They are I think entitled to be treated in the same way as a snuffbox or other articles necessary for his comfort, though not intended for clothing.

Railroads of Missouri.

The following condensed statement of the Report of the Board of Public Works of Missouri, we copy from the *St. Louis Republican*:

Pacific Railroad (Main Line).—The total amount expended on main line is \$10,038,828 05; and the further expenditure required per estimates to open the road to Kansas City is not less than \$3,500,000. The floating debt is \$478,000. Its dues exclusive of unpaid subscriptions is \$400,000. The road is entitled to a further issue of State bonds amounting to \$220,000. The annual interest on all the bonds authorized to be issued is \$420,000. The gross earnings for the year ending November 30, 1858, were \$636,511.

The total of stock subscribed to this line is \$3,804,400; which, after deductions for discount and commissions, yielded \$2,923,012. The road has 127,000 acres land; and State credit amounting to \$7,000,000. The amount issued is \$6,780,000, on which the discounts and commissions were \$753,598.

Southwest Branch.—Subscribed stock \$356,000, of which paid \$66,973, lands 1,040,000 acres, mortgaged for \$10,000,000—of which \$4,500,000 are guaranteed by the State. For \$1,268,000 of these guaranteed bonds the State has exchanged State bonds. These guarantee bonds bear 7 per cent.

On this Branch have been expended \$1,442,710; debt due on it \$84,281.

Hannibal and St. Joseph.—Amount of stock taken \$1,963,000; paid \$336,061, and \$82,000 on county bonds. Land grant 600,000 acres, mortgaged to secure payment of \$5,000,000. These bonds, which carried 7 per cent., have been sold for \$3,351,000. The company has authorized the issue of \$1,500,000 of second mortgage, of which it has disposed of \$447,000, at \$268,200. The interest, payable annually, is \$562,000.

This road is not deemed by the Board to be completed as required by the act, which makes its completion a prerequisite to the sale of its lands.

Cairo and Fulton Railroad.—Stock subscribed \$1,261,775; paid \$50,093. Land granted and subscribed 470,507 acres, of which 400,000 are held in trust to secure payment of bonds to the amount of \$1,600,000. Bonds issued \$500,000.

The expenditures of the company are given in at \$420,366, and the value of the work done and materials found was estimated by the engineer employed by the Board at about \$207,000.

St. Louis and Iron Mountain Railroad.—Stock subscribed, \$1,999,300; received therefrom, \$1,651,205; received from State bonds, \$2,677,452; amount due Company 1st March, \$324,000; total net cost of line, \$1,045,744; gross cost, \$5,200,058; sum needed to finish road, \$118,244; debt due by it, \$171,103; earnings for 11 months, \$132,660; semi-annual interest, payable in Jan'y, but unpaid, \$98,230.

North Missouri Railroad.—Stock subscribed, \$2,520,100; cash value thereof, \$2,056,590; State bonds issued to it, \$4,350,000.

Expenditures to November 30, \$5,632,521; liabilities, \$217,637; value of assets, \$280,895. Interest payable annually, \$343,500, of which on State bonds is \$261,000. January interest on these last not paid.

Value of work done to 1st November, \$5,090,068; necessary to carry road to junction, \$120,000. Estimated final cost to junction, \$6,417,444.

Receipts of transportation so far, \$256,159; expenses, \$276,379. From this last a reduction of \$14,000 has to be made for wood on hand.

We recapitulate, and add other items in tabular form, as annexed:

PACIFIC RAILROAD (MAIN.)

Length (miles).....	282
Track laid ".....	163
Maximum grade, East end, feet.....	45
" " West " ".....	60
Acres land.....	127,000
Stock subscribed.....	\$3,804,400
Stock paid and realized.....	2,923,012
State Credit granted.....	7,000,000
" issued.....	6,780,000
Cash proceeds.....	6,026,406
Total expenditure.....	10,033,823
Interest payable annually.....	408,410
Earnings last year.....	636,511

PACIFIC RAILROAD (SOUTH-WEST BRANCH.)

Length (miles).....	283
Track laid ".....	19
" in progress (miles).....	43
Maximum grade (feet).....	65
Acres land.....	1,040,000
Stock subscribed.....	\$356,000
Cash proceeds.....	66,973
State Credit granted.....	4,500,000
" issued.....	1,400,000
Interest discount and commissions.....	1,308,249
Total expenditure.....	1,442,710
Interest payable annually.....	85,320

CAIRO AND FULTON ROAD.

Length, (miles).....	78
Track laid, ".....	7
Maximum grade, (feet).....	37
Lands, acres.....	470,507
Stock subscribed.....	\$1,261,775
Cash proceeds.....	50,093
State credit granted.....	650,000
" issued.....	250,000
" Bonds sold.....	180,000
Cash proceeds.....	147,827
Expenditures.....	420,366

HANNIBAL AND ST. JOSEPH RAILROAD.

Length, (miles).....	206
Track laid, ".....	170
Maximum grade, (feet).....	122
Acres of land.....	600,000
Subscriptions paid.....	\$410,000
State Credit granted.....	3,000,000
" issued.....	3,000,000
Cash proceeds.....	2,432,698
Land bonds sold.....	5,000,000
Cash proceeds.....	3,351,000
Convertible bonds sold.....	447,000
Cash proceeds.....	268,200
Contract cost of road.....	4,756,400
Interest payable (annually).....	562,060

ST. LOUIS AND IRON MOUNTAIN ROAD.

Length completed, (miles).....	86½
Maximum grade, (feet).....	55
Stock subscribed.....	\$1,999,300
Cash proceeds.....	1,651,205
State credit granted.....	3,600,000
" issued.....	3,276,000
Cash proceeds.....	2,677,452
Cost of road.....	5,200,053
Cost excluding discount, interest, &c.....	4,045,744
Interest payable annually.....	196,560

NORTH MISSOURI RAILROAD.

Length, miles.....	236½
" to junction nearly completed*.....	168½
Maximum grade, (feet).....	50
Stock subscribed.....	\$2,620,100
Cash proceeds.....	2,056,590
State credit granted.....	5,500,000
" issued.....	4,350,000
Cash proceeds.....	3,683,201
Expenditures to November 30th.....	5,632,521
Interest on State bonds.....	261,000

* Finished January 29, 1859.

From the general statement, it appears that at the date of the report, the length of miles of track laid was 614, with a maximum grade of not exceeding sixty-five feet for any of the roads excepting the Hannibal and St. Joseph. The cash subscriptions paid amount to \$7,084,387, the most of which has been paid to the Pacific, North Missouri and Iron Mountain.

Harlem Railroad.

The earnings of the Harlem railroad for the first quarter of the fiscal year show a fair gain over the corresponding portion of 1857. The figures are:—

	1858.	1857.
October.....	\$87,348 99	\$84,801 18
November.....	85,313 54	77,240 03
December.....	92,100 32	74,372 34
Total.....	\$264,762 85	\$236,413 55
	236,413 55	

Increase in 1858.....\$28,349 30

A New Florida Railroad.

A charter has been obtained for a railroad from Tocoi, near Picolata, Fla., to St. Augustine. \$100,000—stock has been subscribed, the first installment paid, and the road commenced. This will be a great advantage to St. Augustine, as the inconvenience of access prevents many from going there.—*Savannah Repub.*

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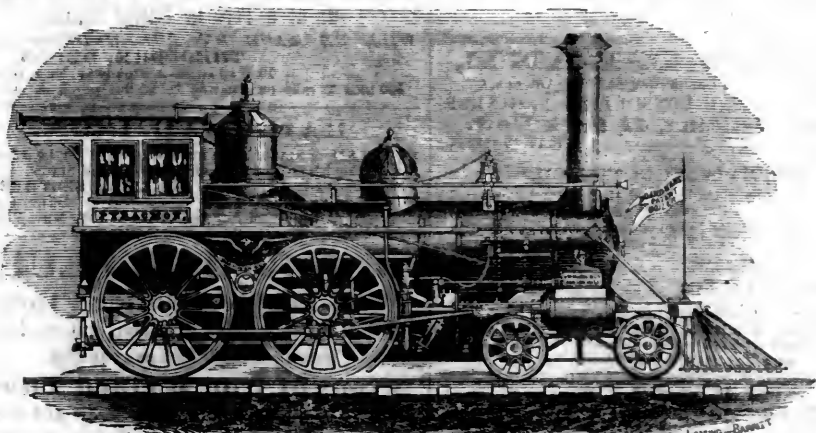
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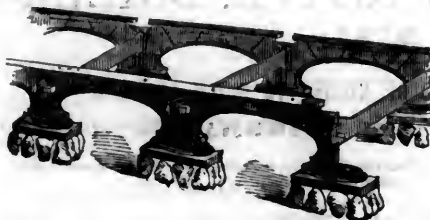
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RAILROAD IRON. CONTRACTS FOR RAILS, AT A FIXED PRICE OR ON COMMISSION, DELIVERED AT AN ENGLISH PORT,

Or at a Port in United States,

WILL BE MADE BY THE UNDERSIGNED, THEODORE DEHON,

10 Wall st., near Broadway, New York.
500 tons T rails on hand 64 to 67 lbs. per linear yard.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER,
6m35 BALTIMORE.
And 17 Nassau st., New York.

IRON BOILER FLUES.

Lap-Welded Boiler Flues, 1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes, From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY

MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

Warehouse—209 South Third st.,

PHILADELPHIA.

STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR. STEPHEN P. M. TASKER.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
Agents for the United States,
12 SOUTH CHARLES STREET,
6m35 BALTIMORE.

And 17 NASSAU STREET, NEW YORK.

MORRIS & JONES & CO., IRON MERCHANTS,

MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL

IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
OUT NAILS and SPIKES, PIG IRON, &c.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854

Railroad Iron.

The undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

OASWELL & PERKINS,
New York, January 1, 1859. Brokers, 69 Wall st.

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,
President of the Incorporation.

February, 1859.

RAILROAD IRON.

The Crescent Manufacturing Company, WHEELING, VA.

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Secy,
WHEELING, VA.

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.

The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER Free on Board at Shipping Ports in England, or At Ports of Discharge in the United States,

RAILS OF SUPERIOR QUALITY,

And of Weight or Pattern as may be required.

VOSE, LIVINGSTON & CO.,
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WOOD, MORRELL & CO.,
Having leased the extensive Works of the

Cambria Iron Company,

Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

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No. 407 Walnut st.

RAILROAD IRON AND COMMON BARS.

THE UNDERSIGNED,

Sole Agents to Messrs. GUEST & CO.,
The Proprietors of the Down's Iron Works,

Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE RENSSELAER IRON COMPANY,
TROY, N. Y.

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,

TROY, N. Y.

New York Agency:

BUSBING, CROCKER & DODGE,
33 CHURCH ST.

A. BRIDGES & CO.,

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS,

OF EVERY DESCRIPTION,

64 COURTLANDT ST., NEW YORK.

RAILROAD AXLES, WHEELS AND CHAIRS,
SPIKES, BOLTS,
NUTS, WASHERS,
CAR, SHIP AND BRIDGE BOLTS.
IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.
STEEL AND RUBBER SPRINGS,
LOCOMOTIVE AND HAND LANTERNS,
PORTABLE FORGES AND JACK SCREWS,
COTTON DUCK FOR CAR COVERS,
BRASS AND SILVER TRIMMINGS.

Also, Sole Agents for the Manufacturers of Car Head Linings.

Orders for the purchase of goods on commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES. JOEL C. LANE.

F.W. Rhineland, James A. Boorman, Edwin A. Post.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

COMMISSION MERCHANTS,

SUPPLY ALL MATERIAL AND ARTICLES USED IN THE
CONSTRUCTION AND OPERATING OF RAILWAYS.
BANK OF COMMERCE BUILDING, NEW YORK.

REFER TO

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Sam'l Blean, Esq., President Hudson River Railroad Co.
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Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co.

RAILROAD SUPPLIES.

WILLIAMS & PAGE,

No. 44 Water, between Congress and Kilby Streets,

Boston, Mass.

Iron Rails, Chairs, & Spikes,
FREIGHT AND COAL CARS,

(on hand or made at short notice.)

Wheels and Axles of all kinds,
LOWMOOR, AMES, BOWLING, AND NASHUA TIRES,
IRON AND STEEL,

Of all kinds for Shops and Tracks.

Car Trimmings, Paints, Oil, Varnish, Car and Switch
Locks, Ventilators, Lanterns, Head-Lights, Gauges, Rubber
Springs, Chairs, Hose and Belting, Ash, Pine and other Timber,
and ALL MATERIALS USED in Equipment and Repairs of
Railroads, Engines and Cars, at lowest prices.

THOS. S. WILLIAMS, PHILIP S. PAGE,
Late Sup't Boston & No. R. R. Late Page, Alden & Co.

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Boston and Maine R. R. COOPER, HEWITT & Co., do.
Capt. WM. H. SWIFT, Boston. REEVES, BUCK & Co., Phila.
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LOCOMOTIVES,

PASSENGER AND FREIGHT CARS.
MANUFACTURERS' AGENTS

FOR Sellers' Iron Turn Tables, Dimpers' Patent Blower,
Gardiner's Volute Car Springs and

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NEGOTIATORS OF SECURITIES.

NEW ENGLAND RAILWAY, STEAMBOAT AND TELEGRAPH SUPPLY AGENCY.

HOLT, GILSON & CO.,

5 Water st., BOSTON.

LOCOMOTIVES, CARS.

Rails, Sleepers, Chairs, Spikes, Wheels, Axles and Tires.

IRON AND STEEL OF ALL KINDS.

BOILER TUBES AND FELTING.

BOLTS, NUTS & WASHERS.

LOCOMOTIVE, HAND AND SHIP LANTERNS.

Car Trimmings of all descriptions: Sperin, Whale,
Lard, Kerosene and Cotton Seed Oil, etc.; Paints and Var-
nishes; Steam and Water Gauges; Car and Switch Locks;
Ventilators; Bell Cords; Rubber Springs, Hose and Belting;
Signal Bells, Machinists' Tools, Gauge Cocks, Oil Cups, etc., etc.
Sole Agents for TOMMY'S celebrated GAUGE GLASSES,
and PACKER'S IMPROVED RATCHET DRILL.

Orders promptly filled at the lowest prices.

W. H. HOLT.

W. H. GILSON.

RAILROAD SUPPLIES.

GILBERT, MURDOCK & CO.,

No. 9 NASSAU STREET,

NEW YORK,

ARE agents for, and prepared to furnish at manu-
facturers' prices,

RAILROAD IRON,

LOCOMOTIVE ENGINES,

RAILROAD CARS,

CAR WHEELS,

AXLES, CHAIRS,

SPIKES, TOOLS,

ETC., ETC.

All inquiries in reference to the above articles will
receive immediate attention.

New York, January, 1859.

GEO. M. FREEMAN,

SUCCESSOR TO

PRATT & FREEMAN,

PHILADELPHIA

RAILWAY SUPPLY AGENCY,

No. 123 WALNUT STREET,

PHILADELPHIA.

Railroad Materials, Locomotive and Car Findings,

MACHINERY AND MACHINISTS' TOOLS,

MINERS' TOOLS, ETC.

COTTON WASTE.

WHITE AND YELLOW CAR GREASE,

LOCOMOTIVE BRASS WORK,

Baggage Checks, Barrows, etc., etc.

RAILROAD LANTERNS, SIGNAL LIGHTS,

STEAM GAUGES, COCKS AND WHISTLES,

INDIA RUBBER HOSE PACKINGS, ETC.

LANTERNS OF ALL DESCRIPTIONS,

ENGINE, STATION, AND SIGNAL BELLS,

Superior Car Upholstery, etc.

AGENCY OF THE KEROSENE OIL COMPANY.

Orders solicited, promptly filled, and forwarded with
despatch and care at the manufacturers' lowest prices.

S. B. BOWLES,

MANUFACTURER AND DEALER IN

RAILROAD SUPPLIES,

No. 12 GOLD STREET,

(Between PLATT and MAIDEN LANE.)

NEW YORK.

MORRIS K. JESUP. JOHN KENNEDY. GILEAD A. SMITH.

M. K. JESUP & CO.,

RAILWAY AGENTS AND BANKERS,

44 EXCHANGE PLACE,

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AGENTS FOR THE SALE OF

FOREIGN AND AMERICAN RAILROAD IRON

AND ALL MATERIALS NECESSARY FOR THE

Construction, Equipment & Operating of Railways.

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BOUGHT AND SOLD

Either privately or at the Board of Brokers.

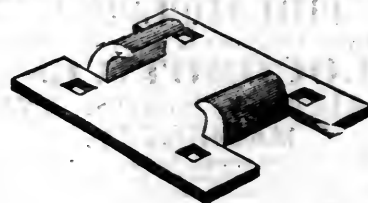
NEW YORK RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the
Patent Rights owned by the late New York Wrought
Iron Railroad Chair Company, and also the entire machinery
for manufacturing their improved Wrought Iron Railroad
Chair, we are now fully prepared to receive and fill all orders
from responsible parties, to any extent, with promptness and
dispatch.

The thickness of the Flgs of our Chair increases through the
bend, where the greatest strength is required, and diminishes
towards the edge; so that a less weight of metal may be used,
and a strength acquired equal, if not superior, to that of a
heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought
Iron Chair now in market, to our works for a supply; believ-
ing they combine qualities superior to any others now manu-
factured.

The Chairs weigh from seven and a-half to fifteen pounds,
according to the thickness of the Iron and size of the Chair.
To enable us to give you a perfect fit, it will be necessary al-
ways to send a section of the Rail. We cannot undertake to
make Chairs without a proper pattern, as it is impossible to
make a perfect fitting Chair from a drawing.

Our manufacture of Chairs are used on a large number of
Roads, of which the following list comprises some of them, viz:

Galena and Chicago Union Railroad Company,
North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company.

Messrs. M. K. JESUP & CO., 44 Exchange
Place, New York, are the only parties authorized to act
as our Agents.

THE ROGERS Locomotive & Machine WORKS,

SUCCESSORS TO

ROGERS, KETCHUM & GROSVENOR,

PATERSON, N. J.,

HAVING extensive facilities, are now prepared to furnish
promptly, of the best and most improved description, either

COAL OR WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER VARIETIES OF

RAILROAD MACHINERY.

J. S. ROGERS, Pres't, { Paterson, N. J.

WM. S. HUDSON, Sup't, {

M. K. JESUP, Vice Pres't.

L. F. STARR, Sec'y and Treas'r,

44 Exchange Place, New York

THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.

HAVING large facilities, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and dispatch.

BRASS and IRON CASTINGS; LOCOMOTIVE TYRES welded and blocked to exact sizes, and every thing connected with the building or repairing of Locomotives furnished on short notice.

These Works being located on the New York Central Railroad, near the centre of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN, Superintendent.

RICHARD NORRIS. HENRY LATIMER NORRIS.
RICHARD NORRIS & SON,

**LOCOMOTIVE STEAM ENGINE
BUILDERS,**

SEVENTEENTH STREET, ABOVE CALLOWHILL,

PHILADELPHIA,

ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

**LOCOMOTIVES,
RAILWAY TOOLS AND
MACHINERY.**

MANUFACTURE to order, Locomotives of any Arrangement, Weight or Capacity. In Design, Material and Workmanship, the Locomotives produced at these Works, are equal to, and not excelled by any.

Locomotive Engines.

**DANFORTH, COOK & CO.,
PATERSON, N. J.,**

HAVING erected an extensive Shop, with the most approved Machinery and Tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various Tools suitable for running Repair Shops.

The business of Machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1749

UNION WORKS, BALTIMORE.

POOLE & HUNT,

Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TYRES, equal to any produced in the country.

WHEELS and AXLES fitted for use.
HYDRAULIC PRESSES for expressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description. SHAFTING, PULLEYS and HANGERS.

WEST POINT FOUNDRY.

R. P. PARROT, Lessee.

Manufacturer of Marine and Stationary

ENGINES,

Sugar Mills, Saw Mills, Iron Bridges, Cannon, WATER PIPES, BOILERS, IRON BUILDINGS, CASTINGS and FORGINGS OF ALL KINDS

Wm. KEMBLE, Agents,
CHAS. J. NOURSE, 29 West Street.

MACHINERY OIL.

REFINED NEAT'S FOOT OIL

WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all kinds of machinery use.

PETER COOPER,
17 Barling Slip,
New York.

IMPROVED PATENT METALLIC OIL,

MANUFACTURED UNDER THE PATENT OF

J. & W. W. CUMBERLAND,
And under the personal Superintendence of the Inventor.

**THE NEW YORK
CUMBERLAND METALLIC OIL
WORKS,**

FOOT OF 24th STREET, EAST RIVER.

**OFFICE, 205 BROADWAY,
NEW YORK.**

WE respectfully call the attention of those interested in the running of

**RAILROADS,
STEAMSHIPS,**

Machine Shops, Factories,

and Machinery of all kinds, to the valuable qualities of our Oil.

1. It is entirely free from Gum, cools heated journals quicker than water, and keeps them cool by its superior anti-friction properties.

2. By its use less motive power is required than in using any other oil yet known. It will move machinery with very perceptibly less motive power than Sperm Oil.

3. The same quantity will last at least 33 1/2 per cent. longer than Sperm, or any other Oil, and the quality is always strictly uniform in its season. We make Summer and Winter Oil.

4. Having largely increased the capacity of our works, we have been enabled to reduce the prices below those of last year; and it is our intention to keep it at all times below the price of Sperm.

The prejudice existing against Oils has very properly grown up, and we are fully aware of the deceptions which have been and still are practiced by unscrupulous persons; but we are prepared to substantiate all the foregoing statements relative to the superiority of our Oils, at

OUR OFFICE, 205 BROADWAY,
by large numbers of certificates of the best managed lines of Railroads, Steamships, Machine Shops, & Factories in this country, testifying to its value as being greatly superior to any other. Most of the certificates being of prominent Companies, it is probable that more or less of them will be known to all. We have also the MEDALS and DIPLOMAS awarded to us by the AMERICAN INSTITUTE.

We will at all times be ready to refund the money if the facts above stated are not satisfactorily substantiated on trial of the Oil; and we only solicit from those who have never used it very small trial orders. We also make

**SUPERIOR GREASE,
TALLOW, AND
BURNING OIL.**

The BURNING OIL will burn in any lamp that will burn Sperm, lasting longer, and burning without smell or smoke.

We manufacture an

**OIL EXPRESSLY FOR
SEWING MACHINES,
GREATLY SUPERIOR TO ANY OTHER,
AND WITH LESS SMELL.**

Several have attempted to imitate our Oil, calling it "METALLIC OIL," as well as giving it a similar appearance; and we would CAUTION buyers against them, and advise them to see that our brand—

"NEW YORK CUMBERLAND METALLIC OIL WORKS, FOOT OF EAST 24th ST."

with the names of the inventors and kind of Oil, is upon every package, however small.

Address,—

**N. Y. C. METALLIC OIL WORKS;
205 BROADWAY,
NEW YORK.**

6m37

THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. Hull & Son.)

108, 110, 112, 114, 116 and 118 CHURCH ST.,

NEW YORK.

FOR RAILROADS,

STEAMSHIPS, MILLS, MACHINE SHOPS, ETC.

THIS OIL, having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is vastly less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

Also,—

**J. C. HULL & SONS'
REFINED BURNING OIL.**

Buyers are requested to give this OIL a trial, as it is believed that it will be found the

**CHEAPEST, CLEANEST AND BEST
OIL FOR BURNING,**

(all things considered), in the market.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

TAW & BEERS,

DEALERS IN

**Sperm, Whale and Elephant Oils,
Adamantine Car and other Candles,**

AND MANUFACTURERS OF

**TAW'S LUBRICATING
GREASE**

**FOR RAILROAD CARS
AND HEAVY MACHINERY.**

THIS celebrated GREASE has been in use upwards of Ten years; and is in the opinion of FORTY RAILROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or description of machinery.

**TAW & BEERS,
16 SOUTH WATER ST.,
Philadelphia.**

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Sperm Oil for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main St., BUFFALO.

Reliable orders filled for any part of the United States or Europe.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 9.]

SATURDAY, FEBRUARY 26, 1859.

[WHOLE No. 1,193, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, February 26, 1859.

Census of Louisiana.

A census of the State of Louisiana was taken last year, and the result has just been published, with some allowance based on the absence of thousands of citizens during the prevalence of the yellow fever, at which time the enumeration was taken. The aggregate population is 629,876, being an increase of 113,114 over the total of the year 1850.

The New Orleans papers deny the correctness of the census of that city, which is put down at 117,525, while it is claimed that the true number must be near 180,000. The climate of New Orleans is such as to prevent any very large increase of its permanent resident population. The population of the State in 1850, and 1858, is as follows:

	1850.	1858.	Increase.
Free Whites.....	225,491	311,217	55,726
Free Colored....	17,462	18,095	623
Slaves.....	244,809	300,574	55,765
Total.....	517,762	629,876	112,114

The great State of Louisiana, which exports to foreign countries more than any other State in the Union, has only about as many inhabitants as the city of Philadelphia.

Philadelphia, Wilmington and Baltimore Railroad.

We have received the annual report of this Company for the fiscal year ending November 30, 1858, which was presented at the meeting of the stockholders held at Wilmington, Del., on the 10th of January. From this we learn that the earnings from operations of the road were:

	1857.	1858.
From passengers.....	\$775,615 43	\$763,579 55
“ freights.....	253,356 91	223,771 95
“ express.....	31,014 28	27,770 56
“ rents.....	16,018 52	16,389 15
“ mail.....	38,013 76	39,377 36
Miscellaneous.....	5,892 08	5,073 38
Newcastle & Frenchtown line.....	23,941 71	19,884 70

Total revenue.....\$1,143,852 69 \$1,095,847 15

The expenditures in 1858 were:

Interest on bonded debt, ground rents, etc., less interest received.....	\$160,000 00
Repairs of road.....	46,849 16
Do. bridges.....	13,411 15
Do. engines.....	24,688 37
Do. cars.....	16,745 06
Do. buildings & fences, etc.....	10,982 87
Conducting transportation.....	125,388 98
Office, salaries, etc.....	20,974 88
Ferries.....	22,170 52
Fuel for locomotives.....	57,395 77
Oil, tallow, waste, etc.....	8,611 67
Miscellaneous expenditure.....	47,199 82
For new work.....	67,166 40
Expenditures of New Castle & Frenchtown line.....	13,295 49
State and County taxes, etc.....	11,000 00
Appropriated to renewals.....	60,000 00
Loss in operating Delaware R. R.....	45,814 22

751,694 36

Net revenue.....\$344,152 79

Dividend 2 per cent. April 1st.....\$112,000 00

Do. 3 per cent. Oct. 1st.....168,000 00

280,000 00

Balance of unappropriated revenue...\$64,152 79

It will be seen that the operating expenses of

the road, together with renewals, and construction of all new works, in fact every expenditure of every kind, for the year, were but 43 per cent. of the revenue.

The value of wood, wood lots, and materials on hand, and paid for, was \$105,008 30.

In 1858 every thing belonging to the year has been charged to expenses, including renewals, and construction of all new work, and there has been appropriated to renewal, \$60,000, none of which has been expended, so that the net results of the business of 1858, are \$404,152 79, or a surplus more than has been expended and divided of \$124,152 79.

The total revenue of the Philadelphia, Wilmington and Baltimore R. R. in 1857, was.....\$1,119,910 98
New Castle and Frenchtown line... 23,941 71

Total both lines.....\$1,143,852 69
Expenditures of all kinds, including appropriation to renewals, taxes, interest, etc.....\$720,498 79
Loss on Delaware road.. 44,418 31

764,917 10

\$378,935 59

Expended and charged to renewals.....\$10,000 00
Do. construction..... 92,129 72

102,129 72

\$276,805 87

The total expenditures, interest, renewals and loss of the Delaware railroad were \$115,352 46 less in 1858 than in 1857.

During the year, the Delaware road has contributed to the revenue of the Company.....\$66,627 97
Deduct loss in operating the same.... 45,814 22

And there remains.....\$20,813 75
as a compensation for doing the business from the Delaware road over the New Castle and Frenchtown, New Castle and Wilmington, and Philadelphia, Wilmington and Baltimore railroads, most of which has been accommodated in the regular trains of the Philadelphia, Wilmington and Baltimore and New Castle and Wilmington roads.

The improvement bonds of the company which fell due in April last were promptly paid at maturity by taking the Revenue in anticipation of Funds to be realized from a new Loan payable

July, 1st, 1884. This new Loan has been authorized by the Stockholders in order to provide means to pay off the Loan due July 1st 1860, amounting to

\$2,161,776 05	
Also the improvement bonds before referred to, due April 1st, 1858,	144,000 00
Also, second series of improvement Bonds, due May 1st, 1863.	119,000 00

Making the total, \$2,424,776 05

This new loan, not to exceed \$2,600,000, was offered, to the holders of the loan due July 1st, 1860, and others at 95 per cent., bearing interest at six per cent., payable semi-annually.

Up to November 30th, 1858, there was taken of this new loan, on the above terms.....\$1,696,500 00

Add to this the amount of new Loan equivalent to the old, held by the State of Delaware, now awaiting the confirmations of the Legislature by recommendation of the Governor,.....85,000 00

Also, amount disposed of since November 30th,.....227,000 00

And the amount of new loan disposed of, will be to the date of this Report,.....\$2,008,500 00

With this amount of new loan disposed of, the Company could easily, and without embarrassment, provide for the balance required for the old at, or before maturity, from its surplus revenue and the proceeds of the sales of its real estate and other property not required for the use of the Road. But in order that there should be no possible contingency about it, we have made a contract with parties of the highest responsibility in the country to take at 95 per cent. whatever balance there may be, if any remaining, required to liquidate the old. It is hardly probable, however, as the second series of improvement Bonds does not fall due till May 1st, 1863, that we shall find it necessary to place any more than has now been disposed of.

This Road, after many reverses and struggles, may now confidently be ranked among the roads that are certain to pay dividends of six per cent. annually, with the necessary appropriation to the Sinking Fund, and a handsome surplus for contingencies. Its position is a strong one, and its strength and character will annually improve, as its ability to make dividends and lay up a surplus is more fully demonstrated. Its policy should be to make no larger dividends than it can be certain of maintaining; together with the appropriation to the sinking fund, and also a surplus sufficient to provide for all reasonable emergencies. A property thus managed, and thus productive, must every year gain in the confidence of the public.

Within less than eight years the whole track between Philadelphia and Baltimore has been relaid with various kinds of T rail, of both English and American manufacture. For two or three years past we have laid down wholly American iron, either from the Montour Works, or from the establishment of Reeves, Buck & Co., weighing fifty pounds per lineal yard, instead of iron of sixty and sixty-five pounds per yard as formerly. We save in the material, and consequently in the first cost, twenty or thirty per cent. The quality and manufacture of the light iron is superior to the heavy iron, and thus a more uniform rail is secured.

A fair estimate of the average durability of the iron, based upon the experience of this road, is ten years, or in other words, we must lay ten miles of new track annually to keep the road up in a state of entirely reliable efficiency. This will require about 800 tons of new iron, that can now be obtained in exchange for old at a difference of twenty dollars per ton. The average durability of cross ties is about seven years. The track requires, if laid with light iron, about 35,000 cross ties per year on our road, and if laid with heavy iron, about 30,500 per year. These are now bought

at an average of 27½ cents each. The cost of relaying one mile of track, is \$100. Cost of spikes and joint fastenings, castings and switches, six hundred dollars.

The cost of these several items per year, would be, at present prices, \$36,450. The cost of labor in adjusting, ditching, inspecting track, together with all other items not enumerated above, will be about two hundred and fifty dollars per mile, or about \$25,000 annually. An expenditure, therefore, in labor and materials, of \$61,450 annually should keep our track in a state of high repair and efficiency.

In the year 1852, the relaying of the entire track between Wilmington and Baltimore was completed, so that the year 1853 was commenced with a T rail, for the entire distance between Philadelphia and Baltimore. The distance between Wilmington and Philadelphia was laid down prior to 1852.—For the last six years, or since the T rail track was completed, there has been expended on the track an average of \$64,210 annually, or a sum as will be seen from the foregoing, amply sufficient to provide for repairs, depreciations and renewals.

The experiment in coal burning still continues to be entirely successful.

The Dimpfel engine Daniel Webster has run during the year, 32,786 miles.

Cost of coal consumed.....	\$1,973 15
Wood for kindling.....	167 70

Total cost for fuel.....\$2,140 85

Cost per mile run, 6 52-100 cents.

Cost of repairs per mile run, including new set of tyres in November, 5 4-10 cents.

The reports of the performances of the Dimpfel engines Henry Clay and Christiana are equally satisfactory.

Among other new work finished during the year has been the abutment of Port Deposit stone at Gray's Ferry Bridge, shortening the South Span to 90 feet; a new Track Scale at Philadelphia, for weighing loaded cars, locomotives, &c., new pit in the engine house at Philadelphia; a new cattle yard at the Bell Road, occupying four acres with a side line, 1,300 feet long, and ample pens for the accommodation of a large trade; an iron bridge over the deep cut near Gray's Ferry; thirteen new cattle guards and small culverts on different parts of the Road; a large culvert of two spans of 11 feet each; the front of the freight house at Chester, has been taken down and rebuilt with a new foundation. At Naaman's Creek the abutments for two bridges have been built and are now ready for the superstructure. A new draw has been put in at Brandywine bridge, and the whole structure thoroughly repaired. At Perryville, the old bridge over the railroad has been taken down and replaced by one of shorter span. Extensive repairs have been made to the docks on both sides of the river. At Havre-de-Grace, the old Truss bridges over the Railroad have been re-built. Bush and Gunpowder bridges have been carefully examined and renewed wherever found at all defective. The docks and other wood work on the iron ferry boat have been thoroughly overhauled and renewed wherever found defective. The engine house and machine shop at Baltimore, have been finished.

The contract system is still in operation and continues to work with great satisfaction. It is believed that a good deal of the regularity of the trains, and freedom from accident, is due to the individual responsibility that is brought to bear upon all the departments of service. The fact is undisputed, that individual responsibility contributes more to success than any other element in the business of corporations.

The equipment of the road consists of 31 engines of which 6 are used on Delaware, New Castle and Frenchtown, and Newcastle and Wilmington Railroads; 60 passenger, 21 baggage and express, 405 freight, and 61 road cars—total 547. There have been added to the stock of cars during the year, two 8 wheel baggage cars, two 8 wheel market cars, four 8 wheel freight cars, and two 4 wheel road cars, and there have been broken up during the same time as unfit for use, four old passenger cars and seven freight cars. The engines are in good order and ample for the work of the road for the present. The whole amount of damage by accidents has been only \$661.61. The losses and damages on freight business has been only \$561. No loss by fire has occurred. No passenger has been injured. Not a single wheel or axle has been broken. Out of 1,982 connecting trains but 13 have failed to connect with adjoining roads.

CONDENSED BALANCE SHEET.

Road, including Susquehanna B'dge.	\$7,069,073 16
Port Deposit Branch Railroad.....	109,514 70
Terminus on the Delaware at Washington St.....	56,944 31
Cost of stock owned by the Co.....	762,225 00
Real Estate at Philadelphia, Chester, Wilmington, Elkton, Havre-de-Grace, &c., including a portion for the Susquehanna Bridge, and Port Deposit Branch Railroad....	257,023 79
Assets as follow:	
Stocks and other securities at cost.....	\$119,552 25
Due by agents.....	17,550 74
Due from sundry acc'ts.....	430 60
Due from P. O. Dep'tm't.....	6,260 09
Bills receivable.....	55,457 03
Bonds receivable.....	3,520 72
Instalments on new stock unpaid.....	2,100 00
Cash.....	159,078 12
Wood and materials on hand, including wood lands.....	88,185 05
Advances to connecting lines.....	16,812 85
Due from Southwark R. Co., for relaying tracks, &c.....	22,165 84
Due from Delaware R. Co.....	37,102 56
	<u>528,215 94</u>
	\$8,782,596 90
Capital Stock.....	\$5,600,000 00
Mortgage Loan, due 1st July, 1860, do. do. 1884.	688,928 83 1,696,500 00
Improvement Bonds, due 1st May, 1863.....	119,000 00
Mortgages on Real Estate.....	40,950 00
Ground rents.....	10,000 00
Current liabilities, viz.:	
Interest on loan, due 1st July, 1860, unclaimed.....	1,495 80
Dividends unclaimed.....	6,365 25
Coupons, Improvement Bonds.....	270 00
For Real Estate waiting order of Court.....	14,125 00
Sundry accounts.....	3,064 29
Due other roads and lines, \$50,802 87 Less due from other roads and lines.....	18,556 13
	<u>32,246 74</u>
Contractors.....	9,319 66
Bills payable.....	21,320 00
Interest.....	70,370 42
Delaware Railroad Lease.....	30,030 47
New Castle and Frenchtown.....	854 13
Balance to credit of Renewal fund..	60,000 00
Balance credit of Revenue, Nov. 30, 1858.....	378,656 31
	<u>\$8,782,996 90</u>

President—S. M. FELTON.

Directors.—Samuel M. Felton, Moncure Robinson, Wm. L. Savage, Joseph C. Gilpin, J. A. Duncan, Jesse Lane, Frederick A. Curtis, John C. Groome, J. S. Cohen, Jr., Thomas Kelso, Columbus O'Donnell, Enoch Pratt, Thomas Donaldson, William W. Corcoran, Edward Austin.

Secretary and Treasurer—A. HORNER.

Demopolis Railroad.

The *Gazette* of the 21st inst. contains the proceedings of the meeting held in Demopolis, on the 17th, to take into consideration the subject of continuing the Selma and Uniontown R. R. on to Demopolis, and thence to the Mobile and Ohio road, via Livingston. There were delegates in attendance from Livingston, and Col. Price, President of the Selma and Uniontown road, was also at the meeting, and addressed it, as did also B. N. Glover, Esq., Messrs. R. F. Houston, H. A. Tayloe, and W. A. C. Jones, Engineer of the N. E. and S. W. Ala. road.

We understand there was some conflict of views as to the most favorable point for the road to cross the Bigbee. A resolution was adopted providing for the appointment of a committee to ascertain what amount of subscriptions could be obtained on the proposed route for the road.—*Greensboro Beacon*.

Memphis and Ohio Railroad.

We learn from Mr. Pickett, Chief Engineer of the Memphis and Ohio Railroad Company, that the last rail has been laid on this road, on the stretch between Brownsville and the junction with the Mobile and Ohio Road—thus completing the continuous connection by rail with Columbus, Ky., and through that place with the entire system of roads radiating from Cairo. It will probably be a week before the full and complete opening of the road will be announced.—*Memphis Bulletin*.

Eastern Shore, Md., Railroad.

A meeting of the friends of the Eastern Shore Railroad, was held at Princess Anne on the 1st inst. It was stated that the whole number of shares subscribed to the Eastern Shore Railroad to be 1,592,408 shares less than 2,000, the number requisite to organize the Company. The remaining shares were subscribed upon the spot. The day appointed for the election of Directors and the organization of the Company was the 22d of February.

Philadelphia and Reading Railroad.

At the annual meeting of the stockholders of this company, held in Philadelphia on the 10th of January last, the report of the Board of Managers, giving in detail a history of the operations of the road for the fiscal year ending November 30th, 1858, was presented and read. It was resolved that the same be accepted, and the board authorized in their discretion to carry into effect any of the measures proposed therein. They were also authorized to enter into such contracts as they may deem advisable for working connecting roads. The policy indicated in the report with reference to the application of the revenues of the road, to the payment of all existing current obligations, was specially approved. A vote of thanks was presented to the board for the very efficient and satisfactory manner in which the affairs of the road had been conducted during the year. The following is a condensed statement of the transportation and income account. The receipts were:

From freight and tolls on coal \$1,865,693 41
 " " on merchandise 335,914 94
 " passenger travel 272,679 71
 " U. S. Mail 18,703 00
 " miscellaneous sources 17,759 85

\$2,510,750 91

And the expenses were:

Repairs of roadway \$149,675 80
 " bridges 6,705 40
 " buildings 8,868 21
 " machinery .. 22,297 10
 " Richmond wharves .. 14,808 92
 " 142 engines .. 151,493 16
 " 4,709 coal cars 96,688 54
 " 925 freight cars 23,571 34
 " 58 passenger cars 12,025 01
 Depots, water stations, etc. 66,045 85
 Office expens's—including salaries of officers, agents, etc. 103,466 91
 14,721 cords of wood .. 55,851 11
 39,281 tons of anthracite coal 77,383 30
 33,782 gallons of oil ... 27,337 42
 Grease and cotton waste, etc. 4,003 57
 Wages of train hands .. 157,717 00
 Other working expenses 78,937 36
 Lateral road expenses.. 3,973 11
 Watchmen 9,901 61
 Sundries 11,051 98
 Drawbacks and allowances 117,995 65

1,199,798 35

Net profit for the year \$1,310,952 56

Interest on bonded debt:
 Coupons due April 1, and Oct. 1, 1858, and Jan. 1, 1859, on 1850 and 1870 bonds \$192,576 00
 Coupons due July 1858, and Jan'y 1, 1859, on 1860 and 1886 bonds. 516,138 00
 Interest on bonds and mortgages 30,987 00

Total for the year.. \$739,701 00

Renewal fund:—
 Five cents per 100 tons on 365,844,285 tons transported one mile during the year 182,222 14
 922,623 14

Dividend fund for the year... \$388,329 42

Disposed of as follows:—
 Sinking Fund 1860.. \$25,000 00
 Do. 1870.. 75,000 00
 Do. (L. V.) 1886.. 50,000 00
 State tax on capital, 1858 18,389 63
 Div. on preferred stock.. 108,626 00
 277,015 63

Reserved fund, 1858..... \$111,313 79

The business of the past year, compared with 1857, shows the following results, viz:

In merchandise, an increase of 111.7 tons in the quantity carried; \$5,929 16 in receipts, and \$10,020 56 in profit.

In travel, a decrease of 6,028 passengers carried, equal to 3,520 through passengers; \$14,854 63 in receipts, and \$26,912 25 in profits.

In coal, a decrease of 167,046.1 tons in quantity, \$547,229 96 in receipts, \$282,380 23 in profit, and a small increase of \$1,384 78, in mail and miscellaneous receipts.

Transportation expenses have been decreased 10.62 cents per ton of coal carried; 3.82 cents per ton of merchandise, and increased 14.30 cents per through passenger.

The net amount of freight and toll received on coal averaged in 1857, 141.13 cents per ton carried; in 1858, 120.94 do., and the per centage of expenses to gross receipts, was in 1857, 48¼ per cent., in 1858, 47.8 per cent. The latter, however, if allowance be made for the reduced rate of freight

and toll, would be 58.8, instead of 47.8, showing a reduction of ten per cent. in the working expenses of the road, during the present year.

The following comparative statement, which includes the miscellaneous charges omitted in the preceding comparisons, exhibits a decrease of \$335,737 71 in the amount of profit earned, viz:

1857.
 Gross receipts \$3,065,521 56
 Expenses \$1,481,745 22
 Renewal 120,008 21
 1,601,753 43

Profit..... \$1,463,768 13

1858.
 Gross receipts \$2,510,750 91
 Exp'ses. \$1,199,798 35
 Renewal 182,922 14
 1,382,720 49

Profit..... 1,128,032 42

Decrease..... \$335,737 71

Owing to the alteration in the rate of the appropriation for the renewal fund from 3 to 5 cents per 100 tons carried one mile, as approved at the last annual meeting, the charge this year has been increased \$73,168 86. If this be deducted from the above the actual decrease in the year's profit is \$262,568 85.

The earnings and expenses of the Lebanon Branch for the last eight months are included in the general account, and somewhat interfere with the correctness of the preceding comparisons.

The dividend fund for the year is as follows:

Net profit from all sources \$1,128,030 42
 Less interest on the bonded debt, (including those issued by the Lebanon Company,) 739,701 00

Dividend fund. \$388,329 42

equal to 3¼ per cent. on \$11,737,041 22, the total amount of the capital stock of the Company.

The charge for interest includes all the Bonds of the consolidated companies, and, as it will not be increased, may be considered as the fixed annual deduction from income. Any future improvement in business, will, therefore, add to the dividend fund of the year.

While every economy has been practised in working the road, perfect efficiency has been maintained in every department, and at no time have the roadway and rolling stock been in better condition. The cost of transportation has been reduced, partly by the lower prices of materials and wages, but chiefly by the decrease in the number of casualties arising from the superior condition of the road and machinery. The improvement in this respect is shown in the following statement of cars broken to tons of coal carried. In 1853, when the system of relaying and widening the tracks first commenced, the breakage was 1 to 2,875 tons carried. In 1856 it was 1 to 4,950 do. In 1857 do. 1 to 10,057 do. In 1858 do. 1 to 27,955 do.

The protracted depression of the iron trade, the stoppage of manufactures, and the general inactivity in business which existed at the close of 1857, sufficiently account for the falling off in the coal tonnage during the winter and spring of the past year, and affected, as upon other railroads, the general business of the Company. The greatest loss was on the line of the road, where the trade continues to be light, as many of the iron furnaces are still standing idle. The demand for the city and for shipment has been improving during the autumn, and the decrease at Richmond would have been made up, but for the great scarcity of vessels.

During the winter the trade has been reduced to the demand for immediate consumption, and high or low prices could have little effect, until there was some general improvement in business. Such, however, was the anxiety to force sales on the opening of navigation, that very low prices

were established, and it became necessary to reduce freight and tolls 20 cents, to meet the reductions on other regions. The total of the coal tonnage was not affected by these reductions, but they no doubt varied the quantity that would have been done in the different regions. The business of last year was so exceptional in many respects, that the result must not be accepted as any indication of the future course of the trade.

The consumption of coal has been almost stationary during the last three years, and for the first time in the history of the anthracite coal trade, there have been two consecutive years of decrease. Former periods of stagnation have been followed by rapid expansions, and as the manufacturing interests and the iron trade will soon be in full activity, there is ground to hope that the coal trade will not be the last in recovering its former prosperity.

The following appropriation has been made of the year's income, viz:

Amount of profit per statement \$1,310,952 56
Less renewal fund 182,922 14

Net profit. \$1,128,032 42
From which deduct for
interest on bonds \$708,714 00
Mortgages 30,987 00

Dividend Fund \$388,329 42
Which has been disposed of as follows, viz:

To sinking fund on Reading bonds \$100,000 00
Lebanon Valley bonds 50,000 00

Together \$150,000 00
(Which, with \$123,244 08 from last year, will, at some future time, be distributed among the stockholders.)

Taxes 18,389 63
7 per cent. dividend declared on preferred stock to be paid hereafter ... 108,626 00

Surplus \$111,313 79
carried to credit of reserved fund.

The balance to the credit of this fund at the end of last year, has been appropriated, as sanctioned at the last annual meeting, viz:

To losses and depreciation of assets .. \$108,655 94
To loss on the negotiation of bonds due in 1886, issued on settlement of floating debt 654,360 18

Together \$763,016 12

The amount of said balance:

The amt't charged this year to income for Renewal Fund, is \$182,922 14
Out of which there has been expended, 170,208 25

Leaving a balance of \$12,713 89 applicable to the coming year.

During the season 18 miles of new track have been put into the road, and the relaying and widening has been completed up to Mohrsville. The total quantity of iron used for this purpose and for ordinary repairs during the year is

4,440 tons of new rails put in.
3,600 tons of old rails taken out.

Excess. . . 840 tons put into the tracks.

Henceforth less iron will be required for ordinary repairs, as almost all the bad 68 lb. rails that were laid in 1855 have been taken out of the road.

Since the opening of the Lebanon branch, the impossibility to pass the wide cars of connecting railroads has been found a serious impediment to the development of the business, and the widening of the tunnels at Phoenixville and at Manayunk could no longer be dispensed with. The

work was therefore commenced at both places on the 1st December, and from the progress already made, it is fully expected that all the rock will be out by the middle of February, and everything completed by the end of March. The continual passing and repassing of the regular trains requires unusual care and attention, but it is hoped that the precautions taken to guard against danger will enable the engineers to carry through the work without accident or interruption to the business. This improvement will open the road between Harrisburg and Philadelphia to the wide cars of other companies, and permit bituminous coal and similar articles to be passed down direct to the iron works and manufactures at the lower end of Schuylkill valley. Another advantage will be the introduction of more convenient passenger cars on the road. This work is one of the objects provided for by the increased allowance for renewal fund.

The relaying and widening track above Mohrsville will require two years to complete, and it will not be necessary to widen Port Clinton tunnel before 1861.

A viaduct over the railroad at Girard avenue is in course of construction, and will be completed early in the spring.

Several of the new passenger railroads propose to cross the Reading track at grade; but as this would interfere with its business, and expose their own passengers to considerable risk of accidents, the managers offered to bear part of the expense of erecting bridges, to avoid the danger and inconvenience. As the offer was not accepted, the protection of the Supreme Court has been appealed to, to prevent such crossings being made, until some efficient system of precaution shall have been established for the safety of passengers.

A new freight depot has been built at Pottsville, on some property owned by the Company.

The Willow Street Railroad has been relaid with heavy street rails from Fourth street to the river, and the store and wharf have been put into good repair, and made convenient for business. Iron and heavy articles can now be shipped direct from the cars, at a considerable saving in expense and time, and the facilities afforded by this avenue to the Delaware cannot fail hereafter to promote the freight business on the railroad.

The only thing wanting to complete the business arrangements in the city, is the building of a convenient freight and passenger depot on the Company's property at Broad and James streets. By concentrating the business in one place a saving in expenses could be made nearly equal to the interest on the capital acquired for its construction. The estimate for a complete depot is \$150,000. It is not necessary, however, to build it all at once, and the managers propose, with your sanction, to proceed with it as fast as funds may become applicable for the purpose.

In accordance with the resolution passed at the adjourned meeting held on the 8th day of March, the consolidation of the Lebanon Valley Railroad Company with the Philadelphia and Reading Railroad Company was carried into effect, and on the 20th of March, 1858, the deeds were deposited with the Secretary of the Commonwealth, and the Lebanon Valley Company ceased to exist as a separate corporation. The outstanding accounts have been settled, and the cost of that road has been added to the capital account of the Reading Company. The total cost has been as follows, viz:

Roadway and Bridges \$3,044,751 25
Depots 57,428 00
Real Estate 36,312 67
Land Damages 208,375 67
Interest, Discount on Bonds, legal and other expenses 643,842 31
Balance of loss on Reading 1886
Bonds, issued for this road 425,266 48

Together \$4,415,976 38

There are still a few cases of land damages and other matters to be assessed by juries, and some small expenditure to complete the depot at Harrisburg. It will also be necessary to complete

and improve the connections with other railroads at Harrisburg and Reading. The outlay for these purposes will, in some measure, depend upon the amount of business to be accommodated, and the managers propose to proceed with them only as they become indispensable by the growth of the trade.

Considering that the road was opened during a period of extreme depression, the development of the business has been very satisfactory, and thus far has been steadily increasing. From the beginning of April to the end of November—

The gross earnings were \$91,385 28
The expenses 49,948 56

Profit on Lebanon branch \$41,436 72
To which there should be added the amount earned on the Main Line from the same business, (carried without extra trains, and at a very trifling expense,) 55,995 60

Total \$97,432 39

Eight months net profit from the business of the Lebanon Valley. The monthly net earnings have increased from

\$9,241 03 in April, to
\$18,113 75 in October,

being at the rate of nearly five per cent. on the cost of the branch. This is the more satisfactory, as during this period very little coal or iron ore passed over the road—a large demand for both will spring up upon a revival of the iron trade, and it is expected that early in the spring all the furnaces in both valleys will be in full operation. At every station on the line new improvements are going on, which are attracting to the road the business of their surrounding neighborhoods.

Upon the completion of the East Pennsylvania Railroad, a new continuous route will be established between New York and the West, shorter than any now existing, which, in addition to merchandise and passenger business, will command the cattle trade of Virginia, Ohio, and the far West.

The great facility for pasturage on the banks of the Susquehanna will attract the trade to Harrisburg, and, in time, it may become the great central market from which the large cities on the seaboard will draw their future supplies.

With a business steadily increasing from existing connections, and a local trade already of importance and daily improving, the Lebanon Valley Branch will be found at no distant date, to be a very important link in the chain of internal improvements, and must soon cease to be a burthen upon the resources of the consolidated companies.

The East Pennsylvania Railroad, from Reading to Allentown, on the Lehigh river, is approaching completion. It passes through a valley rich in deposits of iron ore and agricultural productions, which will hereafter pass over the Reading Railroad, to find their chief market in the Lebanon and Schuylkill valleys. A mutually advantageous business will thus be established between the companies.

A contract for five years, with the option of extension, has been entered into with the Chester Valley Railroad Company, to work their road in connection with the Reading trains, and to keep the roadway and buildings in good repair and working order. By this arrangement a troublesome and dangerous crossing at Bridgeport will be avoided, and in future this company will receive some compensation for the money expended at that place in sidings and other conveniences, which have hitherto been quite unproductive. It is estimated, also, that by being worked conjointly, the tonnage of coal, iron, ore, &c., which pass more or less over both roads may be largely increased, to the mutual advantage of the two companies. The existing time arrangements of the Reading Company will permit connecting trains to be run very conveniently for the inhabitants of the Chester Valley, and the new business from thence will add very little to the working expenses of the Reading Railroad.

The following additions have been made during the year to the cost of the railroad, &c., as exhibited in the general balance sheet of the Treasurer at the end of the year, viz:

Account construction.....	\$19,301 59
do real estate.....	13,562 28
do Willow Street Railroad....	100,000 00
do telegraph.....	350 00
do Lebanon Valley branch....	4,415,976 38

Total added this year.....\$4,549,190 25
Cost on 30th Nov. 1857.....19,262,720 27

Total cost of the consolidated railroads on 30th Nov. 1858.....\$23,811,910 52

The amounts expended on construction and coal estate, amounting together to \$32,863 87, are the only additions not authorized and directed at the last annual meeting. The former consists of the new depot at Pottsville, improvements on Willow street, and at places along the line, and the latter of several trifling purchases required for extensions, and some small payments on account of real estate bought in former years. The cost of the Willow Street Railroad, and part of the cost of the Lebanon branch, were included in the assets of the company at the end of 1857.

In settlement of these additions to the cost of the road, the following stock and bonds have been issued, and assumed as capital stock issued or to be issued:

In exchange for Lebanon Valley shares \$361,500 00
Reading 6s bonds due in
1886, issued.....\$3,586,500
Lebanon bonds assumed
on consolidation.....1,500,000
\$5,080,500 00

Bonds and mortgages on real estate,
and for damages settled.....12,000 00

Total issued during the year...\$5,460,000 00
Stock and bonds outstanding on the
30th Nov. 1857.....18,472,991 22

Total capital stock and bonded debt
on 30th Nov. 1858.....\$23,932,991 22
The excess of this over the total cost
of the roads and equipment is...121,181 70
Add the balance of this year's income
carried to reserved fund...111,313 79

Together.....\$232,394 49
Being surplus of capital represented by floating
assets to be realized hereafter.

Of the loan of 1857, payable in 1886, these was issued, in settlement of floating debt of the company, existing at the close of 1857, bonds to the amount of \$3,586,500, and the remainder of the loan, amounting to \$3,413,500, is held for the other purpose for which it was created, viz: the redemption of the bonds to mature in the year 1860.

By the lamented decease of Charles S. Boker, Esq., a vacancy occurred in the Board of Managers, which has been filled by the election of Jas. Dutton Steele, Esq., the Engineer of the road, and he has subsequently been appointed Vice President of the Company.

It may be proper to call attention to the peculiar advantages resulting from the union with the Lebanon Valley, the connection with the Chester Valley, and that proposed with the East Pennsylvania Railroads. The effect, it is believed, will be largely to increase the general business; and while it will in no respect diminish its efficiency for the transportation of coal, it will open independent and valuable sources of revenue from passengers and general freight to be conveyed to and from the various points to which these railroads lead.

The managers trust that the stockholders will see in the small expenditures and diminished charges an anxious desire to conduct the affairs of the road with the utmost economy consistent with efficiency. It is their intention, if they receive a continuance of the confidence of the stockholders, to pursue the same system, so that in the course

of the ensuing year every outstanding current obligation will be paid in full, and a working capital may be accumulated sufficient for the ordinary business. This is believed to be the true policy of the company, and if this course is approved and sanctioned by the stockholders, and the earnings of the road are devoted to these purposes, any temporary inconvenience will be amply repaid by the permanent prosperity that must ensue.

CONDENSED BALANCE SHEET.

Railroad.....	\$14,442,431 87
Depots.....	399,246 27
Locomotive engines and cars.....	2,121,019 39
Real Estate.....	1,279,842 74
Telegraph Stock.....	20,180 00
Added to construction and equipment in 1858.....	33,213 8
Willow Street Railroad.....	100,000 00
Lebanon Valley Railroad.....	4,415,976 38
Bal. of assets in cash and material over liabilities.....	232,394 49
	\$24,044,305 01
Stock, per report, Nov. 30, 1857....	\$9,635,629 51
New Stock, issued for Lebanon Valley Railroad Stock.....	\$237,800 00
Yet to be issued for do. do.....	123,700 00
	361,500 00
Preferred Stock.....	1,551,800 00
Sinking Fund Stock.....	188,111 71
Reserved Fund, 1858.....	111,313 79
5 per ct. b'ds, 1836-60, unconv'tible	705,600 00
6 " " 1843-60, unconv'tible	1,572 800 00
6 " " 1844-60, convertible.	886,000 00
6 " " 1848-60, convertible.	134,000 01
6 " " 1849-60, convertible.	85,000 00
6 " " 1849-70, unconv'tible	3,209,600 00
6 " " 1857-86, convertible.	3,586,500 00
7. " " 1856-86, L. Valley, convertible.....	1,500,000 00
Bonds and Mortgages, Real Estate	516,450 00
	\$24,044,305 01

President, R. D. CULLEN.

Vice-President, J. DUTTON STEELE.

Managers—Samuel Norris, G. W. Richards, John Ashhurst, David S. Brown, M. S. Richards, of Reading, J. Dutton Steele.

Treasurer, SAMUEL BRADFORD.

Secretary, W. H. McILHENNEY.

Rock Island Bridge.

The city engineer of the city of Rock Island, A. Stillman, Esq., has made an affidavit that the bridge over the river at that point is unsafe, and employees of the Rock Island Railroad Company have been notified that should any accident happen while trains are passing over it, they will be proceeded against for manslaughter. We copy the following from Mr. Stillman's affidavit:

Amos Stillman being duly sworn, deposes and says that he is a surveyor and civil engineer, and has made that his profession for the last fourteen years; that he is now the County Surveyor of the County of Rock Island, and City Surveyor and Engineer of the City of Rock Island.

He further says that he has often examined the railroad bridge across the Mississippi River at Rock Island, and did on the 11th day of February, 1859, make a careful examination of the superstructure and piers thereof, and he says that the same is in a very unsafe condition, and in great danger of falling. He further says that the piers are very much cracked, and some of them are displaced and out of shape, caused by the strain of the wood work. He further says that the stone pier next the draw on the Iowa side has been shoved sideways more than a foot by the span, and is cracked in every direction; that he measured some of the cracks in the stone work, and found them to be more than three inches wide, and that some of the large stones have been dis-

placed fully six inches. He further states that in the month of October last these cracks were all open, and he measured some of them and found them to extend four feet into the pier, that since that time they have all been plastered up, but the pier has moved again and they are opening again, and new ones are visible, in some cases breaking the stones in pieces. He further states that this pier and two others have been fitted with timbers along the side to assist in bearing the thrust of the arches, and in his opinion, but for these timbers one of said piers would have fallen long ago, that in one pier these timbers are badly bent, and liable at any moment to break. He further says that the upper chord of said bridge, on the Iowa side of the draw, is badly broken and pulled apart in several places, and at the point where the lower chord of the span meets the draw truss they have been cut off fifteen inches to enable the draw to be opened.

He further says that that part of the said bridge on the Illinois side of the draw is in a better condition than that part on the Iowa side, but he considers the whole to be very unsafe for the passage of railroad trains, and that every train which crosses is in great danger of falling through into the river.

He further says that the spans of said bridge are about 250 feet long, and the trusses very heavy, which makes it more dangerous than if the spans were shorter.

A bill has been prepared, founded upon the affidavit of Mr. Stillman and will be presented to the Court at the March term, asking for an injunction to prevent trains passing on the bridge in consequence of its dangerous condition.

Debt of New Orleans.

The last annual report (for the year 1858) of the Commissioners of the Consolidated Debt of this city has been made. From it we learn that during the year the collections of the tax amounted to \$620,515 18, out of the \$650,000 levied by the Common Council on real estate and slaves. Other collections from arrears for the years 1852 to 1856 inclusive, have been made.

The total debt of the city amounts to \$7,988,136 25, showing a reduction during the year of \$133,000 notwithstanding that \$97,000 of bonds of the old city, due 1st January, 1857, have been paid, on presentation, and ample means on hand to meet the remaining debt maturing in 1859.

The total amount of old corporation debts is \$1,803,136 25, with interest added \$96,366 50. The bonds issued by the Commissioners up to the 31st ult. were \$6,185,000 with an interest added of \$371,000. The total indebtedness, therefore, is \$7,988,136 25, and total interest \$467,466 50.

Georgetown (S. C.) Railroad.

We learn from an advertisement in the Charleston *Mercury* that the commissioners of the above road have opened books for subscription at Georgetown, Charleston, Kingstree, and Manning, and are to remain open for sixty days.

There is, perhaps, no location where a cheaper railroad could be built. It is not at all improbable that an air line between Georgetown and Gouddins' may be had almost upon a level grade. Indeed, we have heard the remark from one familiar with the country, that all that could be required would be to dig a ditch each side, cut the trees down, and lay the iron on them where they fell.

This road is a link in our railroad system much needed, and we hope the friends of the road will put their shoulders to the wheel and roll the work along.—*Cheraw Gazette*.

Ripon and Wolf River Railroad.

The following are the Directors of the above Road: L. W. Weeks, of Milwaukee; W. P. McAllister, C. Bigelow, of Omro; G. S. Barnum, of Waukau; D. P. Mapes, of Ripon; F. M. Rowley, of Winneconne; N. Olin, of Omro; A. J. White, of Omro; M. L. McLeran, of Omro. I. W. Weeks, President; C. Bigelow, Vice-President.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road.	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,928,911	545,752	150,224	6	---	Brunswick and Florida, Ga.	30	151,887	463,648	518,649	In progr.	208,771	9	---	
Androscog. & Kennebec	56	467,900	1,535,300	2,210,947	159,518	83,368	none	---	South Western	143	1,894,100	441,292	2,285,393	366,214	208,771	9	---	
Kennebec & Portland	72	1,107,520	1,763,735	2,871,255	218,255	128,255	none	---	Tennessee and Alabama	30	809,764	626,899	679,906	53,775	29,405	---	---	
Port, Saco & Portland	51	1,396,400	---	1,396,373	263,717	120,909	6	93	Tennessee and Mississ.	61	757,400	611,812	1,161,132	181,001	99,788	---	---	
Boston, Concord & Montreal	93	1,104,688	2,844,977	3,949,665	312,767	174,025	16	---	Memphis and Charleston	257	2,228,177	3,495,288	6,574,470	642,022	334,504	---	---	
Onondaga	36	1,000,000	899,313	1,899,313	365,629	113,077	6	50 1/2	Mobile and Ohio	306	1,784,800	2,099,459	10,701,428	561,382	276,428	---	---	
Concord	86	1,500,000	8,242	1,508,242	317,055	125,694	4	4 1/2	Miss Central	89	1,576,474	926,196	2,603,698	115,679	---	---	---	
Northern, N. H.	42	3,068,400	406,280	3,474,680	305,890	146,990	4	4 1/2	South (Miss.)	82	1,000,000	1,400,000	2,400,000	264,216	150,790	---	---	
Conn't & Passumpsic Riv.	90	1,000,000	800,000	1,800,000	177,688	74,041	none	---	N. O., Opelousa & G. W.	80	2,800,000	760,000	3,560,000	3,775,500	127,450	---	---	
Watland & Burlington	117	2,233,370	4,169,760	6,403,130	332,215	41,698	none	---	V. O. Jackson & G. N.	206	1,000,000	1,815,610	7,142,560	189,003	---	---	---	
Vermont and Canada	47	1,830,000	---	1,830,000	Less 100	177,339	30	---	Vickab, Shrevep. & Tex.	21	853,760	103,285	892,051	In progr.	---	---	---	
Vermont Central	122	5,000,000	5,276,299	10,276,299	703,583	127,339	91	---	East Tennessee and Ga.	111	1,192,974	1,735,669	2,703,423	227,363	104,992	---	---	
Boston and Lowell	2	1,830,000	428,920	2,258,920	241,251	435,863	6	91	East Tennessee and Va.	139	624,075	1,728,646	3,204,138	61,340	39,062	---	---	
Boston and Maine	74	4,076,974	---	4,076,974	710,002	300,502	6	98 1/2	Nash. and Chattanooga	169	2,263,906	1,632,791	3,896,700	641,552	219,260	---	---	
Boston and Providence	43	3,160,000	239,730	3,399,730	334,458	245,144	6	4 1/2	Covington & Lexington	98	1,344,860	3,046,917	4,001,604	4,640,208	230,906	---	---	
Boston and Worcester	47	4,600,000	699,974	5,299,974	1,019,119	384,513	6	95	Lexington and Frankfort	29	490,455	135,879	635,255	95,807	45,710	---	---	
Cape Cod	47	681,699	291,007	972,706	122,960	39,899	49 1/2	---	Lexington and Danville	13	694,444	71,000	765,500	In progr.	---	---	---	
Connecticut River	60	1,691,111	275,772	1,966,883	267,710	85,096	3	69 1/2	Louisville and Frankfort	65	744,039	625,216	1,502,095	245,750	109,059	---	---	
Eastern, Mass.	60	2,683,400	2,441,874	5,125,274	610,156	272,479	45 1/2	---	Atlantic & Gt. Western	---	866,939	77,294	944,233	In progr.	---	---	---	
Fitchburg	21	3,540,000	100,000	3,640,000	688,974	250,830	6	92 1/2	Hellefontaine and Ind.	118	1,874,395	1,315,237	2,998,392	348,357	120,836	none	---	
N. Bedford and Taunton	67	600,000	---	600,000	188,925	27,827	6	---	Clev., Col. and Cin.	141	4,744,200	90,400	4,834,600	1,497,741	611,740	9 1/2	---	
Old Coffy and Fall River	77	8,015,100	260,100	8,275,200	983,357	305,140	6	100	Cleveland and Toledo	200	3,333,712	4,225,658	7,190,016	930,292	413,790	80 1/2	---	
Vermont and Mass.	61	2,232,541	109,100	2,341,641	240,183	52,267	none	14 1/2	Clev. and Mahoning	65	---	---	1,920,953	In progr.	---	---	---	
Western, Mass.	156	6,150,000	6,839,000	12,989,000	1,117,982	899,763	8	106	Clev. and Pittsburg	133	2,780,744	3,043,992	6,824,488	861,877	309,618	---	---	
Worcester and Nashua	46	1,141,000	205,505	1,346,505	216,885	82,720	4	46	Clev., P. & Ashland	95	3,000,000	1,495,548	4,495,548	1,251,533	681,454	---	---	
Providence and Worcester	43	1,610,000	300,000	1,910,000	344,773	155,044	7	87	Cin., Hamlet & Dayton	80	2,155,800	1,523,092	3,678,892	447,422	280,763	---	---	
Hartford and N. Haven	72	2,350,000	444,000	2,794,000	709,065	340,850	10	124	Cin., Wm. & Zane's	131	2,121,176	3,026,040	6,099,210	223,600	30,248	---	---	
Hartford, Prov. and Fishkill	124	1,936,246	2,132,692	4,068,938	273,428	112,325	none	---	Columbus and Xenia	55	1,440,450	149,000	1,589,450	403,212	181,688	10	---	
Housatonic	57	2,000,000	423,853	2,423,853	318,475	109,344	none	---	Dayton, Xen. & Bol.	63	437,808	422,658	860,466	In progr.	---	---	---	
Naugatuck	62	1,031,800	624,244	1,656,044	235,416	114,237	---	---	Dayton and Michigan	140	1,078,602	393,011	1,471,613	185,826	---	---	---	
N. York and N. Haven	57	2,980,814	293,240	3,274,054	1,157,055	254,669	3	45	Dayton and Western	35	310,000	700,481	1,010,481	125,940	63,253	---	---	
N. Haven and N. London	56	734,250	761,462	1,495,712	89,007	30,315	none	---	Naton and Hamilton	42	499,763	822,600	1,322,363	1,000,000	50,000	---	---	
N. London, W. & Palmer	56	1,001,700	1,032,230	2,033,930	120,571	61,544	none	---	Little Miami	65	2,981,292	1,294,000	4,275,292	3,225,157	77,447	210,120	---	---
Norwich and Worcester	32	2,122,300	724,180	2,846,480	263,417	44,447	---	31	Sandusky, Dayton & Cin.	171	2,097,090	3,368,000	6,665,090	642,614	---	---	---	
Albany Northern	35	643,330	317,550	960,880	172,476	66,333	none	---	Central Ohio	138	1,272,919	6,225,656	4,496,521	570,092	164,697	none	---	
Black River and Utica	100	1,487,871	1,501,183	2,989,054	288,392	31,896	none	---	Pittsb. Ft. Wayne & Chicago	223	6,247,049	9,822,550	14,779,599	1,546,359	677,787	---	---	
Buffalo, Conn. and N. Y.	92	798,439	2,557,849	3,356,288	279,750	31,896	none	---	Pittsb. Mayv. & Cin.	50	371,350	31,000	399,350	328,958	164,479	none	---	
Buffalo and N. Y. City	96	1,300,000	1,040,000	2,340,000	174,089	69,506	---	---	Sand'y, Mans. & Newk.	127	1,850,000	2,206,357	4,056,357	328,958	---	---	---	
Buffalo and St. Line	47	434,111	2,279,833	2,713,944	3,495,832	48,619	none	---	Seloto & Hooking Valley	56	403,975	500,000	903,975	868,858	---	---	---	
Canandaigua and Elmira	91	1,315,000	2,279,833	3,594,833	1,554,433	48,619	none	---	Spring, Mt. Vernon & P.	113	1,600,000	500,000	2,100,000	2,100,000	---	---	---	
Canandaigua & Niagara Falls	36	637,000	506,690	1,143,690	1,157,562	155,433	---	---	Pol. Wash. & St. Louis	242	2,968,100	1,677,509	4,645,609	10,542,500	Recently opened.	---	---	
Cayuga & Susquehanna	144	3,758,466	9,250,362	13,008,828	9,023,825	688,580	22 1/2	---	Cin., Log. & Chicago	109	4,196,679	1,006,125	5,202,804	1,080,433	---	---	---	
Hudson River	95	2,000,000	647,193	2,647,193	325,180	60,180	11 1/2	---	Evansville & Crawfords	100	984,061	1,270,872	2,254,933	249,868	124,140	---	---	
Long Island	564	24,182,400	14,402,683	38,585,083	9,525,416	3,041,120	8	7 1/2	Ind. and Cincinnati	88	1,695,809	1,564,581	3,260,390	491,743	248,622	---	---	
New York Central	464	11,000,000	28,041,460	39,041,460	7,742,607	1,434,932	13	---	Indiana Central	66	612,550	1,261,171	1,873,721	308,159	204,685	---	---	
New York and Erie	154	6,717,100	4,822,495	11,539,595	1,640,393	432,091	none	13 1/2	Ind., Clev. & Pittsburg	83	535,791	1,077,694	1,613,485	253,190	85,248	none	---	
New York and Harlem	118	1,633,022	4,406,874	6,039,896	149,373	78,764	8	---	Jeffersonville	7	1,014,282	694,000	1,708,282	222,737	94,318	none	---	
Northern, N. Y.	35	304,130	213,025	517,155	752,030	149,373	---	---	Madison and Indianapolis	87	1,647,700	1,536,816	3,184,516	260,714	118,628	---	---	
Oswego and Syracuse	29	467,200	294,180	761,380	1,092,420	202,037	3 1/2	---	New Albany and Salem	238	2,635,121	581,948	3,217,069	464,827	371,400	none	---	
Pottsdam and Watertown	25	610,000	140,000	750,000	241,149	82,600	7	---	Pera and Indianapolis	73	---	---	2,000,000	150,000	90,000	none	---	
Rensselaer & Saratoga	40	500,000	396,800	896,800	71,909	21,099	none	---	Terre Haute and Ind.	73	1,361,450	250,148	1,611,598	481,272	205,039	---	---	
Saratoga and Whitehall	60	788,389	1,575,804	2,364,193	169,484	22,503	none	---	Chicago and Rock Isl.	182	6,245,000	1,734,318	8,079,318	1,889,196	806,079	61 1/2	---	
Syracuse & Binghamton																		

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	80	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	92 1/2	94
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	75	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	41	45
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	92
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	76	77
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	97 1/2	98
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	67 1/2	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	10	55
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	30	55
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	10	55
Covington and Lexington	400,000	Do. do.	7	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	47	55
Delaware, Lackawanna and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	87 1/2	89
Florida Free Land	1,500,000	Do. not convertible	7	March, Sept.	"	1891	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		72 1/2
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	98 1/2	99
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90 1/2	100
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	April, Oct. 10	"	1863	87 1/2	93
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		56
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	77	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	73	74
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1883	82 1/2	81
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	95	97
Do. do.	800,000	Do. do.	8	March, Sept.	"	1869	91 1/2	93
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862		80
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863		77 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877		75
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		80
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66		75
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872		65
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	101 1/2	102
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875		75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	800,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	62	66

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85	84
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	92 1/2	93
Erie Railroad	5,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	88	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	77	77 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1880	67	10
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	40	43
Do. do.	4,351,000	Convertible Inscriptions	7	Feb'y, August	"	1871	40	41
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	40	41
Hudson River	4,000,000	1st mortgage, Inscriptions	7	Feb'y, August	"	1869-70	100	101
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	94 1/2	95
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	75	76
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	88 1/2	89 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acres—priv. 7 shares	7	March, Sept.	"	1860	87	88
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	87	88
New York and Harlem	1,250,000	Do. do.	7	May, Novemb.	"	1861-72	12	92 1/2
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	98	99
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	80	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	81	82
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	71 1/2	73
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	91 1/2	92 1/2
Do. do.	3,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	99 1/2	100
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	114	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	1,300,000	Do. convertible	6	Jan'y, July	"	1870	82 1/2	83
Do. do.	3,469,000	Do. inconvertible	6	April, October	"	1866	72	73

CITY SECURITIES.		Int't payable.	On'd	Ask	CITY SECURITIES		Int't payable.	On'd	Ask	
New York, 5 per ct.	1868-'60	{		98	99	Milwaukee, 7 per ct. coup.	X	Divers	45	70
Do. 5 do.	1870-'75		May,	92 1/2	94 1/2	New Orleans, 6 per ct. cp. R.R. X	Do.	Do.	72	77 1/2
Do. 6 do.	1883		August, and	101 1/2	102 1/2	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	87	90	
Do. 6 do.	1890-'93		November,	92	94	Philadelphia, 6 per ct. 1876-'98	Jan'y, July	99 1/2	99 1/2	
Albany, 6 per ct. coup.	1871-'81 X	Feb'y, August,	59	101	Pittsburgh, 6 per ct. coup.	X	Divers	50	52 1/2	
Albany, 6 per ct. coup.	1883	Jan'y, July	55	70	Quincy, 8 per ct. coup.	1868 X	Jan'y, July	67	75	
Baltimore, 6 per ct.	1879-'90	Quarterly,	99 1/2	100	Racine, 7 per ct. coup.	1873 X	10 Feb'y, Aug	80	80	
Boston, 5 per ct. coup.	X	April October	100	101	Rochester, 6 per cent. coup.	X	Divers	90	97 1/2	
Brooklyn, 6 per ct. coup.	Long X	Jan'y, July,	102	102 1/2	St. Louis, 6 per ct. coup.	Long X	Do.	84 1/2	84 1/2	
Cleveland, 7 per ct. cp. W.W. 1879 X		Do. do.	100	103	Do. do. Municipal X		Do.	86 1/2	87	
Cincinnati, 6 per ct. coup.	X	Divers	92	95	Sacramento, 10 p. ct. cp. 1862-'74 X		Do.	37	45	
Chicago, 6 per ct. coup.	1873-'77 X	Jan'y, July	85	86	S.F. & C. 7 p. ct. cp. 1865, pay. N.Y. X		May, Novemb.	60	70	
Do. 7 per ct. coup.	1880 X	Jan'y, July	97 1/2	99 1/2	Do. 10 p. ct. cp.	1871 X	Do. do.	93	91	
Do. 7 p. ct. cp. W.W. 1873-'78 X		Feb'y, August,	100	102	Do. 10 p. ct. cp. N.Y. X		Jan'y, July			
Detroit, 6 per ct. cp. Long X		March, Sept.	100	100	Do. 6 per ct. cp. N.Y. 1875 X		Do. do.	56	60	
Dubuque, 6 per ct. cp. W.W. 1877 X		Jan'y, July	99 1/2	101	Wabash, 6 per ct. coup.	X	Divers	60	60	
Jersey City, 6 per ct. cp.	1880-'83 X	Divers	71 1/2	72 1/2	Do. 6 p. ct. cp. Mun. 1874 X		March, Sept.	80	81 1/2	
Louisville, 6 per ct. coup.	1882 X	Jan'y July	65	65 1/2	Zeroville, 7 do.	X	April, October			

Cincinnati Stock Sales.

BY KIRK & CHEEVER.

For the week ending February 21, 1859.

Stocks	Per cent.
Little Miami, 1st Mort.	68 1/2
Covington and Lexington, 1st Mortgage	68 1/2
Do. do. 2d do.	7 1/2
Do. do. 3d do.	7 1/2
Ohio & Miss., E. D. Construction	75 1/2
Cinc. Ham. and Dayton, 1st Mortgage	75 1/2
Do. do. 2d do.	75 1/2
Indianap. & Cincinnati, do. do.	75 1/2
STOCKS.	
Cincinnati, Hamilton & Dayton	85
Columbus and Xenia	82
Indianapolis & Cincinnati	85
Little Miami	83 1/2
Ohio and Mississippi (E. D.)	83 1/2

Bank Statements.

The last Bank returns of the four principal cities of the Union were as follows:

LOANS.	RECEIPTS.	CIRCULATION.	DEPOSITS.
N. Y., Feb. 19, \$1,746,491	\$26,344,955	\$7,706,859	\$9,066,357
Phila., " 21, 26,574,418	6,176,663	2,772,933	16,129,601
Boston, " 13, 59,921,709	6,679,710	6,275,501	21,082,500
N. Ori., " 12, 22,592,215	16,700,188	12,141,174	25,709,959
Total	\$236,566,769	\$5,742,598	\$28,938,794
Last week	246,530,231	54,444,282	29,290,592
Increase	\$36,628	\$1,268,224	\$1,647,677
Decrease			\$317,263

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending February 5, were \$37,172 44

Week ending February 6, 1858. 35,926 54

Increase \$1,245 89

Total traffic from July 1st. \$1,362,406 03

Same period last year 1,459,209 37

Decrease \$96,803 34

The earnings of the Pittsburg, Fort Wayne and Chicago Railroad Company during the month of January were as follows, viz:

EARNINGS.	
From freight	\$55,886 83
" passengers	51,500 46
" mail	7,825 00
" rent of road	5,500 00
" miscellaneous	100 00

Total \$120,812 29

Earnings in same month last year 94,735 82

Increase (27 1/2 per cent.) \$26,076 47

EXPENSES.	
Conducting transportation	\$18,373 41
Motive power	29,980 60
Maintenance of cars	9,266 67
Maintenance of way	23,539 47
General expenses	4,439 44

Total 85,599 59

Expenses same month last year 66,923 09

Increase \$18,676 50

Net earnings in January, 1859 \$35,212 70

Do. 1858 7,812 73

Increase \$27,399 97

The earnings of the Panama Railroad for the month of January, were—

1859	\$117,300
1858	91,400

Increase \$25,900

The following are the earnings of the Cleveland and Erie railroad for the month of January, 1859

Freights	\$54,999 92
Passengers	24,986 77
Mail	1,800 00

Total \$81,786 69

January, 1858. 94,820 98

Decrease \$13,034 00

The earnings of the Catawissa, Williamsport and Erie Railroad Company, for January, 1859, were \$23,100 09
Less due connecting roads 3,708 28

Net receipts for January, 1859... \$19,391 81
Do. do. 1858... 15,834 87

Increase (22 per cent.).....\$3,556 94

The earnings of the Cleveland, Columbus and Cincinnati Railroad for January were as follows:
Freights.....\$43,389 71
Passengers.....23,932 44
Rents.....6,094 86

January, 1858.....\$73,417 01
70,492 23

Gain\$2,924 78

American Railroad Journal.

Saturday, February 26, 1859.

Delaware, Lackawanna and Western R. R.
We give elsewhere the annual report of this Company for the year ending Dec. 31, 1858.

The result shown is an extraordinary one, and if it can be maintained for the the future this company must certainly bear the palm among coal carrying roads. We fear there is some fallacy in the calculations of the company somewhere. We regret that the report should have given nothing by which the public can verify or test the conclusions of the President. If the company can continue to supply coal at the present rates, and make a net profit of some 66 per cent., other companies must turn over a new leaf or they will find themselves nowhere.

Correction.--Messrs. Holley & Colburn.

In an article in our issue of the 5th instant, we referred to a work recently published by the above named gentlemen, on *European Railroads*, in which we are assured that we did them unintended injustice, particularly in reference to their standing with Railroad Companies, and also, in reference to their engineering experience. The article was written in consequence of numerous complaints of the injurious influence that the work was exerting upon the value of our securities. We thought the contrast drawn between American and foreign roads was unjust to the former, and calculated to do them great harm. Under the influence of such a conviction, we spoke with a good deal of freedom in reference to the authors. We have since had our attention called to this matter, and we are satisfied that we wrote under a wrong impression. We learn that several of our leading Railroad Companies have contributed in considerable sums to reimburse the expense of getting up the work referred to, of which they have expressed their high appreciation. We also have taken pains to get the opinion of competent gentlemen in reference thereto, which is altogether favorable as to its value. From conversations we have had with Mr. Holley, we are satisfied that his object was to make a *useful* and impartial, as well as a *selectable*, work. Such being the case, we would be the last person to throw any obstacles in their way, in a field where so much is to be done, and so many laborers required. We therefore feel it due to state that the portions of the article complained of were written under impressions which we find, on inquiry, to be incorrect, and we desire

fully to withdraw whatever was said, calculated in any way to give them just cause of offence. We desire that nothing said by us should effect their previous or future relations to the Railroad Companies, or the public.

Delaware Lackawanna Western Railroad.

The following is a summary of the report of this company, made to the stockholders on the 25th of January last:

TRANSPORTATION DEPARTMENT.

The gross income from this department was as follows:

From transportation of coal.....	\$1,032,999 39
From transportation of merchandise.....	249,416 16
From transportation of express freight.....	4,417 48
From transportation of mails.....	9,805 00
From transportation of passengers.....	115,116 46
From transportation of extra baggage.....	231 22
From storage.....	80 39
From telegraph.....	589 73
From rents.....	1,665 30
From use of locomotives.....	8,115 01
From use of cars.....	2,075 82

Total.....\$1,430,511 96
The aggregate expenses were.....548,902 29

Net earnings from transportation Department.....\$881, 609 67

The net earnings for 1857 were \$674,498 78; from which however, for the purpose of a just comparison, the sum of \$75,000 should be deducted. The aggregate expenses for the past year include not less than \$66,000 of expenditure which has heretofore been considered as legitimately chargeable to construction account. The track and bridges for the whole distance from Great Bend to the Junction, as well as the equipment, are stated to be in a better condition than at the close of any preceding year, and from present indications no extraordinary expenditures will be required during the present year. 100,000 to 120,000 tons more of coal could have been easily moved without any increase of equipment, if sale had been made of it.

COAL DEPARTMENT.

The amount received for coal in 1858 was.....\$1,944,121 60
The amount received for rents in 1858, was.....3,152 76
The value of coal on hand Dec. 31, 1858, was.....214,686 43
\$2,161,960 79

The aggregate expenses were.....\$2,071,792 11
The value of coal on hand Dec. 31, 1857, was.....139,720 77
2,211,512 88

Less on coal department.....\$49,552 09

The General Agent remarks in his report to the Board, that all the mines are now in good working condition, and capable of yielding an increased quantity of coal if required. Scarcely any of them have been worked to their full capacity.

The amount of coal on hand Dec. 1, 1857, was—tons.....43,290-10
The amount forwarded to market in 1858, was as follows:
Mined by the Co.—tons.....331,394-01
Purchased by other parties—tons.....350,270-06
681,664-07

Total tons.....724,954-17
The aggregate sales in 1858, amounted to.....651,437 66

Quantity on hand Dec. 31, 1858—tons 73,517-11
The foregoing statement, and following tables, are all calculated in net tons.

The income account stands as follows:

The balance to credit of this account, Cr.
Dec. 31, 1857, was.....\$218,881 87
The net revenue from trans. dep. in 1858, was.....\$881,609.67
The amt't received for int. on stock and bonds of Warren and Lack. and Bloomsb'g R. R. Cos. ... 18,720.12
Amount rec'd from other sources.....4,990.57

Total.....\$905,320.36

To one year's int. Dr.	
on \$900,000	
b'ds of 1871..	\$63,000.00
\$1,500,000 b'ds	
of 1875	105,000.00
\$2,583,500 b'ds	
of 1881	180,845.00
To interest on income bonds:	
\$714,500 of 1867	56,688.15
29,000 of 1865	1,610.00
460,810 of 1862	12,633.85
To rent of Warren Railroad:	
Int. on bonds ..	40,467.57
Int. on stock. ...	49,116.37
To rent. of Cay. & Sus. R. R..	54,600.00
To bal'e of gen. int. account..	26,187.10
To insurance and losses.	13,138.38
To balance ag't coal dep.	49,552.00
	632,838 52

Net revenue for 1858..\$252,481 84
To appropriation to renewal fund.....100,000 00
152,481 84

Balance to credit of income account..\$371,363 71
It will be observed that \$100,000 has been appropriated to the Renewal Fund, for depreciation of the road and equipment.

CONSTRUCTION EXPENDITURES.

The cost of the Railroad and Equipments to Dec. 31, 1857.....\$8,762,488 41
Expenditure in 1858.....71,901 47

Total cost of Road and Equipment..\$8,834,399 82
Less amount received from Iron, Land, &c., sold, heretofore charged to Northern Division.....2,692 54

Balance of Construction account \$8,831,707 43
The construction expenditures for the past year have been only such as were imperatively demanded by the requirements of the business, and a few incurred in settlement of previously existing contracts.

The company own 71 locomotives, 17 passenger cars, and 3,366 freight cars, &c.

WARREN RAILROAD.—CONSTRUCTION.

The cost of this road to Dec., 31 1857, was.....\$1,501,503 36
The expenditures in 1858 amounted to.....40,259 79

Total cost to Dec., 31 1858....\$1,541,763 65
For the payments made on this account, this company receives an equal amount of Warren Railroad stock.

The total cost of coal lands belonging to the Company, is \$154,008 19. The amount of the Renewal Fund, is \$233,526 60; of the Coal Department Fund, \$33,283 45; of the Cayuga Division Fund, \$13,334 24; and of the Sinking Fund, \$49,372 48; with which \$69,930 of the Company's Bonds have been purchased. This investment exceeds the amount set apart for the purpose (\$30,000), but it has been increased on account of the low rate at which the Bonds could be obtained.

GENERAL ACCOUNT.

Debtor.

To construction and equipment accounts	\$8,831,707 34
Cost of coal lands and mining improvements	454,008 19
Cost of materials on hand	142,236 57
Value of coal on hand	214,686 43
Stock of Warren Railroad Company	310,450 00
Stock of Lackawanna and Bloomsburg R. R. Co.	132,450 00
Bonds of ditto, ditto, (\$50,000) cost	40,000 00
Bonds of Warren Railroad Company	22,100 00
Bills and accounts receivable	482,485 43
Cash on hand	83,027 15
Coupons funded, maturing in 1859 ..	167,195 00
Cost of coal yards	2,784 20
Cost of vessel-property in New York ..	42,653 66
Advanced on account of coal department for 1858	23,707 64
Suspense account	65,549 40
Sinking fund	49,372 48

Total \$11,064,413 49

Creditor.

By capital stock paid in full	\$3,360,250 00
Scrip stock	622 50
Mortgage bonds of 1871	900,000 00
Eastern extension bonds of 1875	1,500,000 00
Con. Mort. bonds of 1881	\$2,600,000 00
Less amount not issued ..	16,500 00
	2,583,500 00
Income Convertible bonds of 1867 ..	714,600 00
Income Convertible bonds of 1865 ..	29,000 00
Income Convertible bonds of 1862 ..	460,810 00
Interest accrued on bonds to Dec. 31, 1858	167,228 06
Interest accrued on stock to Dec. 31, 1858	4,377 64
Interest accrued on stock and bonds of the Warren Railroad, Dec. 31, 1858	31,317 20
Bills and accounts payable	583,796 16
Renewal fund	233,526 60
Coal department fund	33,283 45
Cayuga division fund	43,334 24
Income account	371,363 71
Certificates for Income Con. bonds of 1867	25,116 18
Certificates for Income Con. bonds of 1862	18,905 00
Fractional Certificates of Warren Railroad Stock	3 482 75

Total \$11,064,413 49

Journal of Railroad Law.

PRINCIPAL AND AGENT.—DISAVOWAL OF CONTRACT. MEASURE OF DAMAGES.

Medburg vs. The New York and Erie R. R. Co.

This was an action for damages, arising from the non-performance, on the part of the defendants, of an alleged contract to transport a certain quantity of flour from Hornellsville, on their railroad, to the city of New York, and to deliver the same at the latter place, on or before the 20th day of February, 1853. The defendants denied the contract. On the trial, Horatio Stevens, a witness for the plaintiffs, testified that he, acting as their agent, made the contract with M. B. Spaulding, the general freight agent of the Company. It was contended by the defendants that Spaulding had no authority to make such a contract. The case was submitted to Richard Goodman, Esq., as referee, who reported in favor of the plaintiffs, and a judgment was entered upon his report for \$931 39. The referee adopted as the measure of damages, the difference between the contract price of the flour (had it arrived on the 20th of February) and the price it was actually sold for, in the market, on its arrival. The defendants insisted that the amount of damage could not be greater than

the difference between the market value on the day it ought to have arrived, and the market value on the day it did arrive. From the report of the referee, an appeal was taken to the General Term of the Supreme Court, when the following opinion was rendered.

By the Court, CLERKE, J.—It may be quite true that a common carrier is not liable on an implied contract to deliver goods at any specific time. But, like any other person, he is bound by the terms of his express undertaking, whether entered into directly by himself, or through the intervention of an agent. The only question of which there can be the slightest doubt in this case is, whether Spaulding was authorized to make the contract upon which this action is founded. The referee has found, unhesitatingly, that he did make it; and it is not our custom to disturb any finding or verdict not clearly against the weight of evidence. As to the authority of Spaulding, he was general freight agent, beyond dispute; and the by-laws entrust him with the power of negotiating contracts and arrangements in relation to the transportation of freight, with the approval of the president. So that, if the approval of the president was given to this contract, there could be no doubt of its validity. But is a contract for the transportation of freight on an extensive railroad, where contracts of every kind in relation to freight, must be almost innumerable, to fail, because the agent has neglected to present the contract to the president for his approval, or because the president has neglected, or finds it impracticable, to examine every engagement made by his subordinates, throughout the whole extent of the road? Necessity requires, and the protection of all persons transacting business with a concern of this description requires, that this restriction relative to the approval of the president, should be construed, as meaning, subject to his approval if he, on any occasion, deems it proper to interpose, before the attempted execution or performance of the contract. But, if he does not think proper to interpose, and neglects to apprise the public that every special contract for the transportation of freight must be ratified by him, the Company must be held liable for the fulfilment of the contract. When the agent is entrusted with authority within a prescribed sphere of action, and is permitted, from day to day, without any interference on the part of the principal, to exercise the authority, I do not think that third parties should be affected by an undertaking between the principal and agent, that every act is to receive the express approval of the principal. But it may be fairly doubted whether any such restriction was intended in the by-laws. Taking into consideration the multiplicity and variety of business on this railroad, it may be well supposed, as I have already intimated, that the restrictions meant that the contracts of the superintendent should be subject to the approval of the president, whenever he should deem it prudent to interfere. This view is strengthened by the direction in section 16 of the by-laws, that the chief clerk shall be furnished, by the general freight agent, with copies of all special contracts for transportation of freight. If it was intended that in every instance the contract should receive the express ratification of the president, it is not probable, if in writing, that it should remain in the possession of the agent, but

the proper person to transfer it to the chief clerk, would be the president himself, after affixing his consent to it. We consider the exceptions on the other points equally untenable. The referee adopted the correct rule of damages in cases of this nature. Compensation for the actual loss sustained, is the fundamental principle upon which our law bases the allowance of damages. It will not, indeed, make this allowance upon a calculation of speculative profits; for this would be proceeding upon contingencies, and would involve the subject too much in uncertainty. It would be too difficult for practical application. Nor will the law indemnify for remote or indirect losses. The loss must be the natural and proximate consequence of the act, and when this can be ascertained, without uncertainty, the principle of compensation will be adopted. This was clearly ascertainable in the present case.

The judgment should be affirmed, with costs.

INJURIES TO EMPLOYEES.—TELEGRAPH CASE.

Byron vs. The New York State Printing Telegraph Co.

The defendants in this suit were the owners of a telegraph line, extending along the eastern bank of the Hudson river, and partly between the cities of Hudson and Poughkeepsie. In April, 1855, the plaintiff, Byron, was employed by the Company in the service of climbing the telegraph poles, and keeping in order the wires, insulators and other fixtures sustained by them.

The complaint alleges that on the 21st day of April, 1855, Byron, in the discharge of his duties aforesaid, climbed one of the telegraph poles, about a mile and a half south of Hudson City, and while he was busied in regulating the fixtures, the pole broke off by reason of a defect in it, not visible to the plaintiff, and fell with the plaintiff fastened thereto upon a ledge of rocks, a distance of twenty-five or thirty feet. By this accident, it is alleged, the plaintiff was so disabled that, besides spending large sums for medical services, he was from that time incapable of any employment, and will never probably recover from his injuries. The damages were laid at \$5,000.

The action was brought in the Supreme Court. The complaint was first met by a general demurrer, which was overruled at Special term, and again, on appeal, at General term. In the opinion of the Court, rendered by his honor Chief Justice MICHIELL, it is held that the allegation of negligence, made in the complaint against the company would be sustained by proving the danger from the defect in the pole, and that it was known to the defendants. Leave was given the defendants to amend, on payment of the costs of the demurrer.

Macon and Brunswick Railroad.

At a meeting of the Company at Macon on the 4th inst., the stockholders elected the following Directors: A. E. Cochran; of Brunswick; B. F. Ross, T. R. Bloom, L. N. Whittle, of Macon; Geo. Walker, of Pulaski; Henry Bunn, of Twiggs; Jas. Houston, of Brunswick.

The Board elected A. E. COCHRAN President, and E. C. Rowland Secretary and Treasurer.

Marietta and Cincinnati Railroad.

At the annual meeting of the Marietta and Cincinnati Railroad, held at Chillicothe on the 9th, the Board re-elected its old officers, namely: Wm. P. CUTLER, President; Beman Gates, Vice President; and Wm. S. Nye, Secretary and Treasurer.

Waterman's Dynamometer.

We give below a statement of the results obtained by Waterman's Dynamometer on the Boston and Worcester R. R., in two round trips, conducted by E. S. Philbrick, Esq., Assistant Superintendent and Engineer of the road. The engines, including tenders, weighed about 34 tons; weight on driving wheels, 16 tons:

Two round trips to Worcester, and return to Boston, with Freight Train.		Distance, 44.92 Miles each Way. Change in elevation, 474 feet.	
		February 9, 1859.	
		Upward Trip.	
		Downward Trip.	
		February 11, 1859.	
		Upward Trip.	
		Downward Trip.	
		February 11, 1859.	
		Upward Trip.	
		Downward Trip.	
		February 11, 1859.	
		Upward Trip.	
		Downward Trip.	
		February 11, 1859.	
		Upward Trip.	
		Downward Trip.	
		February 11, 1859.	
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		Downward Trip.	
		February 11, 1859.	
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		February 11, 1859.	
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		February 11, 1859.	
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		February 11, 1859.	
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		February 11, 1859.	
		Upward Trip.	
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COST OF OPERATING THE ROADS.

Allotted to Passenger Transportation.

Office expenses, stationery, etc.	\$52,782 98
Agents and clerks	267,917 05
Labor, loading and unloading freight..	9,419 88
Porters, watchmen and switchmen attendance	202,561 38
Wood and water station attendance ..	49,344 44
Conductors, baggagemen & brakemen.	274,221 09
Enginemen and firemen	250,307 98
Fuel and cost of labor in preparing for use	724,347 63
Oil and waste for engine and tenders..	93,258 31
Do. cars	14,348 75
Loss and damage to goods and baggage.	20,711 83
Damages for injuries to persons	125,411 95
Do. property, and for cattle killed	8,788 46
General superintendence	96,330 97
Contingencies	316,309 40

\$2,506,061 59

Allotted to Freight Transportation.

Office expenses, stationery, etc.	\$53,644 83
Agents and clerks	354,964 63
Labor, loading and unloading freight..	439,641 58
Porters, watchmen and switchmen attendance	217,619 28
Wood and water station attendance ..	47,613 70
Conductors, baggagemen and brakemen	278,901 14
Enginemen and firemen	302,677 31
Fuel and cost of labor in preparing for use	873,902 53
Oil and waste for engines and tenders..	110,820 12
Do. cars	39,853 54
Loss and damage of goods & baggage.	78,228 15
Damages for injuries to persons	9,802 31
Damages for property and for cattle killed	9,730 69
General superintendence	106,970 84
Contingencies	288,949 63

\$3,223,320 29

Allotted to passenger transportation.	\$2,506,061 59
Allotted to freight transportation..	3,223,320 29
Other costs not allotted	906,669 45

Total cost of operating roads\$6,636,051 33

Total cost excluding city roads\$5,791,435 71

EARNINGS.

From passenger business	\$9,016,747 50
The same exclusive of city roads ..	7,389,922 21
From freight business, city roads excluded	10,532,714 97
From other sources	759,591 38
The same excluding city roads	741,849 07

Total earnings for all roads\$20,309,053 85

The same excluding city roads\$18,664,486 25

Payments for transportation expenses	\$12,830,526 87
The same excluding city roads	11,817,789 09
Payments for interest	4,156,997 05
The same, excluding city roads ...	4,124,359 87
Payments for dividends on stock..	2,503,013 93
The same, excluding city roads ...	2,158,413 93
Amount carried to surplus fund..	218,541 42
The same, excluding city roads ...	185,215 77

Total payment for all roads\$19,709,079 27

The same, excluding city roads ... 18,285,778 66

ACCIDENTS.

Number of passengers killed	20
Do. injured	142
Number of employees killed	29
Do. injured	24
Number of others killed	68
Do. injured	36
Total number killed	117
Do. injured	202
Do. killed, excluding city roads	114
Do. injured do.	191

DEDUCTIONS FROM THE FOREGOING RESULTS.

Amount of stock paid in	\$74,634,956 76
Do. funded & floating debt, 74,627,355 05	

Total amount of stock and debts..149,262,311 81

Excess of stock above debts..... 7,601 71

This sum, \$149,262,311 81, of total stock and debts of all the railroad companies, is 10,624 per cent. of \$1,404,907,679, the total assessed valuation of all the real and personal property of the State. That is, more than one-tenth of the whole valuation of the property of this State has been invested in her railroads.

If we exclude the city roads, we deduce the following results:

Dividing \$126,873,010 70, total cost of construction and equipment, by 2,397-62, the length in miles of roads, we have \$52,916 23 for the average cost per mile of road.

If we divide by 3,709-08, the length of equivalent single track, we find \$34,206 05 for the average cost per mile of single track.

Dividing 373,159,179, the total mileage of the passengers, by 11,250,073, the number of passengers, we have 33-17 for the average number of miles traveled by each passenger.

Dividing 373,159,179 by 6,145,862, the number of miles run by passenger trains, we have 60-72 for the average number of passengers in each train.

Dividing the total mileage of freight, 420,604,609 by 3,473,725, the number of tons of freight, we have 120-91 for the average distance each ton was transported.

Dividing 420,604,609 by 5,417,456, the number of miles run by freight trains, we find 77-54 for the average number of tons of each freight train.

Dividing 6,145,862, the miles run by passenger trains, by 3,709-08, the length of equivalent single track, we find that the entire movement of passenger trains is equivalent to passing over the entire single track 1,657 times.

Dividing 5,417,456, the miles run by freight trains, by 3,709-08 we find that the entire movement of freight trains is equivalent to passing over the entire single track 1,461 times. Hence passenger and freight trains together have passed, in the aggregate, over the entire single track of all the roads 3,118 times.

If we divide 3,117-56 by 365 we shall find that the average number of trains passing daily over the track is 8-54. That is, an average of about 8½ trains daily.

Average Cost of Road per Mile.

For maintaining of roadway.....	\$1,511 70
For repairs of machinery.....	892 47
For operating road	2,415 49

Average Cost per Mile of Single Track.

For maintaining of roadway	\$677 19
For repairs of machinery.....	577 45
For operating road	1,561 42

Dividing \$7,389,922 21, the total earnings for passenger business, by 873,159,179, the mileage of passengers, we find that the average amount received for carrying one passenger one mile was 1-98 cents.

Dividing \$10,532,714 97, the total freight earnings, by 420,604,609, the total movement of freight, we find that the average amount received for transporting one ton one mile was 2-504 cents.

Dividing 373,159,179, the mileage of passengers, by 20, the number of passengers killed, we find that only one passenger was killed for 18,657,959 miles of travel. To travel this distance it would require more than 106 years, moving incessantly at the rate of 20 miles per hour.

Dividing 373,159,179 by 162, the total number of passengers killed or injured, we find 2,303,452 miles of travel for each passenger either killed or injured.

The total number of passengers carried during the year, excluding city roads, is 11,250,073, which divided by 20 gives 562,505. That is, only one passenger has been killed for every 562,504 which have been carried.

From this, we see how small the risk of life, arising from railroad travel.

It is worthy of note, that during the year three fourths of all the passengers killed were comprised in two accidents only—the one at Sanquoit Bridge, on the New York Central Road, where 9 were

killed; the other at Shin Hollow, on the New York and Erie Road, where 6 were killed.

Dividing 73-09, the average weight in tons of a passenger train, exclusive of passengers and baggage, by 60-72, the average number of passengers in each train, we have 1-23 tons for the amount of dead weight moved, for each passenger carried.

Dividing 129-27, the average weight in tons of a freight train, exclusive of the freight, by 77-54, the average number of tons for each train, we have 1-67 tons. That is, 1½ tons of dead weight is moved for each ton of freight transported.

Dividing \$11,817,789 09, the total amount charged to the transportation expenses, by \$18,664,486 25, the total amount of earnings, we find that the average expenses 62-32 per cent. of all the earnings.

Among the documents accompanying this report, in addition to the reports of the various companies, and the tables compiled from the same, usually given, there will be found an alphabetical list of all the railroad corporations in this State, now existing, as well as of those which ever have had an existence, under each of which reference is made to all essential legislative enactments, &c., connected with the same.

An abstract of titles, &c., of such general laws as relate to railroad corporations, is also given.

Respectfully submitted,

VAN R. RICHMOND,
State Engineer and Surveyor.

The following list comprises the roads now in operation:

Albany, Vermont and Canada.
Albany and West Stockbridge—leased to the Western R.R. Co. of Mass.
Black River and Utica.
Blossburg and Corning—leased to the Tioga R. Co. of Pa.
Brooklyn City.
Buffalo, New York and Erie.
Buffalo and State Line.
Cayuga and Susquehanna. No report received from this Co.
Chemung—leased to the New York and Erie R. R. Co.
Eighth Avenue.
Elmira, Canandaigua and Niagara Falls. This road is in the hands of a Receiver.
Flushing—leased to the Long Island R. R. Co.
Hicksville and Cold Spring Branch—leased to the Long Island R. R. Co.
Hudson and Boston.
Hudson River.
Long Island.
New York Central.
New York and Erie.
New York and Harlem.
New York and New Haven.
Niagara Bridge and Canandaigua—leased to the N. Y. C. R. R. Co.
Northern.
Oswego and Syracuse.
Potsdam and Watertown.
Rensselaer and Saratoga.
Rochester and Genesee Valley.
Sackett's Harbor and Ellisburg. No report received from this Co.
Saratoga and Schenectady—leased to the Rensselaer and Saratoga R. R. Co.
Saratoga and Whitehall.
Second Avenue.
Sixth Avenue.
Syracuse, Binghamton and New York.
Third Avenue.
Troy and Bennington—leased to the Troy and Boston R. R. Co.
Troy and Boston.
Troy and Greenbush—leased to the Hudson River R. R. Co.
Troy and Rutland—leased to the Rutland and Washington R. R. Co. of Vt.
Troy Union. This Co. runs no trains.
Union—leased to the New York & Erie R. R. Co.
Watertown and Rome.
Williamsport and Elmira—mostly within the State of Pennsylvania.

Reports have not yet been received from the five following companies: Buffalo and International, Cavuga and Susquehanna, Lebanon Springs, Sickets Harbor and Ellisburg, and Troy and Rutland.

IMPORTANT TRUST SALE.

SALE OF THE SAN ANTONIO AND MEXICAN GULF RAILROAD.

BY virtue of a Deed in Trust, made and executed the thirtieth day of September A. D. 1857, by the San Antonio and Mexican Gulf Railroad Company, of the State of Texas, conveying to the said Deed as Trustees, the property and rights hereinafter described, to secure the payment of certain notes, in said Deed set forth, (amounting with interest, to about \$60,000) which notes have become due and remain unpaid, on the first Monday in April next, being the 4th day of said month, between the hours of 10 A. M. and 4 P. M. at the Railroad Depot, in the town of Laredo in the State of Texas, proceed to sell, at public vendue, to the highest bidder for cash, "All the iron rails, chairs, spikes, turn tables, locomotives, cars, road-bed, ties, and all other material pertaining to, or in any manner designed for the construction of the San Antonio and Mexican Gulf Railroad now constructed or delivered, whether the same be laid down or not."

JOHN C. FRENCH, Trustees.

SAN ANTONIO, Texas, Feb. 1st, 1859.

The Trustees, for the information of purchasers, refer to the aforesaid statement, furnished by the President and Directors, of the French sale, Property, etc., of said road.

The right and privileges of the purchaser or purchasers at this sale, are defined by an act of the Legislature of the State of Texas approved December 14th, 1857, entitled "An act supplementary to and amendatory of an act to regulate Railroad Companies, approved February 7, 1853."

Sec. 5. The road bed, track, franchise and chartered rights and privileges of any railroad company in this State, shall be subject to the payment of the debts and equal liabilities of said company, and may be sold in satisfaction of the same; but the said road bed, track, franchise and chartered powers and privileges shall be deemed one entire thing and sold as such; and in case of the sale of the same, whether by virtue of an execution, order of sale, deed of trust, or any other power, the purchaser or purchasers at such sale, and their associates, shall be entitled to have and exercise all the powers, privileges, and franchises granted to said company by its charter, or by virtue of the general laws of this State; and the said purchaser or purchasers and their associates, shall be deemed and taken to be, the true owners of said charter, and corporations under the same, and vested with all the powers, rights, privileges and benefits thereof, in the same manner and to the same extent, as if they were the original corporations of said company; and shall have power to construct, complete, and work the road upon the terms, and under the same conditions and restrictions as are imposed by their charter and the general laws of the State.

DESCRIPTION OF THE PROPERTY.—A section of five miles and 1034 feet complete, ready for road in actual use; twenty miles of the grading examined and approved by the State Engineer, and five miles of additional grading nearly completed; one twenty ton locomotive in good running order; and eight platform freight cars, and one hand car. About 10,000 cross-ties of the best quality, not laid down upon the road. One new turn-table which has not been put up.

The FRENCH SALE is regarded as very valuable, the charters granted to this company being among the most favorable of those granted to any Railroad Company by the Legislature of the State of Texas.

The original charter is dated September 5th, 1850, and invests said company "with the rights of locating, constructing, owning and maintaining a Railroad, commencing at any suitable point on the Gulf between Galveston and Corpus Christi, and thence running by a short course and to such point near the City of San Antonio, as said company shall deem most suitable;" and has been amended and construed in force by successive Legislatures, to the present time.

The act of November 14th, 1857, provides that "if twenty-five miles of said road be not completed and equipped on or before the first day of January, 1860 their said charter shall become null and void, and said company shall forfeit all their rights and privileges."

By section 10, of the original charter, it is provided "that the said company shall have power to borrow money on their bonds or notes at such rates as the directors shall deem expedient."

SECTION 16. That said company shall have the right to charge and receive such rates and prices for the transportation of passengers and freight, as shall not exceed eight cents per mile for passengers, and for freight not exceeding seventy-five cents for one hundred pounds, for every hundred miles the same may be carried."

By section 1. of the act of February 14th, 1852, it is provided, "that there shall be granted to the San Antonio and Mexican Gulf Railroad Company eight sections of land of 640 acres each, for every mile of railway actually completed by them and ready for use, upon the application of the President of the company, stating that any section of five miles or more of said railway has been completed and is ready for use," etc.

By section 1. of the act of February 13th, 1854, the San Antonio and Mexican Gulf Railroad Company is "invested with the power of continuing their road from the City of San Antonio, by the nearest practicable route, to intersect with the Mississippi and Pacific Railroad, west of the Red Fork of the Colorado River." And by Section 5, of said act "the franchise of said San Antonio and Mexican Gulf Railroad Company, in case they accept the benefits of this Supplemental Act, shall cease and terminate at the end of ninety-nine years."

By the act of November 14th, 1857, said company is entitled to the benefits of the act approved January 30, 1854, on which "An act to encourage the construction of railroads in Texas by donations of land," granting sixteen sections of land, of 640 acres each or 10,240 acres of land for each mile of railroad constructed, to be received when a section of 25 miles or more is completed. It is also provided by said act, that said company shall be entitled to all the benefits of an act, entitled "An act to provide for the investment of the Special School Fund, in the Bonds of Railroad Companies (previously incorporated) by the State, approved August 13th, 1856," whereby \$6,000 per mile is loaned to Railroad Companies, by the State, in United States five per cent. Bonds, on the completion of a section of twenty-five miles of railroad, and the grading of an additional section of twenty-five miles, ready for the cross-ties.

By the foregoing it will be seen that this company is entitled to receive sixteen sections, or 10,240 acres of land in all, for each mile of road on the completion of a section of twenty-five miles. This land may be received entirely under the provisions of the General Land Law, or half of it under that law, and the other half under the Supplemental Charter approved February 11th, 1852. By the former act the lands are required to be surveyed in "sections of 640 acres each, and in square blocks of not less than six miles, unless prevented by previous surveys or a navigable stream;" the State reserving the alternate sections of such blocks; but by the latter act the company may locate "upon any unappropriated land of the State of Texas," and make its surveys to any extent that may be desirable, without being compelled to reserve alternate sections for the State. A privilege of very great value, whether the company locates the certificates or chooses to sell them.

The Engineer of the Company, in a late Report, states that "upon neither the first, nor second sections of the road are there any important or expensive bridges, and this item of expense, usually so large, will upon this road be merely nominal," and the average grade is only 5.5 feet per mile, on the next section of grading.

The right of way has been secured on nearly the whole extent of the road.

All the maps, plans, surveys, profiles, plans and specifications in the possession of the company, will be delivered to the purchaser or purchasers.

OFFICE OF THE ILLINOIS CENTRAL R. R. CO.,
New York Feb'y 13, 1859.

THE Annual Meeting of the stockholders of the ILLINOIS CENTRAL RAILROAD COMPANY, for the election of Directors and the transaction of any other business, will be held at the office of the Company, in the City of Chicago, on WEDNESDAY, the 16th March, 1859, at 10 o'clock A. M. The Transfer Books will be closed on the 10th of March, and re-opened on the 18th.

W. K. ACKERMAN, Secretary.

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OFFICE } 12 Wall St., NEW YORK,
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CAPITAL, \$200,000.

THE SAFEGUARD INSURANCE COMPANY having relied that portion of the Capital Stock which was based upon Securities out of this State are now prepared to continue the Insurance business, and will insure against loss or damage by Fire, on Houses, Merchandise, Leases and the risks of Inland Navigation, on as favorable terms as other Companies.

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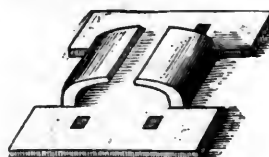
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RAILROAD SPIKES, BOAT AND SHIP SPIKES, ENGINE AND CAR (FAGGOTTED) AXLES, BOILER RIVETS, CAST STEEL for Railway Frogs and Switches, DRAWN TO PATTERN.



MANUFACTURED TO ORDER, QUALITY AND WORKMANSHIP WARRANTED BY
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WE manufacture to order both the Solid Lip, and Folded Lip WROUGHT IRON RAILROAD CHAIRS, and, as we make our own Iron, can guaranty the quality. The SOLID LIP CHAIR is in much favor, and we commend it to Railway Managers, with entire confidence; made of all weights from 9 pounds to 16, and to fit any width or thickness of base. Address

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NEW YORK, May 11, 1858.

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BROKERS IN
RAILROAD IRON
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EQUIPMENTS,
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ARE prepared to furnish either Foreign or American
Rails, &c., Equipments of every kind desired, on
the most favorable terms.

BEERS' CAST-IRON ENDLESS RAIL, FOR CITY RAILROAD,

Now being laid in Philadelphia and elsewhere; This road is exclusively of cast iron, without tie, string-piece, or chair; Rail 85 to 100 lbs. per yard; Double flange and over the present road, with 65 lbs. the groove rail; And with a saving on first cost; effecting a reduction in current yearly repairs, and savings, of at least \$1,000 per mile



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This road can be built and equipped, without additional cost over a road with 56 lbs. T rail; saving not less than 60 per cent on motive power, 50 per cent on dead weight, and 80 per cent on repairs of way; thus reducing the yearly expenses from \$1,500, to \$2,000, per mile. For full particulars, with drawings, relating to both roads, see a recent Treatise, entitled "Railroads, their construction and management, with the remedy; from twenty-five years experience," by S. A. BEERS, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

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By the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnetic Iron from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, the above, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per lineal yard, viz:—25, 30, 35, 40, 45, 50, 60, 62, and 75 lbs.

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THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,
President of the Incorporation.

February, 1855.

American Railroad Iron.

The undersigned is prepared to contract for delivery of American Railroad Iron at points on the Mississippi, Ohio and Tennessee Rivers. Rails can be furnished 27 to 30 feet long when required.

JAMES HENDERSON,
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500 TONS 66 lbs. and 1,500 tons 80 lbs. best Welsh make, Erie pattern, now in port, for sale.

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ARE prepared to fill orders for RAILS of the best quality at the market price.

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WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

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Lap-Welded Boiler Flues, 1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes, from ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

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Lord WARD, Proprietor.

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OUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mill Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854

1753

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OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

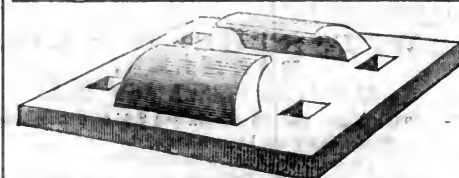
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 BOUGHT AND SOLD
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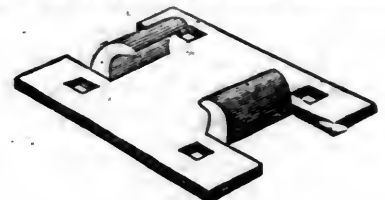
NEW YORK
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J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

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HAVING recently purchased, at Receiver's Sale, all the
 Patent Rights owned by the late New York Wrought
 Iron Railroad Chair Company, and also the entire machinery
 for manufacturing their improved Wrought Iron Railroad
 Chair, we are now fully prepared to receive and fill all orders
 from responsible parties, to any extent, with promptness and
 dispatch.

The thickness of the lips of our Chair increases through the
 bend, where the greatest strength is required, and diminishes
 towards the edge; so that a less weight of metal may be used,
 and a strength acquired equal, if not superior, to that of a
 heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought
 Iron Chair now in market, to our works for a supply; believ-
 ing they combine qualities superior to any others now manu-
 factured.

The Chairs weigh from seven and a-half to fifteen pounds,
 according to the thickness of the Iron and size of the Chair.
 To enable us to give you a perfect fit, it will be necessary al-
 ways to send a section of the Rail. We cannot undertake to
 make Chairs without a proper pattern, as it is impossible to
 make a perfect fitting Chair from a drawing.

Our manufacture of Chairs are used on a large number of
 Roads, of which the following list comprises some of them, viz

Ontario and Chicago Union Railroad Company,
 North Carolina Railroad Company,
 New Jersey Central Railroad Company,
 Panama Railroad Company,
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Messrs. M. K. JESUP & CO., 44 Exchange
 Place, New York, are the only parties authorized to act
 as our Agents.

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Locomotive & Machine
WORKS,

SUCCESSORS TO

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HAVING extensive facilities, are now prepared to furnish
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COAL or WOOD BURNING

LOCOMOTIVE ENGINES

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THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.

HAVING large facilities, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and dispatch.

BRASS and IRON CASTINGS; LOCOMOTIVE TYRES welded and blocked to exact sizes, and every thing connected with the building or repairing of Locomotives furnished on short notice.

These Works being located on the New York Central Railroad, near the centre of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

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WALTER McQUEEN, Superintendent.

RICHARD NORRIS. HENRY LATIMER NORRIS.
RICHARD NORRIS & SON,

LOCOMOTIVE STEAM ENGINE BUILDERS,

SEVENTEENTH STREET, ABOVE CALLOWHILL, PHILADELPHIA,

ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

LOCOMOTIVES,
RAILWAY TOOLS AND MACHINERY.

MANUFACTURE to order, Locomotives of any Arrangement, Weight or Capacity. In Design, Material and Workmanship, the Locomotives produced at these Works, are equal to, and not excelled by any.

Locomotive Engines.

DANFORTH, COOK & CO.,
PATERSON, N. J.,

HAVING erected an extensive Shop, with the most approved Machinery and Tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various Tools suitable for turning and repairing them.

The business of Machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1749

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Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials and workmanship, orders for

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PLATE CAR WHEELS and CHILLED TIRES, equal to any produced in the country.

WHEELS and AXLES fitted for use.
HYDRAULIC PRESSES for expressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description. SHAFTING, PULLEYS and HANGERS.

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REFINED NEAT'S FOOT OIL

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AND equal in every respect to the best SPERM OIL for all kinds of machinery use.

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The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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SATURDAY, MARCH 5, 1859.

[WHOLE No. 1,194, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, March 5, 1859.

Texas Central Railroad.

This, the most important road in Texas, appears to be doing a remarkably good business as seen in the following comparative statement of the income for the month of January for 1857, 1858 and 1859.

	1857.	1858.	1859.
Freights	\$1,998 67	\$2,396 79	\$6,760 20
Passengers	1,800 89	2,275 81	5,395 70
Total.....	\$3,799 56	\$4,672 60	\$12,155 50
Miles open	25	35	50
Earnings per mile, 1857.....	\$151 98		
Do. 1858.....		133 50	
Do. 1859.....			243 10

The total income from all sources since 1st September, 1858, has been \$87,738 14. There is every reason to suppose that the earnings of the current month will place the receipts for the first six months of the year considerably above \$100,000.

The *Houston Telegraph* speaks in the highest terms of the condition and management of the road. The continued success of this important enterprise will do much for the entire railroad interest of the State.

Indianapolis and Cincinnati Railroad.

We give below the general statement of this road.

LIABILITIES.	
Capital stock	\$1,689,900 50
First Mortgage Bonds, 7 per cent.	\$500,000 00
Second do. do.....	400,000 00
Mortgage (1858) Bonds, 7 per cent.....	200,000 00
Dividend Bonds, 7 per cent.....	86,283 98
Income and Domestic Bonds.....	176,000 00
	1,362,283 98
Bills payable less cash on hand	136,608 19
Unclaimed dividends	4,081 15
Surplus and interest fund	265,234 59
Total.....	\$3,458,108 41
ASSETS.	
Construction of road and third rail.....	\$2,497,951 86
Equipment, including Telegraph	540,042 93
Union Railway	25,689 13
	\$3,063,683 92
Real estate account	241,154 34
Bills receivable	94,429 28
Due from other roads & individuals.....	18,029 32
Material on hand.....	24,526 91
Fuel on hand	16,284 14
Total.....	\$3,458,108 41

The bills payable in the above statement have since been paid, and the road stands with nothing but a funded debt, and \$350,000 of available assets, including \$241,000 of valuable real estate not needed for the uses of the road.

The traffic for the year has been as follows:

Receipts from passengers	\$172,837 65
Do. freight	259,724 87
Do. express mail	16,322 48

Expenses of transportation.....	\$448,858 00
	218,023 79

Balance.....	\$230,861 21
Interest and taxes	\$98,000 00

The total freight business in 1858, shows an increase over 1857, which is entirely due to the local business, the through business showing a decline. The amount was:

	1857.	1858.
Through freight	\$133,174 46	\$116,795 88
Local do.	111,195 83	142,929 99
Total.....	\$244,370 29	\$259,724 87

The President of the Company, Mr. H. C. Lord, has recently negotiated a sufficient amount of the 7 per cent. bonds of that road to entirely pay the floating debt, and leave the road in a position to resume the payment of dividends next July.

Watertown and Rome Railroad.

We have received the report of the directors of this company for the year ending December 31, 1858, from which we learn the gross earnings were:

From Passengers.....	\$138,534 15
" Freight.....	241,432 57
" Miscellaneous sources	17,745 89
	\$379,712 61

And the expenses, including renewal of superstructures, building new and repairing old bridges and machinery	\$232,287 46
Less materials and wood on hand	21,575 00
	210,712 46

Net earnings.....\$187,000 15
—or 47 per cent of the gross earnings.

The above net earnings are equal, after paying the interest on the whole funded and floating debt of the company, and the annual contribution of \$10,000 to the sinking fund, to 8.2 per cent. on the capital stock of the company.

The entire receipts and disbursements of the treasurer during the year were:

RECEIPTS.	
Balance on hand Jan. 1, 1858.....	\$19,781 86
From earnings of the road	397,712 41
" Bonds sold.....	21,000 00
" Bills receivable.....	8,739 05
	\$447,233 52

DISBURSEMENTS.	
Road expenses.....	\$232,287 46
Interest on funded and floating debt..	53,426 54
Dividends paid.....	45,037 00
Sinking fund.....	10,000 00
Bonds due September 1, 1858.....	34,000 00
Interest on bonds of Pottsdam and Watertown R. R. Co., due Dec. 1, 1858, guaranteed by this company.	28,000 00
Miscellaneous	13,783 89
Cash on hand and due from agents...	30,698 63
	\$447,233 52

The immediate liabilities of the company were:

Bills payable.....	\$37,236 63
Dividend declared payable Jan 15th....	45,000 06
Former dividends unpaid	2,835 00

\$85,071 63

To pay which the company had—

Cash on hand and due from agents....	\$30,698 63
Due from P. & W. R. R. for cash advanced to pay coupons.....	28,000 00
Bills receivable.....	29,042 65
Materials and wood on hand and paid for	21,575 00

\$109,316 28

The capital stock of the company now stands at \$1,498,500. The funded debt at \$690,500—being a reduction during the year of \$13,000. The cost of the road and equipment has been \$2,159,295. A dividend of 3 per cent. was paid in July last, and another of 3 per cent. declared, payable Jan. 15th. The gross earnings of the road during 1858 exceed those of 1857 by \$21,744 42, while the operating expenses have been less.

The officers of the company are:

President—Wm. C. PIERREPONT.

Superintendent—CARLOS DUTTON.

Secretary and Treasurer—R. E. HUNGERFORD.

Charleston and Savannah Railroad.

We have received the report of the officers of this company, made to the stockholders at their annual meeting held on the 19th of January. The affairs of the company are brought down to January 1st, 1859; at which date, according to the statement of the treasurer, the capital stock stood as follows:

CAPITAL STOCK.

Subscription of City of Charleston.....	\$260,000
State of South Carolina.....	270,000
Individuals and private corporations.....	390,700
Georgia Central R. R. Co.....	75,000
Stock issued to City for preliminary Surveys to contractors, and for right of way and real estate.....	23,400

\$1,019,100

Received from City of Charleston.....	\$260,000
" " State of South Carolina.....	270,000
" " Indiv's and Corporations.....	152,965
Stock issued to City as above.....	23,400

\$706,365

Due by individuals and corporations.....	312,735
--	---------

\$1,019,100

The resources of the company exclusive of subscriptions to the capital stock, consisted of—

Mortgage bonds six per cent.....	\$510,000
On the first issue of which the company has received the indorsement of the Comptroller to the amount.....	100,000

Leaving still to be indorsed, (in instalments of \$100,000) as each consecutive section of twenty miles shall be ready for the iron.....

Mortgage bonds seven per cent.....	1,000,000
Of which there have been issued to contractors, and for right of way, iron and real estate.....	55,000
Leaving available for uses of company..	945,000

Total resources exclusive of subscription on stock.....

\$1,355,000

Since the 1st of January the company has received the endorsement of the Comptroller General on its second issue of six per cent. bonds amounting to \$100,000, and which are now available for meeting the liabilities of the company. Upon the completion of the third 20 mile section, terminating west of the Salkehatchie, the com-

pany will be entitled to the third instalment of \$100,000. With the force at work upon this section, its completion at an early day is anticipated.

Thereceipts, from earnings, of the road, to 15th January were \$3,143 65.

According to the report of the Chief Engineer, made to the 15th of January, the grading of the road, with the exception of two sections, was completed as far as Salkehatchie, a distance of 51 miles. One of the sections was in a fair way to be completed. On the other it had been impossible to work, because the low lands and rice fields, over which it passes, had been kept almost constantly under water, and because, as the contractors were forbidden the use of private roads, it was impossible to get the timber for trestle work to the required points, until they obtained a means of access by the completion of their own road beds on the adjoining sections. More trestle work was also required than was originally intended, on account of the impossibility of obtaining sufficient earth for the embankments. This section will however be completed in a short time. The grading of the three sections immediately beyond the Salkehatchie, is in an advanced state; and also that of large portions of the eleven sections north of Grahamville. The contractors expect to complete the road as far as the Savannah River Swamp before next summer. They will then pass over into Georgia and finish the grading from the river to the junction with the Central Railroad. The track was laid to the Edisto river in October last, at which point it was stopped in consequence of the non-completion of the bridge. As soon as the bridge could be crossed, the track was laid to the high land, and the trains are now running to the Pon Pon Neck road, half a mile beyond the river; thence to the Salkehatchie the track is being laid. The bridge over the Ashpoo will be ready before the track reaches that point. It is recommended that the bridge over the Salkehatchie be put at once under contract; and that over the Coosawat-chie be commenced. The bridge over the Savannah should also be commenced at an early day, as it is a work of considerable magnitude, and will require nearly two years for its completion.

The company have now four engines upon the road, and contracts have been made with the Rogers Locomotive Works, of Paterson, N. J., for a sufficient number to stock the whole line when completed.

There have been purchased and paid for, 2,930 tons of rails, 51 lbs. to the yard, costing, free of duties and expenses, \$151,125, which will be sufficient to lay the track to the Ashpoo river. 2,000 tons have also been contracted for with the Lackawanna Iron Company, to be delivered in six equal instalments, commencing in January and ending in June.

Contracts for spikes have been made with the Troy Iron and Nail Factory, and for chairs with J. B. Green & Co., of New York;

The stock of cars consists of one first-class and two second-class passenger and baggage cars; and 21 freight and construction cars.

The subscription of the State to the stock of this road was paid in the stock of the South Carolina, King's Mountain and Wilmington and Manchester Railroad Companies, amounting at par to \$270,000; \$200,000 being in that of the latter road, is not immediately available.

BALANCED SHEET TO JANUARY 1ST, 1859.

Expenditures.

For Construction.....	\$379,172 41
Iron.....	174,449 12
Locomotives and cars.....	34,372 66
Expenses—(legal advice, printing, rent, &c.....)	31,723 23
Real estate.....	73,500 00
Right of way.....	57,438 32
Engineering.....	46,394 77
Interest.....	12,537 43
Commissions and loss on sale of bonds, and city and S. C. R. R. stocks.....	25,472 44
Transportation.....	926 16
Advances to contractor's	\$2,579 39
Amounts on hand—	
Bills receivable.....	10,025 00
Wilmington and Manchester R. R. stock.....	200,000 00
King's Mountain R. R. stock.....	50,000 00
Cash.....	945 35
	263,549 74

\$1,099,536 28

Receipts.

From Bonds payable—for right of way and real estate.....	\$40,266 67
Bills payable—for iron, right of way, &c.....	131,497 56
Sundry open accounts.....	16,540 46
Amounts retained as security for completion of contracts.....	22,567 64
Amounts due contractors.....	25,222 11
Mortgage bonds—State guarantee.....	100,000 00
Mortgage bonds—Seven per cent.....	55,000 80
Capital stock—Subscription paid in.....	682,965 00
Stock acct.—Stock issued to City for preliminary surveys—to contractors—for right of way—for real estate.....	23,400 00
Freight and passage—being receipts of road to Dec. 25th, 1858.....	2,076 74

\$1,099,536 28

President—THOS. F. DRAYTON.

Secretary and Treasurer—ED. L. PARKER.

Chief Engineer—EDWARD MANGAULT.

(For the American Railroad Journal.)

Speed on Railroads.—How to Increase It with Safety.

There is nothing so well adapted to gratify the ambition of a fast people as the exhilarating rapidity of railroad travel. Now, thirty miles an hour is satisfactory, because it seems to be as fast as is consistent with safety. But let the idea be entertained that sixty or a hundred is attainable with as much or greater safety, and our present rate will soon be intolerable. Notwithstanding the mechanical skill and ingenuity which have been exercised in the construction of railroads and their machinery, it must be conceded that they are yet so imperfect as to render their use unsafe at a higher rate of speed than thirty miles an hour.

What are the points of danger?

First. The joint in the rail. This is a weak point which, notwithstanding all the guards which may surround it, will yield more or less to extreme pressure, and eventually the end of the rail is destroyed. Second. The curvature. With an axle four feet eight inches and a half between the wheels, fast at either end of it, without considering the theoretical value of the conical surface of the wheel, or which periphery of the circle should be high and which low, it must be acknowledged that there is much sliding of the wheel, and the consequent danger of disturbing the rail or leaving the track, and especially of breaking a wheel or

an axle. Third. The length of the train. There are few roads without much curvature, and it needs no explanation to prove that there is a severe lateral pressure by a long train upon all curves; and in proportion to this lateral pressure is the damage of the road, and the consequent of the train being thrown off. Fourth. The disproportion between the necessary weight of an engine, and the capacity of a single rail to bear it. Fifth. Collision.

Whilst the double-rail trackway, as at present conceived, may not be itself perfect, yet it is worthy of inquiry and experiment, whether it does not entirely obviate all the present risks and dangers of railway travel.

Let us describe what we understand a double rail track-way and its rolling stock to be. The track consists of four rails, two on each side, the inner ones being four feet eight inches and a half apart, and the outer ones each two feet apart, with joints so broken as that the points of pressure shall never rest upon a weak point of the road. In the construction of the rolling stock, each car and engine will run upon four trucks, sixteen wheels, instead of two trucks or eight wheels, as they now do; and be fifteen feet wide. The engine to be doubled in its running and working apparatus, except the boiler:—one being common for the supply of both sides. The driving wheels having a diameter of, say, fifteen feet, and the whole equal to a speed of eighty miles an hour, or any speed not retarded by the atmospheric resistance.

Examine the practical working of this in connection with the dangers of the present roads:—

The joint ceases to be a dangerous defect in the road, because the weight never rests upon it;—the curvature ceases to be objectionable, because with an axle only two feet long, and therefore strong, the sliding is not appreciable—the danger of breaking an axle or a wheel is diminished a hundred fold; and if either were to break, an accident to the passengers would not follow, for the other trucks would sustain the car, and so of the engine. The length of the train would be greatly diminished by the width of the cars; each one having a capacity for one hundred and twenty passengers instead of sixty. The weight of the engine would not be increased more than a third or a fourth, whilst the capacity of the road to sustain it is doubled. And lastly, such would be the rate of speed as to render a collision out of the question; for when a train may be passed at the rate of eighty or one hundred miles an hour, there will be no necessity for having any two on the road at the same time. The surface of the road would be so perfect, as that guards may be run so closely to it as to throw off any ordinary obstruction.

CARLISLE, Pa., 21st Feb., 1859.

W.

Sunbury and Erie Railroad.

The first meeting of the new Board of Directors of the Sunbury and Erie Railroad Company was held on the 15th inst. Mr. Wm. G. Moorhead was unanimously re-elected to the Presidency, whilst Mr. John Lindsay and Mr. Spofford were with the same unanimity re-elected to the respective offices of Treasurer and Secretary. In view of the increased labors necessarily falling on the President, by reason of the active progress of the work of construction, the Board deemed it expedient to choose a Vice-President, the choice for which was bestowed on Mr. Edward F. Gay. Mr. G. is an engineer of very large experience, and as an adjunct to the President, will not fail to render valuable service.—*Philadelphia News*.

Chicago and Its Railways.

The Chicago Press, one of the most public-spirited and valuable papers in the West, has in its issue of the 24th February, its annual statement of the condition, traffic, &c., of the railways centering at Chicago. We are not able to give the entire article, but must content ourselves with the general recapitulation of the Press, which we give below:

The trunk roads actually completed and in operation, with their branch and extension lines, centering in Chicago, are as follows:

	Miles.
Chicago and Milwaukee.....	85
Kenosha and Rockford.....	11
Racine and Mississippi.....	86
La Crosse and Milwaukee.....	200
Chicago, St. Paul and Fond du Lac.....	138
Milwaukee and Mississippi.....	192
Galena and Chicago Union.....	121
Fox River Valley.....	34
Wisconsin Central.....	8
Beloit Branch.....	20
Beloit and Madison.....	17
Mineral Point.....	32
Dubuque and Pacific.....	40
Galena (Fulton) Air Line.....	136
Chicago, Iowa and Nebraska.....	64
Chicago, Burlington and Quincy.....	210
Burlington and Missouri.....	70
Quincy and Chicago.....	100
Hannibal and St. Joseph.....	207
Chicago and Rock Island.....	182
Mississippi and Missouri, 1st Division.....	55
“ “ “ 2d “.....	37
“ “ “ 3d “.....	13
Peoria and Bureau Valley.....	47
Peoria and Oquawka.....	143
Chicago, Alton and St. Louis.....	284
Illinois Central.....	704
Pittsburg, Fort Wayne and Chicago.....	467
Michigan Southern and Northern Indiana.....	242
Monroe Branch.....	30
Cincinnati, Peru and Chicago.....	23
Michigan Central.....	282
New Albany and Salem.....	284

11 trunk and 20 branch and extension lines, 4,569

The latter table shows an addition, in spite of “the hard times” during the past year, of 516 miles of railway to those previously completed, that have Chicago for their business centre. The Hannibal and St. Joseph road, and those in Iowa and Wisconsin, constitute in the main the additions that have been made. The total number of miles of railway in the State of Illinois now completed and in operation does not vary much from two thousand seven hundred and seventy-five miles. In 1850 there were but 95 miles of railway completed in the entire State. Such a result is equally gratifying and suggestive to all who study the progress of Western development. The number of trains that arrive and depart from the city daily is about one hundred and ten.

The falling off in the earnings of the railways centering in this city, has probably realized the expectations of the most inveterate croaker. They furnish a very reliable index to the great depression which business of all kinds has suffered during the past year. Some of our friends, when we commenced collecting the above statistics, predicted that, owing to the large per centage of decrease, some of our roads would decline to furnish their figures. The public will be glad to see that these fears were unfounded, and that the managers of our railways acted upon the principle that it is wise “to know the worst and to provide for it.” Retrenchment in expenses is the remedy that in most cases has been applied to the falling off in receipts. Those who have preserved our statistics for the past few years can very easily determine the decrease for each month for any particular road, and the department of traffic to which such decrease in revenue has occurred.

The following table shows the earnings of all

the railways centering in Chicago, for the year 1858:

	Passenger.	Freight.	Mail and Misc.	Total.
C. & Mil.....	\$116,588 84	\$46,363 40	\$12,265 91	\$204,186 15
Rac. and Miss.....	41,151 20	14,077 85	155,229 06	155,229 06
Mil. & La C.....	205,745 19	169,941 16	492,453 80	492,453 80
C. S. P. & F. L.....	102,376 26	191,608 50	380,319 63	380,319 63
Mil. & Wis.....	305,305 93	657,900 29	388,186 02	388,186 02
Gal. & C. Un.....	1,022,141 65	472,269 13	1,547,561 23	1,547,561 23
Min. Point.....	14,015 78	37,487 05	58,055 38	58,055 38
C. Ia. & N. W.....	15,379 29	32,817 86	66,868 24	66,868 24
Ch. B. & Qu.....	633,084 75	108,421 97	1,600,709 63	1,600,709 63
Dubuque & P.....	80,909 17	29,468 83	61,578 08	61,578 08
Bur. and Mo.....	46,377 68	42,869 46	1,975 06	91,222 10
Ch. & Rock I.....	449,526 02	439,162 32	43,101 66	981,780 00
Miss. & Mo.....	90,280 02	124,162 51	3,400 00	717,842 53
C. A. & St. L.....	417,800 26	424,734 34	24,753 32	867,288 52
Illinois Central.....	819,829 87	976,914 87	180,804 28	1,976,578 52
P. Ft. W. & C.....	742,372 04	699,053 79	126,354 35	1,567,780 18
M. S. & N. I.....	920,366 53	849,528 36	208,946 97	2,038,841 85
Mich. Central.....	1,013,062 24	981,752 98	2,016,185 85	2,016,185 85
Total.....	\$15,197,156 85			

The total is much below the aggregate earnings of the previous year; but when it is remembered that, seven years ago, Chicago had but forty miles of railway, the earnings of which could not have been over \$40,000, the above result ought to be sufficiently satisfactory. In order to show the precise effect of the stagnation in trade upon the traffic of our railways, we append the following table, showing the earnings of the ten trunk roads leading into the city, for the last three years:

	1856.	1857.	1858.
C. & M.....	\$650,000	\$522,732	\$204,186
C., St. P. & F.....	137,303	429,305	380,320
G. & C. U.....	2,456,046	2,117,905	1,547,561
C. B. & Q.....	1,627,030	1,399,586	1,600,710
C. & R. I.....	1,751,704	1,681,102	981,780
C. A. St. L.....	1,000,000	988,310	867,288
Ill. Central.....	2,469,534	2,203,965	1,976,579
P., Ft. W. & C.....	1,478,429	1,652,728	1,567,780
M. S. & N. I.....	3,114,756	2,186,125	2,039,347
Mich. Cen.....	3,128,154	2,656,471	2,016,186

Total...\$17,812,956 \$16,428,229 \$13,191,737

The table shows a falling off in receipts in these ten lines of \$1,384,727 61 in 1857 from those of 1856, and \$3,236,491 92 in 1858 from those of 1857. The total decrease between the years 1856 and 1858 is \$4,621,219 53. These figures show a per centage of decrease, which explains in some measure the cause the low price of railway stocks but in every well managed road the expenses have in most cases been reduced in a corresponding ratio, so that the actual value of Western railway stocks should not be estimated by the falling off in their receipts during the past year. With fair crops and ordinary prosperity, we expect to record a very considerable increase in the traffic of our railways at the close of the year 1859.

MOVEMENT OF PASSENGERS.

Our tables showing the movement of passengers, indicating that the tide of emigration is steadily westward, though for the past year it has been checked largely by the general stagnation of all kinds of business. It has been impossible for those in the Eastern States who wished to seek new homes west of Lake Michigan to dispose of their property, and hence they have been obliged to remain till “better times” should make a market for their property. The following table shows the passenger movement on the three great eastern lines leading into this city:

	Through.	West. Way.	Total.
P., Ft. W. & C.	50,404	173,665	224,069
M. S. & N. I.	50,763	159,962	210,725
Mich. Central.	58,810	135,005	193,815
Total	159,977	468,632	628,609

	Through.	East. Way.	Total.
P., Ft. W. & C.	40,542	173,395	213,937
M. S. & N. I.	33,399	158,804	192,203
Mich. Central.	43,475	130,629	174,104
Total	117,416	462,828	580,244

The table shows that among the through passengers of these three roads, 42,516 came to this city more than returned by them, and the total excess of the western over the eastern movement amounts to 48,365. It is to be regretted that the Chicago and Milwaukee, and the Chicago, Alton and St. Louis roads, did not furnish their figures for passengers in the form to enable us to use them in showing the passenger traffic west of the city. The figures for four of the lines are as follows:

	Through.	West. Way.	Total.
C. St. P. & F.	24,334	39,143	63,477
Gal. & Ch. Un.	21,220	181,516	202,736
Ch., B. & Quincy	10,998	149,071	160,069
Ch. & Rock I.	20,356	112,496	132,852
Total	76,908	482,226	559,134

	Through.	East. Way.	Total.
C. St. P. & F.	18,394	40,381	58,775
Gal. & Ch. Un.	20,177	171,890	191,997
Ch. B. & Qu.	9,286	149,683	148,969
Ch. & Rock I.	16,627	107,431	124,058
Total	64,484	469,295	533,799

From these figures it appears that these four roads took west from this city, 12,424 through passengers more than they returned. A comparison of the total movement of through passengers for the past three years gives the following

Results.

	1856	1857
M. S. & N. I.	117,662	64,187
Mich. Central.	117,662	64,187
Total	235,324	128,374

M. S. & N. I.	105,370	54,621
Mich. Central.	108,995	64,746
Total	214,365	119,367

M. S. & N. I.	50,763	33,399
Mich. Central.	58,810	43,475
Total	109,573	76,874

C. St. P. & F. L.	2,217	2,530
G. & C. U.	72,707	42,562
C. B. & Q.	31,433	25,492
C. & R. I.	48,978	30,439
Total	155,335	101,013

C. St. P. & F. L.	43,518	35,046
G. & C. U.	57,736	37,724
C. B. & Q.	16,091	14,105
C. & R. I.	31,734	25,851
Total	149,179	112,826

C. St. P. & F. L.	24,334	18,394
G. & C. U.	21,220	20,177
C. B. & Q.	10,998	9,286
C. & R. I.	20,356	16,627
Total	76,908	64,484

These tables reveal a steady and large decrease

in the passenger traffic for the past three years. Yet the total number who came to this city last year on the three great eastern lines, above those who returned, was 42,516; while the number who went west more than returned from the city, by four lines, was 12,424. The latter number, however, would form a pretty respectable city. There can now be no doubt that within the next few months there will be a large emigration to the new gold fields at the head waters of the Platte, and we shall be much surprised if the statistics of the passenger traffic for the present year do not approach, if indeed they do not equal, those of 1856.

The following list embraces the roads completed, in process of construction, or projected, with their different branch and extension lines, centering in Chicago. Where roads extend beyond Illinois, they are in most cases traced only through a single State beyond our own. The trunk lines are set on the left of the column; the branch and extension lines are indented:

	Miles.
Chicago and Milwaukee	85
Kenosha and Rockford	80
Racine and Mississippi	150
La Crosse and Milwaukee, to St. Paul, about	375
Hudson and Superior	150
Branch to Byfield	80
Chicago, St. Paul and Fond du Lac—Chicago to Marquette and Ontonagon on Lake Superior	453
Milwaukee and Mississippi	192
Galena and Chicago Union	121
Fox River Valley	34
Wisconsin Central	150
Beloit Branch	20
Beloit and Madison	85
Mineral Point	56
Prairie du Chien and La Crosse	150
Dubuque and Pacific	331
Galena (Fulton) Air Line	136
Chicago, Iowa & Nebraska to St. Paul	232
Line with the Iowa Central to the Mo.	350
Sterling and Rock Island	50
Chicago, Burlington and Quincy	210
Burlington and Missouri	220
Quincy and Chicago	100
Hannibal and St. Joseph	207
Chicago and Rock Island	182
Mississippi and Missouri, 1st Division	300
" " 2d	100
" " 3d	50
Peoria and Bureau Valley	47
Peoria and Hannibal	130
Peoria and Oquawka	143
Illinois River	83
Chicago, Alton and St. Louis	284
Illinois Central	704
Pittsburg, Fort Wayne and Chicago	467
Michigan Southern and Northern Indiana	242
Monroe Branch	30
Cincinnati, Peru and Chicago	70
Michigan Central	282
New Albany and Salem	284

Total—11 trunk and 29 branch and extension lines.....7,415

It will be seen that each year this list is somewhat changed. The names of some roads are changed, a few are omitted, and some are added. Our object is to make our statements perfectly accurate at the time they are written. As to the projected lines, those only are given which have at least a fair prospect of success.

As this is the last of our series of statistical articles for the past year, we present our usual

General Summary of the Business of Chicago, for the year 1858.

Total number of miles of Railway centering in Chicago now completed (Feb 20, 1852, there were but 40 miles)	4,569
Total number to be completed in from five to ten years	7,415
Total number of miles of Railway in the State of Illinois	2,775

Total earnings of all the Railways centering in Chicago for the year

1858	\$15,197,155 74
Number of trains arriving and departing daily, about	110
Total number of passengers carried west by four of the principal Railways	76,908
Number of passengers carried west more than were returned east	15,335
Total number moved west on the three eastern lines more than were returned east	48,365
Population of Chicago in 1852	38,783
Present population of Chicago, estimated at no increase last year	130,000
Total receipts of grain in Chicago for the year 1858—(flour being reduced to wheat)—bushels	24,282,685
Total shipments of grain—(flour being reduced to wheat)—bushels	20,035,166
Total receipts of wheat—(flour being reduced to wheat)—for the past year	13,245,878
Total shipments	10,909,243
Total receipts of corn	8,260,033
Total shipments of corn	7,453,212
No. cattle packed in 1858	45,504
Average weight of cattle packed, lbs.	530
No. barrels of beef packed	96,000
Value of beef packed, about	\$1,277,536
Total receipts of live and dressed hogs for the season of 1856-7	214,223
Total receipts of salt for 1858, bbls.	333,983
Total shipments of salt for 1858, bbls.	191,279
Total receipts of lumber for the year, feet	273,020,506
Estimated price of grain, live stock, beef, pork, provisions, grass seeds, &c., exported for the year	\$19,928,495 83
Number of vessels arriving in the port of Chicago for the past year	6,754
Tonnage of same	1,621,960
Total amount invested in buildings and public improvements for 1858	\$3,962,933

Sunbury and Erie Railroad Company.

EIGHTH ANNUAL REPORT OF THE MANAGERS TO THE STOCKHOLDERS.

The history of the Sunbury and Erie Railroad Company, as embraced in the annual reports heretofore presented to the stockholders, has been one of persevering, but fruitless efforts to obtain subscriptions to its capital stock, sufficient to accomplish the object for which it was incorporated.

It is a source of much gratification to the present Board of Managers, that they can now congratulate the stockholders upon such an improvement in the affairs of the company as insures the speedy and economical completion of the work committed to their charge.

By an act of the General Assembly of this Commonwealth, approved by the Governor on the 21st of April last, entitled "An act for the sale of the State Canals," this Company was authorized to purchase from the State of Pennsylvania the Delaware Division, the Lower North Branch Division, the Upper North Branch Division, and the West Branch and Susquehanna Divisions of the Pennsylvania Canal, for the sum of three millions five hundred thousand dollars. The purchase money was to be paid in five per cent. bonds of the Company, which bonds the Company was authorized to issue to the amount of \$7,000,000, secured by a mortgage of the whole line of the road, finished and unfinished, from Sunbury to the harbor of Erie. Power was also given to the Company, in case it should make the purchase, to sell the property, or any part of it, to other corporations, or to associations of individuals to be incorporated, on condition that, if the same should be sold for a larger sum than the price paid to the State, seventy-five per cent. of the excess should be paid into the Treasury of the Commonwealth.

In pursuance of this act the managers made the purchase on the terms proposed. They issued seven millions of five per cent. bonds, and executed a mortgage of the road to secure the payment of

the same, as required by the act. Three millions five hundred thousand dollars in said bonds were paid to the State in settlement of the purchase money, and the residue thereof deposited in the office of the State Treasurer, to be appropriated as hereafter may be required in the construction of the road.

The managers having received from the Governor the necessary deeds of conveyance, entered upon and took possession of the property, which they subsequently sold and conveyed to other parties, for the aggregate sum of \$3,875,000, as follows:

The Upper and Lower North Branch Divisions, to the North Branch Canal Company, for	\$1,600,000
The West Branch and Susquehanna Divisions, to the West Branch and Susquehanna Canal Company, for	500,000
The Delaware Division, to the Delaware Division Canal Company, for	1,775,000

Total amount of sales.....\$3,875,000

The North Branch Canal Company afterwards sold to the Wyoming Canal Company that part of the canal which extends from Wilkesbarre to Northumberland, and the payment for the entire work, by consent of your managers, was made by the two companies as follows:

By the North Branch Canal Company.....	\$590,000
By the Wyoming Canal Company.....	1,010,000

\$1,600,000

The proceeds of these several sales, having exceeded the amount of purchase money paid to the State Treasurer on the 13th of September last, in compliance with the conditions of the act. Of that payment, \$281,000 were in the bonds of the Wyoming Canal Company and the balance in cash.

In compliance with the provisions of the said act of Assembly, there have also been deposited in the State Treasury bonds of the different canal companies, grantees of the works, as follows:

Of the Delaware Division Canal Co.....	\$1,000,000
" West Branch and Susquehanna Canal Company.....	500,000
" North Branch Canal Company..	200,000
" Wyoming Canal Company.....	300,000

In the aggregate.....\$2,000,000

These bonds all bear interest at the rate of six per cent. per annum, and are to be returned to this company—one-half thereof when the line of our road shall be graded and bridged, ready for the superstructure, from Williamsport to the mouth of the Sinnemahoning, and "satisfactory evidence is produced to the Governor that there is secured on available subscriptions to the stock of the Company, to be collected and applied in the progress of the work, one million of dollars in addition to the amount now paid in" and the other half when the line from Erie to Warren shall be graded and bridged, ready for the superstructure.

Of the new work, a distance of 68 miles is now nearly ready for the superstructure, so that the rails will be laid as far as Farrandsville, (33 miles,) on the very first opening of the spring. The iron for this part of the line, as well as for the Western Division, has been contracted for upon very favorable terms, and a considerable portion of it has already been delivered. The line from Erie to Warren can readily be completed in running order during the approaching summer.

The connections already completed with the Sunbury and Erie Railroad are as follows:

1. The Northern Central, connecting at Sunbury, forming, as above stated, a direct communication with Baltimore, and also with Philadelphia, by two routes, one by the Pennsylvania Central, the other by the Lebanon Valley and Reading roads.

2. The Shamokin and Sunbury, connecting at Sunbury, 40 miles in length, and penetrating the heart of the anthracite coal deposits of the middle or central basin.

3. The Catawissa and Williamsport, connecting at Milton, 12 miles above Sunbury, forming a di-

rect line to the city of New York, and a third and direct route to Philadelphia, by the Little Schuylkill and Reading roads.

4. The Williamsport and Elmira, connecting at Williamsport, 40 miles above Sunbury, forming a direct line to Buffalo and Niagara Falls, and crossing the New York and Erie at Elmira, and the New York Central at Canandaigua, distributing points on the lines of those two roads.

Besides the connections already formed, others will be made as follows:

5. The Tyrone and Lock Haven, 53 miles in length, to connect at Lock Haven, 26 miles west of Williamsport, passing through the rich mineral deposits of Centre county, and connecting with the Pennsylvania road at Tyrone. This road will be completed during the present year.

6. Three coal roads, finished and stocked, to connect at Farrandsville, and now awaiting the completion of the Sunbury and Erie to that point. These roads extend to the bituminous coal beds of the Tangascotack.

7. The Alleghany Valley Road, to connect at or east of Ridgway, communicating directly with Pittsburg and the valley of the Ohio, and forming a new and favorable route from Pittsburg to Philadelphia.

8. The Venango Road, to connect at or west of Ridgway, forming with its connection an air line through the richest parts of Ohio, Indiana, and Illinois, to Council Bluffs, on the Missouri. Every link of this extensive line is now in progress, except that part of it which extends from the Ohio State line to the connecting point on the Sunbury and Erie Road.

9. The Lake Shore Road, to connect at Erie, communicating with all the principal cities of the north-western lakes.

The Treasurer's accounts present the following exhibit of the receipts, expenditures and resources of the Company, from its re-organization in 1851, to the 1st day of January, 1859:

RECEIPTS.

Amount of capital stock paid in....	\$3,903,843 13
Seven per cent. bonds issued (part of loan of \$1,000,000)	527,000 00
Temporary loans.....	309,591 19
Income from railroad.....	198,791 71
Old assets of company.....	1,738 78
Proceeds of sale of Delaware Division Canal.....	1,775,000 00
Proceeds of sale of North Branch Canal.....	1,600,000 00
Proceeds of sale of West Branch & Susquehanna Canal.....	500,000 00
Income from Canals.....	60,167 66
Total.....	\$8,876,132 47

EXPENDITURES.

For road construction and superstructure.....	\$3,584,679 07
For buildings, land, & right of way	294,060 63
For engineering.....	210,088 58
For maintenance of way	47,999 58
For equipment	37,933 57
For incidental expenses.....	205,474 86
For discount on Municipal and Company Bonds.....	256,663 74
For interest to Stock and Bondholders...	398,463 40
For interest on transient loans	160,220 00
For piers at the harbor of Erie	75,890 37
Paid to the State Treasurer 75 per cent. of surplus received for Canals.....	281,250 00
Balance.....	\$5,555,774 80
Total.....	\$8,876,132 47

This balance is composed of bonds deposited with the State Treasurer.

Bonds of Del. Division

Canal	\$1,000,000 00
Do. W. Branch and Susq. Canal	500,000 00
Do. Wyoming Canal ..	300,000 00
Do. N. Branch Canal ..	200,000 00
Total.....	\$2,000,000 00

In hands of Treasurer:

Bonds of Del. Division Canal	\$200,000 00
Do. Wyoming Canal....	319,000 00
Do. North Branch Canal	375,000 00
Do. of the City of Erie.	133,000 00
Do. of Quakake R. R. Co.	12,500 00
Stocks of the Del. Div. Canal Co.....	100,000 00
Do. Telegraph Co.	2,000 00
Bills receivable.....	102,702 39
Cash	4,119 79
Do. in hands of disbursing agents	19,874 33
Interest due on bonds ..	30,065 00
Cost of coal on hand received in payment of tolls	19,411 78
Due by Railroad Co's...	2,684 38
Total.....	1,320,357 67
Total.....	\$3,320,357 67

There is, therefore, applicable to the completion of the road:

The above mentioned canal bonds, deposited with the State Treasurer.....	\$2,000,000 00
The cash and assets in the hands of the Treasurer, as above	1,320,357 67
The balance unissued of the Company's 7 per cent. bonds for \$1,000,000	473,000 00
Five per cent. bonds of the company deposited with the State Treasurer, part of the loan of \$7,000,000, of which the State owns one-half ...	3,500,000 00
Total.....	\$7,293,367 67

Of the above, the second and third items are under the present contract of the company, and \$1,000,000 of the first will be, when the line of road from Williamsport to the Sinnemahoning shall be ready for the superstructure, and the additional subscription above referred to shall have been secured. This work as before stated, is now nearly completed, and will be entirely so before the 1st of May next. The other \$100,000 of the first item will become available when the road shall be graded from Erie to Warren, which can be accomplished by the 1st of July next.

There will then remain the Middle Division, from the mouth of the Sinnemahoning to Warren, about 110 miles, upon which but little work has yet been done, and the greater part of which is still uncontracted for.

Of the additional subscription of one million of dollars, required by the act of Assembly, but little has yet been paid in, so that nearly the whole is to be added to the amount, as above stated, of the resources for the completion of the road, increasing the aggregate to over \$8,000,000, an amount, after making all necessary deductions for discounts, contingencies, &c., amply sufficient to complete the whole line to Erie, and, it is believed, also, to furnish the requisite rolling stock.

The only portion of these resources not already secured is the additional stock required, and of this there has been or will be secured along the line of the road about \$500,000, leaving about \$500,000 yet to be provided for, and which the board rely upon the public spirit and enlightened self-interest of the citizens of Philadelphia to supply, so that this great enterprise may proceed without delay or interruption to a speedy consummation. If this just expectation is realized, there is nothing in the character of the work itself to prevent the cars from successfully traversing the whole line to Erie, before the close of the year 1860.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday on a par valuation of \$100.

NAMES OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares	NAMES OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares	
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,923,941	545,752	150,224	6	---	Brunswick and Florida, Ga.	30	151,887	463,648	538,649	1,399,100	441,292	2,269,323	208,771	---
Androscog. & Kennebec	56	457,909	1,835,308	2,293,217	159,513	83,368	none	---	South. Western	143	1,399,100	441,292	2,269,323	1,399,100	441,292	2,269,323	208,771	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	213,255	120,909	6	93	Tennessee and Alabama	30	309,754	626,889	679,906	309,754	626,889	679,906	29,405	---
Portland, Saco, & Portland	51	1,396,400	1,396,400	1,396,400	1,396,400	1,396,400	1,396,400	1,396,400	Tennessee and Missis.	64	757,540	611,812	1,161,152	757,540	611,812	1,161,152	161,001	99.88
Boston, Concord, & Montreal	93	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	Memphis and Charleston	287	2,228,177	3,495,288	5,672,470	2,228,177	3,495,288	5,672,470	642,022	834,604
Oneshaire	54	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	Mobile and Ohio	305	6,784,829	2,066,459	10,701,428	6,784,829	2,066,459	10,701,428	564,382	278,428
Concord	38	1,500,000	8,242	1,412,576	817,060	125,064	6	50	Miss. Central	59	1,576,474	926,796	2,503,098	1,576,474	926,796	2,503,098	115,679	---
Northern, N. H.	82	3,068,400	406,286	3,068,400	305,880	165,966	4	48	Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	1,000,000	1,400,000	2,400,000	264,255	150,789
Con't & Passumps. Riv.	90	1,000,000	800,000	1,784,146	177,518	73,401	none	---	N. O. Opelousas & G. W.	80	2,800,000	760,000	3,877,526	2,800,000	760,000	3,877,526	284,178	127,460
Rutland & Burlington	117	2,238,376	4,158,785	6,397,161	332,256	41,688	none	---	N. O. Jackson & G. N.	206	4,035,000	1,815,610	7,142,563	4,035,000	1,815,610	7,142,563	189,003	---
Vermont and Canada	47	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	Vicksburg, Shreveport & Tex.	21	883,766	103,285	992,061	883,766	103,285	992,061	104,992	---
Vermont Central	122	5,000,000	5,276,399	10,276,399	705,538	127,389	6	91	East Tennessee and Ga.	111	1,192,974	1,735,669	2,703,428	1,192,974	1,735,669	2,703,428	227,363	39,062
Boston and Lowell	28	1,830,000	438,920	2,268,920	438,920	225,863	6	98	East Tennessee and Va.	130	626,075	1,728,664	3,203,138	626,075	1,728,664	3,203,138	61,314	219,264
Boston and Maine	74	4,076,974	4,229,281	8,306,255	770,802	305,502	6	94	Nash. and Oshattanooga	159	2,263,905	1,632,793	3,896,703	2,263,905	1,632,793	3,896,703	641,552	220,906
Boston and Providence	43	3,160,000	339,730	3,500,000	454,178	245,194	6	94	Ovington & Lexington	98	1,334,850	3,065,917	4,091,604	1,334,850	3,065,917	4,091,604	426,408	45,717
Boston and Worcester	44	4,600,000	599,974	5,199,974	1,019,149	389,613	6	94	Lexington and Frankfort	29	430,055	166,879	638,255	430,055	166,879	638,255	95,807	---
Cape Cod	47	681,690	291,007	972,697	122,900	39,899	49	49	Lexington and Danville	13	694,444	71,000	765,500	694,444	71,000	765,500	109,059	6
Connecticut River	50	1,591,110	277,772	1,868,882	267,710	55,096	3	69	Louisville and Frankfort	65	741,099	625,216	1,502,095	741,099	625,216	1,502,095	109,059	6
Eastern, Mass.	60	2,583,400	2,441,373	5,024,773	616,156	272,479	45	45	Atlantic & Gt. Western	118	1,874,395	1,315,237	2,993,392	1,874,395	1,315,237	2,993,392	120,836	none
Fitchburg	67	3,540,000	100,000	3,640,000	3,640,000	3,640,000	3,640,000	3,640,000	Belleville and Ind.	118	1,874,395	1,315,237	2,993,392	1,874,395	1,315,237	2,993,392	120,836	none
N. Bedford and Taunton	21	800,000	none	800,000	168,925	27,827	6	100	Clev., Col., and Cincin.	141	4,748,210	90,400	4,762,370	4,748,210	90,400	4,762,370	514,740	9 92
Old Colony and Fall River	77	3,015,100	260,100	3,275,200	683,357	305,140	6	100	Cleveland and Toledo	200	3,333,712	4,225,538	7,193,010	3,333,712	4,225,538	7,193,010	433,790	30
Vermont and Mass.	22	2,232,541	1,019,148	3,251,689	240,133	52,267	none	13	Clev. and Mahoning	65	---	---	---	---	---	---	---	---
Western, Mass.	156	5,150,000	6,839,090	11,989,090	2,117,982	889,703	8	105	Clev. and Pittsburg	133	2,780,744	3,043,992	6,537,486	2,780,744	3,043,992	6,537,486	309,513	8
Worcester and Northua.	46	1,141,000	205,565	1,346,565	218,888	82,720	4	46	Clev. P. & Ashtabula	95	3,000,000	1,495,548	4,040,978	3,000,000	1,495,548	4,040,978	581,454	15
Providence and Worcester	43	1,510,020	300,000	1,810,020	444,773	155,044	7	87	Cin., Hamilton & Dayton	60	1,555,800	1,526,092	3,181,915	1,555,800	1,526,092	3,181,915	260,763	53
Hartford and N. Haven	122	2,350,000	944,000	3,294,000	769,065	342,335	10	124	Cin., Wilm. & Zanesville	131	2,421,176	3,782,040	6,698,210	2,421,176	3,782,040	6,698,210	30,285	---
Hartford, Prov. and Fishkill	74	1,031,800	424,244	1,456,044	318,476	109,344	none	---	Columbus and Xenia	55	1,490,450	149,000	1,582,476	1,490,450	149,000	1,582,476	181,689	10
Housatonic	67	2,000,000	623,895	2,623,895	473,476	114,237	---	---	Dayton, Xen. & Belpre	63	437,838	422,658	860,496	437,838	422,658	860,496	65,235	---
Manhattan	52	2,980,836	2,323,240	5,304,076	1,157,055	254,569	3	45	Dayton and Michigan	140	1,076,062	893,011	1,869,826	1,076,062	893,011	1,869,826	50,008	---
N. York and N. Haven	60	3,388,258	3,238,240	6,626,498	88,007	30,318	none	---	Dayton and Western	35	310,000	700,481	1,035,173	310,000	700,481	1,035,173	77,454	87
N. Haven and N. London	68	510,700	1,052,000	1,562,700	120,571	61,544	none	---	Baton and Hamilton	42	499,763	832,669	1,178,163	499,763	832,669	1,178,163	290,123	10
N. London, W. & Palmer	66	1,122,300	274,183	1,396,483	265,471	44,547	31	31	Little Miami	65	2,981,292	1,266,000	3,925,150	2,981,292	1,266,000	3,925,150	164,697	none
Norwich and Worcester	32	430,000	1,625,099	2,055,099	117,718	9,904	---	---	Sandusky, Dayton & Cincin.	171	2,697,090	3,368,006	6,965,096	2,697,090	3,368,006	6,965,096	577,787	10
Albany Northern	35	430,000	1,625,099	2,055,099	117,718	9,904	---	---	Central Ohio	138	1,627,997	6,226,656	4,986,822	1,627,997	6,226,656	4,986,822	164,697	none
Black River and Utica	35	430,000	1,625,099	2,055,099	117,718	9,904	---	---	Pittsb. Ft. Wayne & Chicago	423	6,247,040	9,822,550	14,770,704	6,247,040	9,822,550	14,770,704	577,787	10
Buffalo, Conn. and N. Y.	100	1,487,874	1,501,183	2,988,957	172,475	66,333	none	---	Pittsb. Mayv. & Cin.	50	371,350	31,000	390,350	371,350	31,000	390,350	164,479	none
Buffalo and N. Y. City	92	798,439	2,597,849	3,396,288	288,392	31,896	none	---	Sand. Mans. & Newk	127	1,350,000	2,206,357	3,562,357	1,350,000	2,206,357	3,562,357	164,479	none
Buffalo and St. Line	69	1,300,000	1,040,000	2,340,000	679,750	355,763	10	---	Scioto & Hocking Valley	56	403,975	609,050	888,858	403,975	609,050	888,858	164,479	none
Buffalo and Elmira	47	434,111	922,393	1,356,504	174,089	69,506	---	---	Spring, Mt. Vernon & P.	113	1,000,000	950,000	2,194,000	1,000,000	950,000	2,194,000	164,479	none
Canadaigua and Niagara F.	36	1,815,000	2,279,554	4,094,554	135,433	48,649	none	---	Tol. Wash. & St. Louis	242	2,965,100	7,577,500	10,542,600	2,965,100	7,577,500	10,542,600	164,479	none
Canadaigua & Susquehanna	95	3,000,000	606,889	3,606,889	1,902,832	688,580	none	32	Cin., Log. & Chicago	255	4,198,679	1,006,125	2,090,433	4,198,679	1,006,125	2,090,433	164,479	none
Hudson River	144	3,758,466	9,250,362	13,008,828	1,902,832	688,580	none	32	Evansville & Crawfordsv.	109	986,661	1,270,872	2,158,718	986,661	1,270,872	2,158,718	124,140	---
Long Island	556	24,182,400	14,402,635	38,585,035	5,525,413	3,041,120	8	81	Ind. and Cincinnati	88	1,686,809	1,564,684	3,251,493	1,686,809	1,564,684	3,251,493	245,622	7
New York Central	464	11,000,000	28,081,463	39,081,463	5,742,607	1,454,032	none	13	Indiana Central	66	612,350	1,261,179	1,909,911	612,350	1,261,179	1,909,911	204,695	---
New York and Erie	133	5,717,100	4,822,498	10,539,598	1,040,393	324,891	none	13	Ind., Clev. & Pittsburg	83	835,791	1,071,694	1,828,425	835,791	1,071,694	1,828,425	86,248	none
New York and Harlem	118	1,633,022	4,822,498	6,455,520	520,153	135,754	none	1	Jeffersonville	78	1,014,262	694,000	1,839,576	1,014,262	694,000	1,839,576	222,737	94,318
Orange and Syracuse	35	306,130	213,025	519,155	149,373	78,754	---	---	Madison and Indianapolis	87	1,647,700	1,336,816	2,984,516	1,647,700	1,336,816	2,984,516	118,628	none
Potomac and Watertown	29	467,200	234,189	701,389	149,373	78,754	---	---	New Albany and Salem	288	2,535,121	5,281,849	7,029,494	2,535,121	5,281,849	7,029,494	371,402	none
Potomac & Saratoga	25	610,000	140,000	750,000	211,149	82,600	7	---	Peru and Indianapolis	73	---	---	---	---	---	---	---	---
Rensselaer & Whitehall	48	500,000	396,000	896,000	71,909	21,089	none	---	Terre Haute and Ind.	73	1,361,450	250,125	1,686,809	1,361,450	250,125	1,686,809	206,079	10
Saratoga & Binghamton	20	768,369	1,578,804	2,347,173	159,484	22,503	none	---	Chicago and Rock Isd.	182	6,248,000	1,734,318	6,628,272	6,248,000	1,734,318	6,628,272	850,039	62
Syracuse & Binghamton	27	437,830	737,079	1,174,909	156,363	55,184	---	---	Chicago, Burl. and Quincy	210	4,631,540	3,852,970	8,042,420	4,631,540	3,852,970	8,042,420	81,767	48
Troy and Boston	97	1,500,000	700,979	2,200,979	440,290	162,037	3	50	Chic. St. Paul & Fd du Lac	178	2,800,000	1,325,900	3,625,000	2,800,000	1,325,900	3,625,000	10	---
Watertown and Rome	67	1,000,000	700,979	1,700,979	440,290	162,037	3	50	Galena and Chicago	259	6,023,800	3,899,015	9,395,455	6,023,800	3,899,015	9,395,455	1,192,042	8
Belvidere Delaware	94	3,000,000	11,407,200	14,407,200	1,640,737													

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	80	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	92 1/2	96
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866		
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east sec.	7	Divers	"	1861-64	60	70
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	41	48
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	92 1/2
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1869	78	77
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	97 1/2	98
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	67 1/2	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	50	55
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	30	55
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	30	55
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1876	88	89
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1891	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1872		72 1/2
Galeta and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94 1/2	95 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	91	92
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	10	10 April, 10 Oct.	"	1863	87 1/2	93
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		
Indiana Central	400,000	Do. convertible	7	May, Novemb.	"	1866		85
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indiana & Cincinnati (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	71	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1869	7	Feb'y, August	"	1865	69 1/2	70 1/2
Little Miami	1,500,000	Do. inconv.	7	2 May, 2 Nov.	"	1863	83	83 1/2
Michigan Central	1,000,000	No mortgage, convertible	6	April, October	Boat	1860	95	97
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	91 1/2	95
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862		80
Do. do.	650,000	Do. 2d do. 1858	8	Jan'y, July	"	1863		77 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	April, October	"	1877		75
New Albany and Salem	600,000	Do. 1st section	10	April, October	"	1868-62		90
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		75
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		80
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1865		75
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66		75
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	50	60
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	100 1/2	101 1/2
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875		75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,600,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	92 1/2	95
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95 1/2	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	83 1/2	84 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1869	72 1/2	73 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1869	55	55 1/2
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	39	41
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	38	40
Do. do.	3,600,000	Convertible	7	Jan'y, July	"	1862	36 1/2	40
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	101 1/2	102 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	92 1/2	94
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	74 1/2	75
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	69	90
Do. (Free Land)	3,000,000	M'ge 345,000 acrs-priv. 7 shar's	7	March, Sept.	"	1860	90	91
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	87	88
New York and Harlem	1,900,000	Do. do.	7	May, Novemb.	"	1861-72	92	92 1/2
New York and New Haven	760,000	No mortgage, do.	7	June, Decemb.	"	1855-60	96	98
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	81 1/2	82 1/2
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	73	73 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	91 1/2	92
Do. do.	8,000,000	No m'ge conv. from June 57-59	7	15 June, 15 Dec.	"	1864	102 1/2	103
Panama, 1st issue	900,000	Convertible till 1855	7	Jan'y, July	"	1866	115	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91 1/2
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	1,900,000	Do. convertible	6	Jan'y, July	"	1870	82 1/2	83
Do. do.	3,469,000	Do. inconvertible	6	April, October	"	1866	72 1/2	73

CITY SECURITIES.	Int't payable.	Off'd	Ask	CITY SECURITIES.	Int't payable.	Off'd	Ask
New York, 5 per ct. ....1858-'60	{ May, August, and November.-	98	99	Milwaukee, 7 per ct. coup. X	Divers	45	70
Do. 5 do. ....1870-'75		93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	72	77 1/2
Do. 6 do. ....1888		101 1/2	102 1/2	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	87	90
Do. 6 do. ....1890-'98		92	94	Philadelphia, 6 per ct. ....1876-'98	Jan'y, July	99 1/2	99 1/2
Albany, 6 per ct. coup. ....1871-'81 X	Feb'y, August.	95	70	Pittsburgh, 6 per ct. coup. X	Divers	45	51 1/2
Alleghany, 6 per ct. coup. X	Jan'y, July	99	100	Quincy, 8 per ct. coup. ....1868	Jan'y, July	67	75
Baltimore, 6 per ct. ....1878-'90	Quarterly.	99	100	Racine, 7 per ct. coup. ....1873	10 Feb'y, Aug	80	80
Boston, 5 per ct. coup. ....Long X	April October.	100	101	Rochester, 6 per cent. coup. X	Divers	90	97 1/2
Brooklyn, 6 per ct. coup. ....Long X	Jan'y, July	101 1/2	102 1/2	St. Louis, 6 per ct. coup. ....Long X	Do.	84	85 1/2
Clev'Pd, 7 per ct. cp. W.W. 1879	Do. do.	100	103 1/2	Do. do. Municipal. X	Do.	86	87
Cincinnati, 6 per ct. coup. X	Divers	91 1/2	95	Sacramento, 10 p.ct. cp. 1862-'74 X	Do.	37	45
Chicago, 6 per ct. coup. ....1873-'77 X	Jan'y, July	85	87	S. Francisco, 7 p.a. cp. 1865, pay. N.Y. X	May, Novemb.	60	70
Do. 7 per ct. coup. ....1880	Jan'y, July	97	99 1/2	Do. 10 p. ct. cp. ....1871	Do. do.	60	91
Detroit, 7 per ct. cp. W.W. 1873-'76 X	Feb'y, August.	100	102	Do. 10 per ct. pay. N.Y. X	Jan'y, July	56	60
Dubuque, 8 per ct. cp. ....Long X	March, Sept.	100	100	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	56	60
Jersey City, 6 p.ct. cp. W.W. 1877	Jan'y, July	99 1/2	101	Whealing, 6 per ct. coup. X	Divers	80	80
Little Miami, 6 per ct. cp. ....1880-'83 X	Divers	71 1/2	72	Do. 6 p.ct. cp. Mun. ....1874 X	March, Sept.	80	81 1/2
Memphis, 6 per ct. coup. ....1882	Jan'y July	65	65 1/2	Zanesville, 7 do. X	April, October		

Cincinnati Stock Sales.

BY KIRK & OLIVER.

For the week ending February 28, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	68	53
Covington and Lexington, 1st Mortgage	68	66
Do. do. 2d do.	74	80
Ohio & Miss., E. D., Construction	74	80
Cinc. Ham. and Dayton, 1st Mortgage	74	80
Do. do. 2d do.	74	80
Indianap. & Cincinnati, do. do.	74	80

STOCKS.

Cincinnati, Hamilton & Dayton	55
Columbus and Xenia	83
Indianapolis & Cincinnati	60
Little Miami	56
Ohio and Mississippi (E. D.)	3

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending February 12, were \$35,838 50
Week ending February 13, 1858..... 30,697 68

Increase \$5,140 81
Total traffic from July 1st. \$1,398,244 53
Same period last year 1,489,907 05

Decrease \$91,662 52
The traffic of the Great Western Railway of Canada, for the week ending 18th of Feb'y, 1859, was as follows:

Passengers \$16,549 11
Freight and live stock 17,062 83
Mails and sundries 1,852 32

Total \$34,964 26
Corresponding week, 1858 32,991 15

The operations of the Memphis and Charleston railroad for the month of January were as follows:
Receipts from passengers \$74,500
Do. freight 58,000
Do. mail 4,597
Do. express 783

Total \$137,880
Expenses 55,380

Net profits \$82,350

Extract from Marie & Kanz's Money Circular for the European Steamer of March 2nd.

[TRANSLATED.]

NEW YORK, Tuesday, March 1st, 1859.
Our last advices were to the 15th ult. The stock market remained without activity until the 25th, when news was received from Europe by the "Africa," bringing Liverpool dates to 12th ult. This steamer having brought out the speech of the Emperor Napoleon, the stock market began gradually to improve, and our quotations to-day consequently show an almost general advance over our last circular. This upward tendency receives additional strength from a renewed abundance of money, the rates for which are slightly lower, and from a moderate but general increase in the receipts of the railroads. We note more particularly an advance in Missouri State Bonds, Illinois Central Freeland Bonds and Hannibal and St. Joseph Bonds, and also on most of the railway shares; and a decline on Erie Fourth Mortgage and unsecured bonds. Our latest dates from Europe are to the 16th ult., per "City of Baltimore," arrived yesterday. State Stocks, with the exception of 1 1/2 per cent. rise on Missouri, and a decline of 2 per cent. on Indiana 5s, the changes are slight, but bonds are scarce, with an upward tendency; sales small, except about \$400,000 in Missouri. The last loan of the United States sold at 103, firm, a rise of 3/4; the 5s, 1865, at 101 1/2; the 6s, 1862, at 104 1/4, and the 6s, 1868, at 109. Virginias and Tennessees, 1/2 per cent. higher. City and County Bonds—Very quiet for the past fortnight, transactions altogether of a retail character. Prices unchanged except 1 per cent. decline on Brooklyn City 6s. Railroad Bonds—Some are higher, but the greater number are a fraction lower, the Erie issues more particularly. Principal sales confined to Erie and Illinois Central Bonds. Erie 1st mort.,

sales at 96; 2d and 3d do., steady at previous prices; 4th mort., 4 per cent. lower; 1875s, (sales 38a38¼) 5½ decline; 1871s (35a38) 2 do.; 1862s, 4½; New York Central 6s, no change; do. 7s, 1861, sales at 102¼; do. 1876, at 100; Illinois Central Construction Bonds, 5½ advance; Freeland Bonds, 4½; Michigan Central, 1st mort., 1882, ¼; Michigan Southern Sinking Fund, 1; Hannibal and St. Joseph, 6 per cent. higher; Delaware, Lackawanna and Western 1st mort., 1½ lower; Hudson 2d mort. ½. Railroad Shares—Dull up to the 26th ult., but since then, active, with an advancing tendency. Reading has advanced 1¼ per cent.; New York Central, 2½; Panama, 3. Michigan Central, 3½; Michigan Southern, ¼; do. Preferred 4½; Illinois Central, 2½; Chicago and Rock Island, 2½; Galena and Chicago, 3½; Cleveland, Columbus and Cincinnati, ¼; Chicago Burlington and Quincy, 4 per cent.; Hudson River ½; Little Miami, 2; Harlem Preferred, 1½; Pacific Mail, 2½. We note likewise sales of Indianapolis and Cincinnati at 60, and Norwich and Worcester at 32; Erie, ¾ lower; Cleveland and Toledo, ½; Milwaukee and Mississippi 1½. Money—We notice a less active demand—rates declining. Loans on call 4½a5 per cent.; first-class paper, 6a7 per cent.; names less current, 8a9; Treasury notes, 4½ per cent., 99.70a99.80, interest added. Exchanges—Very firm, with some activity. London, 109½a109¾; Paris, 5f. 12½c.

Extract from De Coppet & Co.'s Money Circular for the European Steamer of March 2nd.

[TRANSLATED.]

NEW YORK, Tuesday, March 1, 1859.

Our last advices are under date of 15th February. The tone of our Stock market remained tame and spiritless until the 25th ult., on which day the news from Europe, per Canada, came to hand. The favorable construction placed on the political advices by that steamer imparted a considerable degree of activity to the market, and caused a decided improvement in prices, which generally close at an advance on those current at the date of our last report. The upward movement has been assisted by an increasing ease in the money market, and of the amicable termination of the conference between the Presidents of the four great railway lines, and has been further strengthened by the tenor of the news to hand today, per City of Baltimore. Erie Railroad Securities have formed an exception to the general course of the market; the Fourth Mortgage and Convertible Bonds of the Company have suffered a material decline. State Stocks—Missouri 6 per cents. have advanced 1½; Tennessee 6s, ½; Virginia 6s, ½; and California 7s, ½ per cent. Ohio 6s are sparingly offered. Sales of Kentucky 6s at 104½. Indiana 5s have declined 1½ per cent. The 5 per cent. Government loan 1874, is firm at 102½a103. City and County Bonds—The demand has been light, and the sales have been confined principally to Brooklyn 6s, at a slight concession, and to Albany 6s, Cleveland 6s and Chicago 6s; all Water loans, and to St. Louis City 6s, at well-sustained prices. In Railroad Bonds there has been little activity. Illinois Central Construction 7s have risen 1; do. Freeland, 3½; Michigan Central 8s, 1½; Galena and Chicago 2d mortgage, 1; Hudson River 1st mortgage, 1; do. 2d mortgage, 1; and Michigan Southern 2d mortgage, 1 per cent. Erie 3d mortgage have declined ½; Erie 4th mortgage, 3; Erie Sinking Fund, 3½; and Erie Convertible Bonds, 2 per cent. Sales of Little Miami 6s at 83½a84; Delaware, Lackawanna and Western 1st mortgage at 87½a88; and of Green Bay, Milwaukee and Chicago 8s at 80. Railroad Shares—The market, save for a few, is higher. New York Central have advanced 2½; Illinois Central, 2½; Galena and Chicago, 3½; Chicago and Rock Island, 2½; Michigan Central, 3½; Panama, 3; and Reading, 1½ per cent. Erie have declined ¼, and Milwaukee and Mississippi 1½. Sales of Cleveland, Columbus and Cincinnati at 92½a93; of Indianapolis and Cincinnati at 60; of Little Miami at 84a87; and of Harlem Preferred from 38½a40½.

Money is again increasingly abundant, and rates have declined. Loans on call, 4½a5; indorsed paper, 6a7 per cent. per annum. Exchange on Europe—The market continues but poorly supplied with bills. Sterling has been sold principally at 109½a109¾, and Francs at 5.13½a5.12½.

American Railroad Journal.

Saturday, March 5, 1859.

AN ABSOLUTE WANT SUPPLIED.—A first class reliable Railroad Map, has long been the primary want of mercantile men in every part of the continent, and although many attempts have been made to supply this deficiency, the work has been heretofore undertaken by incompetent men whose wretched abortions have excited ridicule and contempt.

These failures have at length prompted the right parties to undertake a Railroad Map worthy of the wants of the age, and we have pleasure in calling the attention of railroad men, merchants, manufacturers, and shippers, to the *Railroad Map of the United States and Canadas*, just issued by a copy of which can be seen at our office.

The greatest possible care has been taken in the compiling and arrangement of this Map, proofs having been furnished for correction and examination, before issuing, to every railroad company in the country. A careful examination of this valuable Map, authorizes us to pronounce it to be *the most complete and perfect Railroad Map ever issued.*

The publishers having decided to offer it at the very low price of four dollars, publicity is alone required to ensure it a place in every counting room and office throughout the country.—*U. S. Mining and Rail Road Journal. February 12th, 1859.*

We copy the above, credit and all, from the *Buffalo Commercial Advertiser*. We will simply add that there is no such paper in existence as the "U. S. Mining and RAILROAD Journal"—and that this is the first time it has appeared in our columns. We can account for it in no other way, than that it was supplied to the editors of the *Commercial*, with the credit affixed to it, by the "parties" themselves, with the deliberate intention of deluding the public, by conveying the idea that it originated in our paper. We know nothing whatever of the map referred to, or of its publishers, (whose names and residence we have erased for obvious reasons.) We would thank the "right parties" in future to credit puffs of their map to the source from whence they emanate.

There is no RAILROAD JOURNAL in the U. S. except our own. Philadelphia, Boston and Cincinnati have papers devoted to the same interests with which we are identified; but no one has presumed, even in those distant cities, to prefix our title to their sheets, or ever endeavored, that we are aware of, to obtain patronage by its use. This despicable meanness was reserved for, and has hitherto been confined to, a significant advertising sheet issued in this city, which in less than three years has reached its *thirteenth volume*, and attained the enormous circulation of *Six thousand copies*; upon which basis, coupled with a free and ingenious use of our title, its agents solicit, and are often successful in obtaining, advertisements. We shall take occasion at some future day to recount some of the maneuverings of the runners of this establishment. We think we can draw a picture that will be readily recognized by hun-

dreds of our "railroad men, merchants, manufacturers and shippers." In the meantime we shall continue to add to our collection. Voluntary contributions to the budget are solicited.

Galena and Chicago Railroad.

The following is a condensed statement of the last annual report of this company:

Galena and Chicago Railroad, Jan'y 1, 1859:
The construction account has been increased \$3,660 12 during the year for a new freight house at Morrison, and now amounts to... \$9,339,390 10
The capital stock has been increased \$2,600, and now amounts to.... 6,026,400 00
The funded debt has been reduced \$116,000, viz: \$109,000 of the 2d, and \$7,000 of the first mortgage bonds purchased and canceled, it now amounts to..... 3,783,015 28
Viz: Litchfield B'ds, due May 1, 1859..... \$52,015 28
First mortgage Bonds, due Feb'y 1, 1862, to Aug. 1, 1863..... 1,993,000 00
Second mortgage, due Aug. 1, 1857..... 1,738,300 00
..... \$3,783,015 28

The floating debt of last year (\$49,716 56) has been paid off, and the Company has now no floating debt.

The earnings for the year were \$1,547,501 23
And the surplus of last year..... 193,737 82

Total..... \$1,741,209 05

The expenses for the year were \$927,232 85
The interest paid and due on bonds 268,486 07
The dividend paid and due (August 4 per ct.) 241,024 00
..... 1,486,742 91

Leaving a surplus of \$464,556 14
The cost of the purchase of \$109,000 second mortgage bonds for the sinking fund has been charged to this account..... \$97,751 33
Also the improvement account 8,168 37
..... 105,918 70

Leaving a surplus of \$198,636 44
Add whole amount of second mortgage bonds canceled 262,000 00

Making the annual surplus.. \$460,636 44
The actual business of the year appears to have been as follows:

Earnings..... \$1,547,561 23
Expenses..... \$927,232 84
Interest 268,486 07
Sinking Fund 105,918 70
..... 1,301,637 61

Net earnings..... \$245,923 62
This about pays the 4 per cent. declared in August last, which amounted to \$241,024.

Correspondence from the Rhine.

Coblenz, February 8, 1859.

The Left Bank Rhine River Railroad to this city has recently been opened. The result will be an entire change in mining affairs in this region. The famous iron ore mines near Horhausen, Oberlahr and Buglahr in the district of Neuwied will be most favorably affected by this road. A connecting bridge from Neuwied to the opposite depot of the Rhine River R. R. will become necessary. The transportation to the Rhine is still too expensive, and it appears that the question of a branch road from the iron ore region to the Rhine will be taken into consideration.

Some time since the continuance of the looking glass factory at Aachen had been a matter of doubt; but now its further existence is secured, since the Secretary of Commerce has granted the right of carrying on the establishment to the Looking Glass and Chemical Product Company of Paris. The looking glass manufactory of St. Gobain is one of the oldest establishments of this line of industry in Europe and is owned by the above-named company. The Aachen establishment will now avail itself of the experience and of all the improvements, which the St. Gobain institution, in the long course of its existence has amassed, and will further develop a branch of industry, the importance of which as a matter of commerce and trade increases in proportion to the growing luxury of our age. Bavaria alone is annually exporting 10,000 c.w. of looking glass.

Since the extension of the telegraphic system of Europe, the Rhenish-Westphalian wire manufactory has assumed grand proportions. A few months ago the Metallurgic Company at Aachen gave notice of their intention to start an extensive establishment for producing telegraphic and other wires. In the districts of Duren and Schleiden similar projects are on foot, and there are no drawbacks to prevent their being carried out. Iron and coal are abundant in that part of the country. The mountain ridge along the right bank of the Rhine is inexhaustible for ore of any description (gold and silver excepted).

Our industrial men—I am speaking of those now-a-days,—are possessed of a spirit of enterprise, for which the Belgians and the English are reputed, and in which the astonishingly growing nation on your side of the broad Atlantic reign supreme. Without it, no development of industry either here or there would have been possible.

The statistics of the railroad and telegraph lines of Germany show a consumption of enormous quantities of iron, but, at the same time, a daily growing participation of our home industry in the supply of rails, wheels, locomotives, cars, wires, etc., required, is hailed with the utmost pleasure.

The necessity and usefulness of establishing a Rhenish-Westphalian Technological Society is being acknowledged everywhere. *

Illinois Central Railroad.

We present herewith a synopsis of the Report of this Company for the year ending Jan'y 1st, 1859:

Cost and value of the estate to January 1, 1859.
Road and equipment, actual outlay...\$23,726,240
Interest charges to date..... 8,099,683

Total cash outlay.....\$31,825,923
Less net traffic and land income 4,848,601

Total.....\$26,977,322
Add discount on \$20,000,000 bonds... 2,532,211

Present cost of the estate.....\$29,509,533
Construction mortgage.....\$17,000,000
Canceled by land income.. 927,000

Freeland mortgage.....\$3,000,000
Canceled by land income... 123,000

Capital stock.....\$17,500,000
Of which not yet paid in.. 7,016,000

Present stock and mortgages..\$29,434,000

Comparing with value the property as follows:
In road, exclusive of interest and dis-

count charges, or by actual outlay..\$23,726,240
Bills receivable for land sales..... 18,140,506

Together.....\$36,866,796
—and 1,365,005 acres land unsold.

Of the interest charges paid by the company from the commencement of the enterprise in 1851, the Mortgage Bondholders have received \$6,172,837, the stockholders \$652,867, and the holders of Bills payable \$1,273,989—together, \$8,099,683.

Of the cash income of the Company, chiefly since 1855, when the road was opened through, and the Land Department fairly organized, the receipts were:

From net traffic.....\$2,559,021
Land collections..... 2,289,580

Together.....\$4,848,601

Of the land notes and unsold lands on hand, the following is the division:

The Construction Mortgage is on 2,000,000 acres, and originally for...\$17,000,000
The sales thus far, 871,448 acres, for... 11,056,548

Leaving 1,128,552 acres to cover..\$5,944,452
Notes paid and bonds canceled..... \$927,000
Notes running to maturity..... 10,129,548

Total sales as above.....\$11,056,548

The Free Land Mortgage is on 345,000 acres and originally for.....\$3,000,000
The sales, 195,813 acres, for..... 2,780,087

Leaving 149,187 acres to cover.....\$219,913

Notes paid and bonds canceled.....\$123,000
Notes running to maturity..... 2,657,087

Total sales, as above.....\$2,780,087

Interest Fund Land Notes on hand.....\$353,921
Interest Lands.....\$50,000 acres.
Of which, sold.....162,573 "

Leaving on hand.....\$7,427 "

TRAFFIC FOR THE YEAR.

Gross traffic of the road.....\$1,976,578
Less operating expenses..... 1,419,955

Leaving net.....\$556,623
Of which to State of Illinois..... 132,005

And to the Company.....\$424,618
Cash from land sales..... 588,237

Total net cash increase.....\$1,012,855

As compared with mortgage interest...\$1,314,470
And extraordinary outlay of year..... 613,514

Together.....\$1,927,984

The charges upon the year, other than for mortgage interest, appear to have been:—1. For interest upon the floating debt or bills payable extended from the crisis of 1857, at one time \$3,700,000, and since provided for within \$396,167 by stock assessment and other means. This interest charge amounted to \$298,415. 2. Interest on Optional Right Bonds, since received in part payment of stock assessment and canceled within \$65,000. This charge is \$27,527. 3. A permanent addition to the construction of the roadway \$257,425; and 4. Miscellaneous charges attaching to the general management of Land and Traffic departments, \$30,147. In all, as above, \$613,514. The credit land sales of the year amount to 52,387 acres for \$701,155, making an average of \$13 40 per acre. The Company purchased and canceled during the year from the proceeds of land collections \$431,000 of their mortgage bonds.

London Correspondence.

26, THROGMORTON STREET,
LONDON, 4th February, 1859.

To the Editor of the AM. RAILROAD JOURNAL.

The report of the New York and Erie Railroad Co. has been received in this country, and its contents carefully studied. Under the costly management peculiar to this Railroad, all the advantages which the position of the line, and the interest of its friends can secure, are expected to be realized by the European holders, who place their hopes upon the promised future success. They not unnaturally expect the most judicious employment of all the means at the disposal of the President, to promote their interests. That the Erie line has had to contend with many difficulties, is patent to all who have invested in its securities. But in the inauguration of a well-defined system of management, these difficulties were supposed to be "a thing of the past." A new and politic organization was to be adopted; the fares between the termini were to be made remunerative, and the increase from freight traffic was to secure a dividend to the holders of share capital. Hitherto the wish has been the only parent to the hope, and the result is, disappointment. It is a praiseworthy ambition to seek to secure to the New York and Erie the command of the great East and West traffic; but it would appear, from the result of past experience, that it has to contend with a rival it cannot conquer. If that is indeed a fact, is it not the duty of those entrusted with its management, to defer to the ordinary laws of commerce; and where they are hostile, to avoid their injurious influence as far as possible?

The New York & Erie and the New York Central are supposed to be the great competing lines for passengers and goods between the East and West. For the year ending 30th September, 1858, the Erie obtained only 24,233 through passengers going east, against the Central's 77,980; and only 22,573 through passengers going west, against the Central's 67,259. We must suppose, therefore, that the New York Central can offer greater facilities for east and west passenger traffic than the New York and Erie.

If, therefore, the Erie cannot command the traffic, the management of the line may justly be called in question, provided the traffic it does obtain is conducted at a loss. I am not prepared to assert that such is the fact, but I submit the following extracts from the report of the President and confess to be unable to arrive at any different conclusion.

The receipts from passengers and freight during the year ending 30th September, 1858, are stated as follows:

	Passengers.	Freight.
From passengers (direct).....	\$1,182,258 27	
From freight (direct).....		\$3,843,310 77
From mails charged to passengers....	94,686 00	
From telegraph....	4,822 89	4,822 89
From rents.....	5,400 00	10,451 55
From hire of cars..	1,967 36	1,967 37
From storage.....		1,929 34
	\$1,289,134 52	\$3,862,481 92

The number of passengers carried was 793,671, and reducing the emigrant passengers to 1st class, the number of passengers carried one mile was 57,256,386. Consequently the receipt per mile was 2,2515 cents.

The cost of earning the revenue is shown in the following statement of the working charges.

ITEMS.	DIVIDED IN PROPORTION TO, Receipts. Train Mileage.	
Office expenses, stationery	\$41,366 12	.....
Agents, clerks	146,600 83	.....
Porters, watchmen, & switchmen	\$53,359 64	.....
Wood & water station attendance	8,984 58	.....
Fuel, first cost labor	471,040 36	.....
Damages for property	3,104 28	.....
General superint'd'ce	69,051 92	.....
Contingencies	107,363 52	.....
Tools, machinery in shops	30,189 53	.....
Incidental expenses	30,328 55	.....
Repairs of road-bed	81,491 27	.....
Do. track	838,347 91	.....
Do. fences, & gates, etc.	16,707 37	.....
Do. truss bridges	84,300 35	.....
Do. engine and car houses	10,409 82	.....
Do. dwellings	798 23	.....
Superintendence & office expenses	822 50	.....
Taxes	62,256 63	.....
Contingencies	10,665 46	.....
Ferry	103,115 35	.....
<i>Extra.</i>		
Expenses, etc., paid in 1858	52,641 66	.....
Loss on propellers	13,164 66	.....
Bad debts	8,492 57	.....
Fuel destroyed by fire	6,152 18	.....
Rent Union R. R.	83,400 00	.....
Do. Chemung R. R.	24,000 00	.....
Bad debts previous to 1857, loss on sale of express equipment, depreciation of w'd, Cascade embankm't expenditure, Union R. R.	28,577 53	.....
	\$578,969 64	\$1,807,763 36
	CHARGED DIRECT TO, Passengers. Freight.	
Labor, loading, unloading	\$145,499 69	.....
Passenger conductors, etc.	\$67,149 29	113,263 40
Passenger enginemen, etc.	68,462 95	.....
Freight do. ....	.....	121,863 55
Oil waste, pass. eng's ..	19,557 92	.....
Do. freight do. ....	.....	36,532 73
Do. pass. cars ..	3,665 87	.....
Do. freight do. ....	.....	24,026 28
Loss and damage, g'd's, and baggage	34,340 92	.....
Damages for injuries to persons	33,975 12	.....
Repairs passeng. eng's ..	120,519 42	.....
Do. freight do. ....	.....	238,114 33
Do. passeng. cars ..	140,771 02	.....
Do. freight do. ....	.....	330,351 25
Do. passeng. wood and water stations ..	29,764 41	.....
Telegraph expenses	44,749 74	.....
Express do.	48,525 23	.....
	\$532,891 23	\$1,088,761 89
Divided in proportion to receipts	144,868 83	434,100 81
Divided in proportion to train mileage ..	732,310 00	1,075,453 48
	\$1,409,570 65	\$2,594,316 18
Say, received from passenger traffic ..	\$1,289,134 43	.....
Loss of 0.2,103 cents in 57,256,386 passengers	120,410 17	.....
The cost of earning being	\$1,409,544 60	.....

Upon the appropriation of the working charges to passenger and freight traffic as adopted in my statement, the loss upon passenger traffic for the year ending 30th September, 1858, is shown to amount to over \$120,000. It is well known there are certain charges affecting the way traffic as charged to the "passenger per mile," not equally due to the "through passenger per mile." Station charges, the wear and tear of engines is lessened by fewer stoppages, and the friction upon the rails is not so great when the break has to be applied less often. But, against these advantages, the increased speed necessary to conduct "through traffic" tells adversely with equal, if not superior, force; and the cost of "through and way" traffic is thus nearly equalized. Allowing such to be the case, that the charge of carrying "each passenger per mile" is (cents) 2.4618, and deducting from receipts of passengers, the earnings from mails, telegraph and rents we should have a loss upon passenger traffic of \$224,000, distributed as follows:

	Passengers	
Cents.	per mile.	
Loss of 0.5968 on 9,046,046 going West ..	\$53,986	
0.8518 on 9,329,606 going East ..	79,469	
0.7243 on 5,051,700 Emigrants ..	36,589	
Through	\$170,044	
0.1128 on 15,457,138 East way ..	17,435	
0.1988 on 18,371,897 West " ..	36,523	
	\$224,903	

The deduction from each class for mails, telegraphs, &c., being (in cents) .0186 for each passenger. Here we have a road working its passenger traffic at a loss, although an insignificant advance in the rate of passage money would evidently give a profit to the Company. It is vain to plead necessity for such a ruinous policy. The President was the great upholder of an advance of passenger charges; and even if it did cripple his competing line, he should have withstood the temptation. The result only offers another proof of the ability of the Central to carry against the Erie; for, adopting the figures in both reports, with the "Central's" receipts at 1.8609 per passenger per mile, that railway shows a profit of \$921,744 from passenger traffic, the cost for each being 1.1836 cents per mile.

The goods traffic upon the Erie is profitable both in "way" and "through" traffic—the cost of carrying a ton of freight per mile being 1.5662 cents, and the lowest receipt being 1.7404 cents.

The market for American securities is without any material alteration during the past week. Michigan Central 1860 bonds have declined 1 per cent., and the Sinking Fund bonds 1 per cent.; Pennsylvania Central 2d Mortgage Sterling bonds have advanced 1 per cent. With these exceptions, the quotations are the same as this day last week. Consols close $95\frac{3}{8}\frac{1}{2}$.

Your obedient servant,

WILLIAM LANCE.

Finances of California.

EXTRACT FROM THE GOVERNOR'S MESSAGE.

Our finances are in a much more prosperous condition than at any other period since the organization of the State. The interest upon the public debt is being promptly paid, and our bonds rank as high in the market as our sister States.—The indebtedness of the State in the aggregate amounts to \$4,043,485 63. The annual interest upon the debt, as ratified by the people, \$273,000.

It is quite probable that there are other demands of a just and equitable character against the State, which will swell the amount of actual indebtedness to \$4,150,000. Although \$1,446,150 have been appropriated to the Indian Department in California within the last six years, there are not more than 3,000 or 4,000 Indians on the Reservations.

Covington and Lexington Railroad.

The *Covington Journal* gives the following statement of the affairs of the Covington and Lexington Railroad Company which are now before the courts:

Besides the stockholders, indorsers and income bondholders, there are three sets of mortgage bondholders, each set having a distinct interest.—The income bondholders will endeavor to secure a share in the distribution, while the city of Covington, as stockholder and indorser, will make an effort to save some part of the \$500,000 for which she is liable, and which is involved in the disposition of the property. The mortgage debt, with date of issue, is divided as follows:

1st Mortgage, March 1, 1852	\$420,000
2d Mortgage, March 1, 1853	1,000,000
3d Mortgage, June 1, 1855	600,000

The date of issue is likely to become a matter of some importance, and the reader will bear it in mind.

A suit by James Winslow, trustee of the second mortgage, is, as our readers are aware, pending in the Fayette Circuit Court. The railroad company filed an answer to the petition, and the holders of income bonds have filed answers and cross-petitions. The case will come up for hearing in June next.

To add to the complications already existing, a question has been raised as to the validity of the mortgages.

An act, approved February 27, 1849, amending "the charter of the Licking and Lexington Railroad Company," authorizes the Corporation "to borrow not exceeding \$500,000, at an interest not greater than 7 per cent. per annum, and pledge the property of the corporation to secure the payment of the money borrowed, and issue certificates of stock therefor." Under this act the first mortgage for \$420,000 was executed; \$381,888 41 was realized. Contrary to statements in one or two of the Cincinnati papers, there is in this act no positive restriction as to the rate at which the bonds may be sold, and the first mortgage would seem to be valid against all the world.

On the first day of March, 1853, and without authority of law, the second mortgage for \$1,000,000 was executed. The net proceeds amounted to \$726,030 23. By an act of the Legislature, approved February 6, 1854, the second mortgage was legalized, and unlimited power conferred upon the Railroad Company "to borrow money upon the credit of the corporation, on such terms, at such rate of interest, for such times, in such places, and to such amounts" as the directory of the company deem proper.

Six months prior to the issuing of the second mortgage, and at a time when the only lien on the road was the first mortgage, the city of Covington indorsed the bonds of the Railroad Company for \$200,000. This was done under an act of the Legislature, approved Jan. 3, 1852, which provides in reference to this \$200,000, that "the said Company may issue such indebtedness as may be deemed proper, and secure the same by giving a lien upon the property and assets of the company."

The income bonds, amounting in the aggregate to \$610,000, and netting \$369,823 01, were issued July 10, 1854, Dec. 1, 1854, and Feb. 1, 1855.

The third mortgage, for \$600,000, netting only \$300,000, was issued June 1, 1855.

The foregoing statement embodies the main facts as derived from the acts of the Legislature, and the reports of the company. It has been stated in the public prints that a part of the income bonds were issued prior to the execution of the second mortgage. This does not appear to

have been the case. The second mortgage was issued March 1, 1853, and legalized Feb. 6, 1854. The first set of income bonds was issued July 10, 1854.

Journal of Railroad Law.

PASSENGER CARRIERS BY SEA.—RESPONSIBILITY FOR BAGGAGE.

Although the majority of the cases reported in this part of the JOURNAL relate exclusively, and directly to railroad law, we occasionally meet with decisions of interest, which although bearing but indirectly upon the subject, serve to give the reader a more broad and comprehensive view of the rules applicable to it.

A case of this kind is that of *Van Horn vs. Kermit*, reported in the last volume, just issued, of E. D. Smith's Common Pleas Reports. This suit was prosecuted by the plaintiff as the assignee of the claim of one Bogle, for the value of baggage lost upon a ship jointly owned by the defendant Kermit and one Carow. Bogle was a passenger in the vessel on her trip from Liverpool to New York, where she arrived upon Monday evening. On Tuesday the passenger went to the ship, and visited her again on Wednesday. Upon the day last mentioned, the baggage in question was missing. The other facts and evidence bearing upon the questions discussed on the appeal, fully appear in the following opinion:

BY THE COURT, WOODRUFF, J.—The suggestion that a traveler on a voyage at sea must, in order to make a ship owner responsible for the safety of his baggage, place it beyond his own reach, in the special charge of the officers of the ship, has, I apprehend, no foundation. The passenger must necessarily require frequent access to his trunks, and unless it appears that he is required to see that they are deposited in some other place on shipboard, there would seem to be none more appropriate than the state-room or cabin assigned to him for use during the voyage. Doubtless the carrier may require that portion of the baggage not necessary for daily use by the passenger to be deposited in any suitable place which he or his agents may designate; but there is nothing in the evidence given on the trial in this case to indicate that the passenger assumed or exercised any exclusive control over his baggage, or that it was not kept during the voyage just where it was proper to keep it, or that there was any other place in which it might have been deposited. The master and officers of the ship had the control of all the arrangements, and the presumption is that the baggage was kept in the place assigned by them for that purpose.

The ship having arrived in port, the ship's officers, or the owners, had a right to require the passenger to remove his baggage within a reasonable time, and so to exonerate themselves from responsibility as carriers, for its safe keeping; and if, upon the evidence, it had been found by the Court that on the day succeeding the night of the ship's arrival, viz., on Tuesday, the master and mate had notified or directed the passenger to remove his baggage, I think he could not recover for a loss happening thereafter without their fault; but whether such direction was given was a question of fact, in regard to which the testimony was conflicting, and the finding of the Court below must be regarded by us as conclusive. The finding, in this respect, was certainly not so against

evidence as to warrant our interference upon that ground.

I do not understand the evidence to be that the defendants were not paid for the passage of the owner of the baggage, but the contrary is testified; and not only so, they received him on board, with his baggage, as a passenger, and if his passage money has not been paid, they may collect it. To charge the carrier, it is not indispensable that passage money should be paid in advance, nor is it material whether he pays for his passage himself, or it is paid for him by his friends. In either case he is entitled to have his baggage safely brought and delivered.

I incline to the opinion that the appellants are correct in saying, that the vessel having arrived on Monday night, and the passenger having had the whole of Tuesday in which to remove his baggage, the liability of the defendants had ceased; and that if they had shown that the loss which occurred after that time had happened without fault or negligence on their part, or on the part of their agents, they would not be liable; but if not liable, as common carriers, to the full extent of insuring the safety of the goods, they were not relieved from all care of the property, and all responsibility for its delivery when demanded. They could, as before suggested, notify the passenger to remove it on that day; but if they did not, they were bound to preserve it with ordinary care, and, as bailees, were chargeable if it was lost through their negligence. Upon proof that it could not be found when the passenger returned to the ship, on Wednesday, the ship being meantime in the care of the owners, it was, at least, the duty of the owners to show that the loss occurred without their fault or that of their servants. This they did not do, nor attempt to do, except so far as the language of the witness, who speaks of the property as stolen, and of the loss as robbery, seems to indicate that some third persons may have taken the goods. The evidence does not show that the property is not still in the possession of those who had charge of the ship when the passenger left, on Tuesday. A portion of the contents of the missing trunk distinctly appears to have come into the actual possession of the defendants, in their store. Clearly they did not, on the trial, exonerate themselves and their agents from the presumption of negligence, which the absence and non-production of the property left in their charge on Tuesday, warranted. The proof that the defendant, Kermit, was a joint owner with Carow, is not very implicit; but we cannot say that the finding below was, in this respect, without evidence. Indeed, the appearance of the whole case upon the return, suggests most clearly, to my mind, that this point was not controverted on the trial. But there was some evidence on the subject. It is true that, until the copartnership of the defendants in the business was proved, the declaration of the defendant, Carow, was not competent evidence to charge his co-defendant; but it was, as to Carow, an admission that he was one of the owners. The book-keeper "of the defendants" was examined, and he proved that they were partners, and that he was their book-keeper in their office. Some of the goods were found and delivered to the passenger, at their office. The book-keeper, in his testimony, using language commonly used by the clerks in speaking of their principals, says, Alex-

ander Taylor & Co. are "our agents at Liverpool for this ship." Now, although slight rebutting evidence would have been sufficient to overcome this proof, the Court below, in the absence of such evidence, were warranted in finding it *prima facie* proof that the partnership proved embraced the business of this ship. Besides, although the declaration of Carow was not competent evidence, and must have been rejected if objected to on behalf of Kermit, I am not prepared to say that, when received without objection, it might not be taken by the Court as evidence of the fact. I find nothing in the list of the goods lost, which we can say a passenger, making a voyage from a foreign country, might not, with propriety, take with him as baggage; or that we can say was not suitable or proper for his personal convenience on the journey, or his amusement and use in the country to which he was bound. His guns for sporting, and the small quantity of clothing materials, certainly were not so.

The testimony of the witness, in relation to the fact of loss, the description of the goods lost, and their value, I think *prima facie* sufficient. Although he had not examined "his things" for six or seven months before the loss, the witness is quite explicit as to the contents of his trunks and the articles lost. And on the passage, although he did not examine them in detail, he unlocked the trunks, and says that there was no difference in the appearance then and when he examined them six months before.

We cannot say that this evidence was insufficient to sustain the finding. And so in regard to the value of the goods, the witness speaks explicitly and is not contradicted.

I do not perceive any sufficient reason for disturbing the finding of the court below, or for reversing any rulings had on the trial.

Judgment (for the plaintiff) affirmed.

Locomotive Improvement.

The patent granted on the first of the present month, to the superintendent of the Rogers Locomotive Works, settles a question which has been some 2½ years before the Patent Office with regard to who is the inventor of the improvement in smoke boxes described in this patent,—the introduction of the *diaphragm* to check the flame. It appears that Mr. Wm. S. HEDSON, of Paterson, N. J., designed the improvement in question at some date previous to the summer of 1856 and that in July of that year it was—with some additions since found unnecessary—put in actual use by him on the locomotive "Governor Pennington" running on the New Jersey R. R. and Transportation Co's line. In October of the same year Mr. H. applied for patent, but through a misunderstanding was rejected. During the period which has since elapsed other parties have obtained a patent for a modification of the invention, as it must be tributary thereto.

The object attained by this invention is the all-important one of economy of fuel. The novel feature is a diaphragm extending across the upper portion of the smoke box and which serves to retain the flame in a more prolonged contact with the boiler than heretofore was enjoyed, yet without sensibly retarding the draught. The diaphragm is not made perfectly tight but on the contrary is perforated or provided with equivalent openings above or at its sides, which are of such

size as to make the diaphragm of no effect either for good or evil when the fire is being kindled. A locomotive thus provided, will, it appears, conduct itself in the ordinary way so long as the fire is moderate, but when the machine is under full headway, with the fire burning intensely, a large portion of the current of intensely heated gases flowing through the tubes passes through the lower part of the deep smoke box. The flame and hottest portions of the gases are more reluctant to descend than the cooler portions and are detained longer in and about the boiler. The theory is simple and is very obvious on an inspection of a machine thus provided. The invention has been introduced on a large number of locomotives running in all parts of the Union, and is, so far as we have learned, universally approved.

It is found in practice that the increased heat in the boiler in consequence of the use of this diaphragm is realized not alone in the immediate vicinity of the smoke box but even the fire doors are sensibly hotter than in engines without this addition. The diaphragm is constructed of a single thickness of sheet iron, and is very easily removed to allow access to the tubes and the steam pipe whenever required. The whole is of very trifling weight and cost and as it adds practically nothing to the complication of the structure, the improvement will probably be introduced very generally.

Pennsylvania Railroad.

The annual meeting of the stockholders of the Pennsylvania Railroad Company was held on the 7th ult. The great question was on the subject of a terminus on the Delaware river. After a debate, it was resolved to invite proposals for properties and prices of the different sites that have been mentioned, and for a double track railroad, with bridging, etc., from Houstonville to each site; these proposals to be presented by the 1st of May, after which the Directors will have authority to make such selections as will be most advantageous.

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OFFICE OF THE ILLINOIS CENTRAL R. R. Co.,
New York, Feb'y 15, 1859.

THE Annual Meeting of the stockholders of the ILLINOIS
CENTRAL RAILROAD COMPANY, for the election
of Directors and the transaction of any other business, will be
held at the office of the Company, in the City of Chicago, on
WEDNESDAY, the 16th March, 1859, at 10 o'clock A. M.
The Transfer Books will be closed on the 10th of March,
and re-opened on the 18th.

W. K. ACKERMAN, Secretary.

IMPORTANT TRUST SALE.

SALE OF THE SAN ANTONIO AND MEXICAN GULF RAILROAD.

BY virtue of a Deed in Trust, made and executed the thir-
tieth day of September A. D. 1857, by the San Antonio
and Mexican Gulf Railroad Company, of the State of Texas,
conveying to the undersigned as Trustees, the property and
rights hereinafter described, to secure the payment of certain
notes, in said Deed set forth, (amounting with interest, to
about \$60,000), which notes have become due and remain un-
paid—we shall, on the first Monday in April next, being the
4th day of said month, between the hours of 10 A. M. and 4 P. M.
at the Railroad Depot, in the town of Lavaca in the State of
Texas, proceed to sell, at public vendue, to the highest bidder,
for cash, "All the iron rails, chairs, spikes, turn tables, loco-
motives, cars, road-bed, ties, and all other material pertaining
to, or in any manner designed for the construction of the
San Antonio and Mexican Gulf Railroad, now constructed or
delivered, whether the same be laid down or not."

JOHN JAMES,
JOHN C. FRENCH, } Trustees.

SAN ANTONIO, Texas, Feb. 1st, 1859.

The Trustees, for the information of purchasers, refer to
the subjoined statement, furnished by the President and Di-
rectors, of the Franchisees, Property, etc., of said road:

The rights and privileges of the purchaser or purchasers at
this sale, are defined by an act of the Legislature of the State
of Texas approved December 19th, 1857, entitled "An act
supplementary to and amendatory of an act to regulate Rail-
road Companies, approved February 7, 1853."

"Sec. 5. The road-bed, track, franchise and chartered
rights and privileges of any railroad company in this State,
shall be subject to the payment of the debts and legal liabilities
of said company, and may be sold to satisfaction of the
same; but the said road-bed, track, franchise and chartered
powers and privileges shall be deemed one entire thing and
sold as such; and in case of the sale of the same, whether by
virtue of an execution, order of sale, deed of trust, or any
other power, the purchaser or purchasers at such sale, and
their associates, shall be entitled to have and exercise all the
powers, privileges, and franchises granted to said company by
its charter, or by virtue of the general laws of this State; and
the said purchaser or purchasers and their associates, shall be
deemed and taken to be, the true owners of said charter, and
corporators under the same, and vested with all the powers,
rights, privileges and benefits thereof, in the same manner
and to the same extent, as if they were the original corpora-
tors of said company; and shall have power to construct,
complete, and work the road upon the terms, and under the
same conditions and restrictions as are imposed by their char-
ter and the general laws of the State."

DESCRIPTION OF THE PROPERTY.—A section of five miles
and 1,034 feet complete and ready for and in actual use; twenty
miles of the grading examined and approved by the State En-
gineer, and five miles of additional grading nearly completed;
one twenty ton locomotive in good running order; and eight
platform freight cars, and one hand car. About 10,000 cross-
ties of the best quality, not laid down upon the road. One
new turn-table which has not been put up.

The FRANCHISE is regarded as very valuable, the char-
ters granted to this company being among the most favorable
of those granted to any Railroad Company by the Legislature
of the State of Texas.

The original charter is dated September 5th, 1850, and in-
vests said company "with the rights of locating, constructing,
owning and maintaining a Railway, commencing at any suitable
point on the Gulf between Galveston and Corpus Christi, and
thence running by such course and to such point near the City
of San Antonio, as said company shall deem most suitable;"
and has been amended and continued in force by successive
Legislatures, to the present time.

The act of November 14th, 1857, provides that "if twenty
five miles of said road be not completed and equipped on or
before the first day of January, 1860, their said charter shall
become null and void, and said company shall forfeit all their
rights and privileges."

By section 10, of the original charter, it is provided "that
the said company shall have power to borrow money on their
bonds or notes, at such rates as the directors shall deem ex-
pedient."

"SECTION 16. That said company shall have the right to
charge and receive such rates and prices for the transportation
of passengers and freight, as shall not exceed eight cents per
mile for passengers, and for freight not exceeding seventy-five
cents per one hundred pounds, for every hundred miles the
same may be carried."

By Section 1, of the act of February 14th, 1852, it is pro-
vided, "that there shall be granted to the San Antonio and
Mexican Gulf Railroad Company eight sections of land of 640
acres each, for every mile of railway actually completed by
them and ready for use, upon the application of the President
of the company, stating that any section of five miles or more
of said railway has been completed and is ready for use," etc.

By section 1, of the act of February 13th, 1854, the San An-
tonio and Mexican Gulf Railroad Company is "invested with
the power of continuing their road from the City of San An-
tonio, by the nearest practicable route, to intersect with the
Mississippi and Pacific Railroad, west of the Red Fork of the
Colorado River." And by Section 5, of said act "the franchise
of said San Antonio and Mexican Gulf Railroad Company, in
case they accept the benefits of this Supplemental Act, shall
cease and determine at the end of ninety nine years."

By the act of November 14th, 1857, said company is entitled
to the benefits of the act approved January 30, 1854, entitled
"An act to encourage the construction of railroads in Texas by
donations of land," granting sixteen sections of land, of 640
acres each, or 10,240 acres of land for each mile of railroad
constructed, to be received when a section of 25 miles or more
is completed. It is also provided by said act, that said com-
pany shall be entitled to all the benefits of an act, entitled "An

act to provide for the investment of the Special School Fund,
in the Bonds of Railroad Companies (previously) incorporated
by the State, approved August 13th, 1856," whereby \$6,000
per mile is loaned to Railroad Companies, by the State, in
United States five per cent. Bonds, on the completion of a sec-
tion of twenty-five miles of railroad, and the grading of an ad-
ditional section of twenty-five miles, ready for the cross-ties.

By the foregoing it will be seen that this company is entitled
to receive sixteen sections, or 10,240 acres of land in all, for
each mile of road on the completion of a section of twenty-
five miles. This land may be received entirely under the pro-
visions of the General Land Law, or half of it under that law,
and the other half under the Supplemental Charter approved
February 14th, 1852. By the former act the lands are required
to be surveyed in "sections of 640 acres each, and in square
blocks of not less than six miles, unless prevented by previous
surveys or a navigable stream." The State reserving the alter-
nate sections of such blocks; but by the latter act the com-
pany may locate "upon any unappropriated domain of the State
of Texas," and make its surveys to any extent that may be
desirable, without being compelled to reserve alternate sec-
tions for the State. A privilege of very great value, whether
the company locates the certificates or chooses to sell them.

The Engineer of the Company, in a late Report, states that
"upon neither the first, nor second sections of the road are
there any important or expensive bridges, and this item of ex-
pense, usually so large will, upon this road be merely nominal,"
and the average grade is only 5.5 feet per mile, on the next
section of grading.

The right of way has been secured on nearly the whole ex-
tent of the road.

All the maps, plates, surveys, profiles, plans and specifica-
tions, in the possession of the company, will be delivered to
the purchaser or purchasers.

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Now being laid in Philadelphia and elsewhere;
THIS road is exclusively of cast iron, without tie, string-
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ses from \$1,500, to \$2,000, per mile. For full particulars, with
drawing, relating to both roads, see a recent Treatise, entitled
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dy, from twenty-five years experience, by S. A. BEERS,
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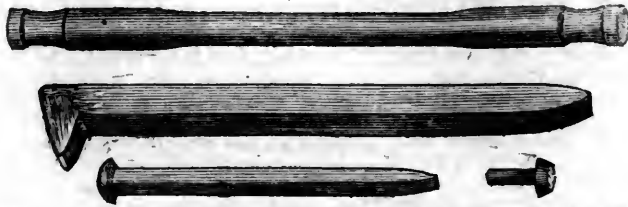
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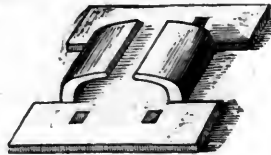
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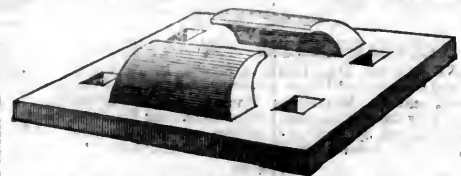
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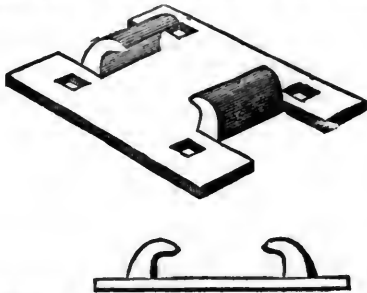
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STEAM NAVIGATION, COMMERCE, FINANCE,
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SECOND QUARTO SERIES, VOL. XV., No. 11.]

SATURDAY, MARCH 12, 1859.

[WHOLE No. 1,195, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, March 12, 1859.

European and North American Railway.

The comprehensive plan involved in the conception and construction of this railway is in keeping with, and will account for its comprehensive name. It is no less than a line of rails across the State of Maine, and the provinces of New Brunswick and Nova Scotia, to the nearest available continental harbor of North America to Ireland, and is in reality a plan for shortening the time of passage between the metropolis of the New World and the metropolis of the Old. In the words of its projectors, "no one familiar with the commonest principles of commercial economy can for a moment doubt the truth of the assertion, that at some time or other the necessities of trade will require the adoption of the shortest possible sea voyage between the continents of Europe and America. The discerning minds of both continents have seen the rapid approach of this event in the various measures by which lines of railway have been pushed out from the great commercial centres of England and the United States towards each other, in the direction of the shortest line between them."

The construction of the Britannia Tubular Bridge, and of the railway from Dublin to Galway—the latter place being the nearest harbor in Great Britain to North America—long ago awakened

public attention to some corresponding movement on this side of the Atlantic, with a view of fulfilling the great requirement spoken of. In June, 1850, a few public spirited individuals of Portland, Maine, united in a memorial to the legislature of that State, asking that a survey should be made with a view to ascertain the most practicable route for a railway from Bangor to the boundary line of the Province of New Brunswick, in the general direction of St. Johns.

From the easternmost point of Nova Scotia (Cape Canso) to Galway Bay, in Ireland, the distance is about 2,000 miles. The nearest available harbor to Cape Canso, and but a short distance west, is White Haven, which, according to the authority of Admiral Owen, who had surveyed it, "is a most splendid and commodious port at the nearest available point of North America to Ireland, its natural facilities greatly exceeding those of Halifax or any other point upon the coast." Galway Harbor, on the west coast of Ireland, is one of the finest in the world, having great advantages over Bristol or Liverpool. The distance from Galway to Dublin is 120 miles; from Dublin to Holyhead, 63 miles; and from Holyhead to London, 263 miles.

From White Haven to St. John the distance is less than 250 miles; from St. John to Waterville, in Maine, to which point there then existed a continuous line of railways from New York, is about 200 miles. These lines have since been extended east to Bangor, 55 miles nearer to St. John. The entire distance from New York to London, by the line indicated, and the time required for its passage, is shown in the following table:

	Hours.
London to Holyhead, by railway, 263 miles.....	7½
Holyhead to Dublin, steamer, 63 miles.....	3½
Dublin to Galway, by railway, 120 miles.....	4
Galway to White Haven, steamer, 2,000 miles.....	128
White Haven to Bangor, by railway, 400 miles.....	13½
Bangor to New York, ".....	477 miles 16
Total distance, by steamer, 2,063 miles.....	
Total distance, by railway, 1,260 ".....	

Total distance..... 8,323 miles; time 172½ hours—or 7 days 4½ hours.

From an inspection of a globe, it will be seen that this route follows nearly upon the great circle between the two extremes. It varies so slightly from it as to be but little, if any, longer than the

route usually taken by the steamers from New to Liverpool, which is estimated at from 3,100 to 3,300 miles. In the above table the speed of the steamers is calculated at 16 miles per hour, which it is admitted is a much faster average rate than is now accomplished; but it must be borne in mind that a shortening of sea voyage from 3,300 to 2,000 miles would dispense with 40 per cent. of the coal and other extra weight now carried.

A capital of \$200,000,000 invested in railways between Galway and London, has a direct interest in the plan proposed, as well as a capital of almost equal amount in New England and Canada.

These, and many other pertinent facts and arguments, were embodied in the memorial to the Legislature of Maine, which was a most ably written, and foreseeing document. The movement in Maine aroused a corresponding movement in the Provinces, and a convention was immediately called, to be held in Portland on the 31st of July, 1850. The convention was attended by delegates from all the British Provinces, and most of the Northern and Eastern States. It embraced the most distinguished men of the Provinces as well as of the New England States, and was by far the largest and most enthusiastic assemblage of the kind ever convened in this country. The session lasted three days, adjourning on the 2d August, after passing a series of pertinent resolutions, and appointing an executive committee to make applications for the necessary charters, &c. The Legislature of Maine promptly responded to the object of the convention, and although the statutes of the State forbid that any charter should be granted until after full surveys are made, and plans and estimates of cost exhibited, yet a charter was immediately granted, of the most liberal character—perpetual in duration—the company not subject to taxation—stockholders excepted from the provisions of the individual liability law, and the charter not subject to alteration. The company was permitted to organize on a subscription of \$1,000,000. The bill became a law Aug. 20, 1850, and on the same day the appropriation for surveying the line was made. Aug. 27 another act was passed, providing that, in case said company should be constituted a corporation in the British provinces, it might increase its capital stock to \$15,000,000. In the meantime the gov-

ernment of New Brunswick had directed the survey to be made from St. John to the boundary of Maine, under the charge of John Wilkinson, Esq. A. C. Morton, Esq., was appointed by the Governor of Maine to make the surveys in that State. Surveys had already been made from St. John eastward, as far as Shediac, on the Gulf of St. Lawrence. The route for the whole distance proved to be of a feasible character, involving no serious obstacles. The Legislature of New Brunswick, at its next session, granted a charter of incorporation for the construction of the road within the limits of the Province, and liberal provincial aid was extended. So far, nothing that could be required in the way of legislation was wanting. The railway revulsions of the past few years have, however, conspired to delay the realization of the great object. The State of Maine, by its constitution, is debarred from incurring a debt exceeding \$300,000, and, beyond the surveys, could not materially aid the project. The means of its capitalists have been required to develop projects of more local interest; and with the exception of the line from Waterville to Bangor, (55 miles in length,) before referred to, nothing has been done this side of the boundary of New Brunswick. There was, however, an inherent weight in the plan, and the momentum given it at this convention has not died out. The ultimate completion of the line is inevitable. The words of the late General Dearborn, in his speech at the convention, are prophetic, and his reasons unanswerable:

"I feel satisfied that it can be done. I feel satisfied that it will be done. All history and all experience show that the necessities of commerce seek out the nearest and shortest routes for travel and business. Calais and Dover have been the points of embarkation ever since the invasion of Cæsar, and for no other reason, but because they were the nearest points between the Island of Great Britain and Continent of Europe. Cape Sunium was the point of concentration for the trade of Greece, simply because it was the nearest point to Egypt. Why was the Appian Way extended from Capua to Brundisium, on the Adriatic Gulf? Because that was the nearest good harbor, near the narrowest place in the Adriatic Sea, in the most direct line from Rome to Constantinople. Why was the suspension bridge of Telford extended across the Menai Strait to the Island of Anglesey? and the still more wonderful work of modern times, the Britannia Bridge across the same Strait? Because it was in the most direct line from London to Dublin and Ireland. If you will examine the map, you will find that in all time past, the points of islands or continents which approach the nearest, have become the highways of their intercourse and their commerce. It is for this reason that I believe that the highway for the trade and communication between this country and Europe must be made to the eastern coast of Nova Scotia.

"Look at the map of America, and see who will be benefitted by the completion of this undertaking? All of us, from the country bordering on the waters of the St. Lawrence and on the Lakes of Canada, to the fertile valleys of the Mississippi and its tributary streams. There are no less than fifteen States of this Union directly interested in this line, and there are millions who will be rejoiced at the prospect before them. But not only will the world be benefitted by the productions of these fertile districts being widely distributed, but by freedom of intercourse, asperities and misunderstandings between great nations will be softened and removed, and at all events, a firm and lasting friendship will be produced between two great nations speaking the same language and advocating the same principles of civil and religious liberty. When Dewitt Clinton first opened his

canal to Buffalo, that was almost the extent to which travelers could go west; and the trade was of scarcely any moment, except in furs and in the productions of the forest. Now it is on the way to the great granary of the earth; and the trade which reaches the Erie Canal from beyond it, is far greater than all it receives this side of Buffalo. The project we are now considering is one of equal importance, and its accomplishment will confer equal honor upon its authors. Vast as the enterprise is, it can still be accomplished."

We are led into this general history of the European and North American Railway, and these quotations, by a perusal of the annual reports of the Chief Commissioner, R. Jardine, Esq., and the Chief Engineer, Alex. L. Light, Esq., of this Railway, which have just been made to the government of the Province of New Brunswick.

Although nothing, as before stated, has been done in the State of Maine towards carrying out this great international line beyond the making of surveys from Bangor to the boundary line of New Brunswick, yet the project has been studiously followed up in New Brunswick, and in Sept. 1852, a contract was entered into between the provincial company and the English firm of Peto, Brassey, Betts, Jackson & Co., for the engineering, construction and equipment of the entire line from St. John to the Gulf of St. Lawrence, at \$31,200 per mile. With the exception of the aid provided by the Provincial Government, the contractors really furnished the means for building the road. The work progressed under this contract until July, 1856, when the whole enterprise was transferred over to the Provincial Government, and the contract with Messrs. Peto & Co. was cancelled—the contractors receiving \$432,000 for work and materials upon the road to that date. Since then the work has been executed directly by the Government; part of the time under the sole superintendence and engineering of A. L. Light, Esq., but latterly under the charge of a Board of Railway Commissioners; of whom R. Jardine, Esq., is Chairman—Mr. Light still acting as Chief Engineer. The reports of these gentlemen present a detailed, concise and satisfactory statement of the progress and condition of the works up to the present time, and will well repay any one for their perusal.

From them it appears that the total length of the line now completed and under construction is 109.18 miles extending from St. John to Shediac on the Gulf of St. Lawrence, of which 29.9 miles are in operation, viz, 9.6 miles from St. John eastward, and 20.3 miles from Shediac westward to Moncton, including a branch of about 1 mile in length at the latter point, to the wharves. The first named division was put under contract on the 10th of Jan'y, 1857, and although it involved extremely difficult and expensive work, was opened for traffic on the 1st June, 1858, at a cost of \$43,236 per mile. The latter was let on the first August, 1856, and opened for traffic on the 20th August, 1857, at a cost of \$25,940 per mile. The whole length of the road from St. John to Shediac, including the branch mentioned, being 109.18 miles, there remain 79.28 miles yet to be completed, all of which is under contract, and in a forward state.

The cost of the whole line from Mill street, St. John, to Shediac harbor, including the Moncton branch: stations, wharves, rolling stock, land damages and engineering, amounts to \$3,711,904; or an average per mile of \$34,000.

Its state of progress may be summed up as follows:

	Miles.
1st Division—Shediac to Moncton, completed,	19.42
2d do. —St. John to Salmon Brook, do.	9.60
Branch to wharves at Moncton, do.	0.88
3d do. —Hampton to Sussex, ½ done	23.18
4th do. —Moncton to head of Petit-Codiac, 0.4 done	20.59
5th do. —Sussex to head of Petit-Codiac, let, cleared, and work well in progress	24.51

Total.....108.18

The total expenditure on the works to 1st November, 1858, was as follows:

To July 6, 1856. Purchase of road and materials from Messrs. Peto & Co.	\$432,000
From July 6, 1856, to April 1, 1857. Expenditure under superintendence of A. L. Light, Chief Engineer.	233,808
From April 1, 1857, to October 31, 1858. Expenditure under direction of Board of Commissioners	1,434,548

\$2,100,356

The total cost as before stated being... 3,711,904

Leaving to be yet expended..\$1,611,548

The road will cost about \$2,800 per mile more than the original price agreed on in the contract with Messrs. Peto & Co., but the reports give a full and satisfactory explanation of this difference. Work of a superior quality to that required in the specifications of that contract has been adopted, and necessary work has been done not included in that contract, all of which would have been an extra charge. The alignment has been perfected; the road straightened; reversed curves avoided, and the total curvature reduced 1,728°, or nearly five full circles; the length of the road has been reduced 2½ miles; permanent stone structures have been adopted in lieu of trestle works and wooden culverts; bridges over or under the road have been substituted in place of level crossings; more wood and water stations have been constructed than contemplated originally; additional depot grounds and wharves have been purchased, and more fencing has been constructed than first contemplated. These additional expenditures, necessary to the construction of a first class road and indispensable to its traffic when completed, all of which would have been an extra charge by Messrs. Peto & Co., are estimated to amount to \$7,232 per mile—which, added to the original contract price, would have made the cost of the road \$38,432 per mile. From this, if there be deducted the present estimated cost \$34,000 per mile, it will appear that, what is apparently an increase of cost, is in fact a saving of nearly \$4,500 per mile, or nearly half a million dollars in the aggregate. The minimum radius of curvature is 2,865 feet; the maximum 12,278 feet between St. John and Moncton. By the original location, under the Peto contract, the minimum radius was 1,584 feet, and the maximum 5,280 feet. On the original location the total amount of straight-line was 70.9 miles, while on the new location it is 79.7 miles. The highest point of grade upon the line is but 165 feet above high water at St. John, and the maximum grade is 45 feet per mile. Seventy-five curves have been dispensed with and straight lines substituted. Ten of these curves were reversed curves, always highly objectionable, while sixteen others were nearly as bad, being reversions connected by short tangents of from only 20 to 90 feet in length.

The whole line from St. John to Shediac is only $2\frac{3}{4}$ miles longer than an air line—a result, considering the rugged character of the country, which could only have been arrived at by most thorough examinations and skilful engineering. The details of the works are all of the most thorough description. The excavations wide to give perfect drainage; all the bridges of over 40 feet span of iron. The rails weigh 63 lbs. per yard. The track is ballasted with broken stone and gravel in the most thorough manner. The gauge is $5\frac{1}{2}$ feet. Engineers and others who have examined the road, speak of it, without exception, as being one of the most thoroughly constructed, on this continent, if not equal to any in Europe. The officers having charge of the work have judiciously kept in view the original object of this line, viz, a great international passenger railway, and have spared no pains to fulfil the conditions required in such a work. It is a line upon which the highest rate of speed can be obtained with safety. That all this is accomplished at the comparatively low cost of \$34,000 per mile, or \$4,500 per mile less than it could have been obtained for under the original arrangement with Messrs. Peto & Co., is a significant commentary upon the absurdity of these great contracts. No method can be more disastrous than that of placing everything in the hands of contractors—allowing them to select their own engines, make their own locations and design their own structures. No matter what the skill, or reputation, or honesty and good intentions of the contractors, their own pecuniary interest is very naturally the chief criterion by which every question of alignment, gradients, or construction is tested. The results developed by the operations on the European and North American railway prove that the cancelment of the original contract was a fortunate negotiation for the Province, and that the management of the works has been in careful and competent hands. The reports bear inherent evidence of the correctness of their statements, and we have seldom seen any so full in their detail.

All the contracts for grading the remaining portions of the road are to be completed by the 1st June, 1860; but should circumstances render it an object to open the whole road for traffic before that time, the grading could be easily completed by 1st Oct., 1859, and sufficient ballast can be easily laid on during the spring, to admit of the whole being certainly opened with safety by the 1st June, 1860.

The Nova Scotian Railways have, during this time, been progressing as quietly but as certainly as those in New Brunswick. A line is now in operation from Halifax to Truro, $61\frac{1}{2}$ miles, and an extension of 60 miles would carry it to the line between Nova Scotia and New Brunswick, and about 50 miles more would make the connection with the line from Shediac to St. John. With the completion of this portion of the European and North American Railway, the following would be the only links wanting in a continuous chain of Railway from New York to Halifax, viz:

	Miles.
Bangor to boundary of New Brunswick.....	90
Boundary to St. John	70
Head of Petit-Codiac to boundary line of N. S.	50
Boundary line to Truro	60

Upon the completion of such a chain, there can be no doubt of the possibility of shortening the time of passage between New York and London to eight days.

Galena and Chicago Railroad.

The twelfth annual report of the directors of this company to the stockholders which has just been received, contains a comparative statement of the earnings and expenses of the road for the two last fiscal years, ending December 31st, 1857 and 1858, from which we have compiled the following:

	1857.	1858.
EARNINGS.		
From freight	\$1,327,786 67	\$1,022,141 65
" passengers ...	726,909 58	472,269 13
" mails, etc. ...	69,258 72	53,150 45
	\$2,117,904 97	\$1,547,561 23
EXPENSES.		
Repairs of locomotives.....	\$98,122 35	\$51,150 21
" cars	101,703 23	54,106 68
" track	258,130 71	167,612 79
" bridges	36,337 05	50,871 79
" buildings & fences, etc.	19,278 44	14,612 48
Locomotive service.....	83,207 26	63,028 09
Train service	45,262 90	34,888 63
Station service.....	190,220 90	84,756 56
Fuel and water	288,211 19	206,420 83
Oil and waste.....	35,952 22	24,847 53
Taxes	52,624 81	70,266 89
Salaries	34,218 76	30,315 17
Miscellaneous	98,991 79	74,355 19
	\$1,842,261 61	\$927,232 84
The surplus earnings on the first of January, 1858, were.....		\$193,737 82
The gross earnings for the year ending December 31, 1858, were		\$1,547,561 23
Total.....		\$1,741,299 05
The operating expenses for the same time, were		\$927,232 84
Interest on bonds.....		268,486 07
Dividend of August last, 4 per cent.....		241,024 00
		1,486,742 91

Leaving a surplus of	\$304,556 14
This account has also been charged with the cost of \$109,000 of second mortgage bonds, for two instalments of the sinking fund	\$97,751 33
And for the improvement account.....	8,168 37
	105,919 70

Leaving a surplus of	\$198,636 44
Add to the whole amount of the 2nd mortgage bonds which have been purchased from the current revenues, and canceled for sinking fund purposes.....	262,000 00

And it makes an annual surplus of...\$460,636 44

The whole amount charged to construction account, January 1, 1859, was \$9,339,390 10.

The estimated value of the tools and machinery in the machine and car shops on the 1st of January, 1858, was \$59,734 21; the valuation on the 1st of January, 1859, was \$50,302 02—showing a depreciation of \$9,432 19. This depreciation has been charged to the current expenses of the last fiscal year.

The expenses for the past year have been nearly 60 per cent. of the earnings. The ratio for the eight months of the fiscal year, as stated in the last Annual Report was 56 per cent.; but the ratio for the whole of the year 1857, was 63 per cent.

Since the whole road was opened in 1856, the earnings and ratio of the expenses have been:

Year ending.	Earnings.	Ratio of Expenses.
May 31, 1856.....	\$2,315,786 96	45 per cent.
May 31, 1857.....	2,416,343 85	53 do.
Dec. 31, 1857.....	2,117,904 97	63 do.
Dec. 31, 1858.....	1,547,561 28	59 do.

It is gratifying to find that with a continued reduction in the gross earnings (the falling off in the last year being about 27 per cent.), the ratio of the expenses has been reduced nearly $\frac{3}{4}$ per cent.

The tracks, structures and rolling stock have been maintained in an efficient working condition, and from a careful comparison, are found to be, in the aggregate, in as good condition as they were at the date of the last report.

The falling off in earnings for the past year was comparatively greater in the passenger traffic than in the freight. The loss from the preceding year on the former being 33 per cent., and on the latter 24 per cent.

The capital stock of the Company now consists of 60,264 shares (\$6,026,400)—showing an increase of 26 shares since the last annual report, by the conversion of \$2,600 of the previously outstanding scrip.

The funded debt at the date of the last annual report was	\$3,899,015 28
There has been purchased and canceled on account of the sinking fund of the 2nd mortgage bonds	\$109,000
There has also been purchased from the proceeds of the sales of real estate and surplus lots & lands, \$7,000 of the first mortgage bonds, which have been canceled also.	7,000
	116,000 00

Making the amount of the present funded debt

The floating debt of the Company on the 1st of January, 1858, was \$49,716 56. This was all paid during the past year as it became due. The Company has now no floating debt.

The new bridge, 360 feet in length, over the Kishwaukee river at Cherry Valley Station, on the main line, has been completed and brought into use, as has also the new bridge of 80 feet span crossing a branch of the same stream, near De Kalb station, on the Chicago, Fulton and Iowa line. The cost of these structures was materially diminished, from the fact, that most of the timber and iron used in their construction, was obtained from the material saved from the wreck of the bridge over Rock river, near Sterling, in the Spring of 1857. The total cash outlay on their account, is about \$17,000, of which amount about \$10,000 was paid during the past year.

The new bridge, 760 feet long, spanning Rock river, near Sterling, was brought into use February 1st, 1858. Its total cost, including the expense of the temporary pile bridge used during its construction is \$31,804 78, from which amount about \$1,500 should be deducted as the value of the materials composing the temporary bridge, which have been taken up and are still good. Of the amount expended on account of this bridge, \$10,431 19 were paid during 1857, and \$21,373 59 during 1858.

The total amount charged for the year to the account of "Bridge Repairs," including the Sterling

bridge, was \$50,871 79, in which are included the amounts above specified; which being properly called extraordinary and unusual expenses, leaves as the cost of the ordinary and usual bridge repairs, \$19,498 20.

During the year, 19,739 rails of new and repaired iron, and 20,601 new ties have been placed in the track; These new materials were distributed as follows:

	Rails.	Ties.
Main line (including second track and E. Elgin Branch) 152½ miles.	15,631	11,246
C. F. & I. line, 105½ miles.	2,645	7,828
Beloit Branch and St. Charles Air Line Branch, 34½ miles.	1,463	1,527
Total	19,739	20,601

The total amount charged to the account of "Track Repairs," for the past year, is \$167,612 79. Of this amount, \$77,765 87 was for the pay of laborers employed in this department of the service, and the remainder, \$89,846 92, was for material—iron, ties, etc. The average number of men employed in repairs of track, was 259, and the number of miles of main track, including the second track, is 289½; thus allowing one man to 1.118 miles of main track. The actual total expense per mile of main track, was \$578 97. There are 43.6 miles of sidings on the road, making a total of 333.1 miles of track; thus lessening the actual cash outlay per mile, to \$503 19. The cost of maintenance of way per mile run (including the mileage of trains of the C. B. & Q. R. R. between Chicago and the Junction) in all 911,735 miles, was a fraction over 24 cents per mile.

A new freight and passenger house has been erected at Morrison, on the Chicago, Fulton and Iowa line. It is a framed building, 40x90, and cost about \$3,500.

Additional side tracks have been built at Fulton whereby freight can be transferred directly between cars and steamboats, thus saving a large item of expense for handling and trucking:

Two new stations have also been established. One, called Kane, is midway between Geneva and Blackberry, and 40¾ miles from Chicago. The other, called Clifton, is between Morrison and Fulton, at the bluffs of the Mississippi river, and 131¼ miles from Chicago. Ample depot grounds have been secured and side tracks built at both of these stations, and a temporary freight building has been erected at Clifton.

Seven-eighths of a mile of additional sidings have in all been built during the year.

In May last a connection was formed between the Beloit and Madison road and the Southern Wisconsin branch of the Milwaukee and Mississippi roads, by the construction of about half a mile of track, at a cost of \$6,174, which amount was equally divided between the two companies. By this means, the tracks of the two roads are united, forming an uninterrupted line between Milwaukee and Chicago. By an arrangement between these companies, the trains of the Chicago road run direct to Janesville. At this place an engine house and small passenger house have been erected at a cost of \$1,933 58.

The company owns about 940 acres of land, at and near Harlem Station, on the line of the road, nine miles west from Chicago. Here are to be located the general repair shops of the company. An engine house containing seventeen stalls for

engines, and a repair and blacksmith's shop are already erected, and it is proposed that the other shops, which are now in Chicago, will, at some future time be removed to this point. Twenty-six and three-quarter acres of land have been reserved for depot and railroad purposes, and the remainder of the tract has been sub-divided into lots and blocks for sale.

CONDENSED BALANCE SHEET.

Construction—Main Line.....	\$2,127,906 29
Beloit Branch.....	410,522 61
Chicago, Fulton and Iowa Line..	2,296,546 19
Second Track	405,868 06
Depot grounds and buildings....	824,031 88
Equipment—Cars.....	\$773,686 78
Locomotives	538,229 97
Chicago, St. Charles and Mississippi Air Line Railroad.....	549,581 49
Expended for additional grounds, tracks, buildings, &c., at South Branch Station, and to and at Harlem	62,018 86
This Company's proportion of the cost of a bridge, tracks, &c., for connections with Eastern Roads..	20,000 00
Discount on bonds interest and incidentals	644,487 97
Bonus Stock, issued August, 1854..	686,510 00
Tools and machinery.....	50,302 02
Real Estate.....	22,706 10
Materials on hand	281,483 01
Wisconsin Central R. R. Co. for old strap iron	16,741 07
Advance to other lines.....	27,887 94
Fox River Valley Railroad Co. Bonds, received of Wadsworth & Sheldon in settlement in 1854.....	88,000 00
Beloit and Madison Railroad Company Bonds, 170,000, received for 1,700 tons of iron furnished in 1854, cost.....	121,002 84
Sinking Fund Instalment, May 1, 1859, for cost of \$24,000 Second Mortgage Bonds, purchased in advance.....	21,870 00
Cost of \$7,000 1st Mortgage Bonds, purchased.....	6,888 75
Debts and balances due the Co.	64,075 99
Miscellaneous	17,457 92
Henry Tucker, Treasurer, cash on hand	193,311 25
	\$10,300,516 99
Capital Stock, 60,264 shares.....	\$6,026,400 00
Funded Debt—	
Litchfield Bonds, due May 1st, 1859.....	52,015 28
First Mortgage Bonds:	
3d Div., due Feb. 1, '62..	\$262,000
" Aug. 1, '62..	160,000
" Feb. 1, '63..	60,000
" Aug. 1, '63..	118,000
1st Mort. due Aug. 1, '63..	1,393,000
	1,993,000 00
Second Mortgage Bonds, outstanding, due May 1, 1875.....	1,738,000 00
Sales of land.....	4,949 15
First Mortgage Sinking Fund.....	7,000 00
Second Mortgage Sinking Fund....	262,000 00
Scrip outstanding.....	5,994 63
Unclaimed divid'ds, coupons, wages, &c.	12,521 49
Income Account, surplus January 1st, 1859.....	198,636 44
	\$10,300,516 99

President, JOHN B. TURNER.
 Vice-President, WILLIAM H. BROWN.
 Asst. Pres. and Chief Engineer, WILLIAM J. MCALPINE.
 Superintendent, PHILIP A. HALL.
 Secretary, WILLIAM M. LARABEE.
 Treasurer, HENRY TUCKER.
 Auditor, GEORGE M. WHEELER.

Finances of Missouri.

REVENUES.

The whole amount of revenue for the biennial period, from ordinary sources, was \$1,861,368 84. To this add the balance in the treasury, on the 30th of September, 1856, to wit: \$271,891 94, and the whole amount subject to appropriation during two years has been \$1,633,268 28.

The revenue assessed was \$1,565,700 81, of which \$158,074 77 was collected from licenses, and \$1,377,626 04 was assessed to taxes.

The assessed taxes were distributed among the different subjects of taxation as shown in the annexed statement of the footings in the tables appended to the report:

Amount.	1857 Valuation.	Taxes.
Polls.....	\$130,268	\$48,827 00
Acres land..	21,645,795	\$124,747 740
Town lots.....	64,375,933	128,751 85
Slaves (No.) 99,093...	41,605,608	83,311 20
Bonds and notes.....	26,013,470	52,026 94
Personal property....	31,187,291	62,373 58

Amount.	1858 Valuation.	Taxes.
Polls.....	\$135,040	\$50,835 37
Acres land..	26,525,337	\$221,605,766
Town lots.....	14,287,025	28,570 97
Slaves.....	101,883	45,090,028
Bonds and notes.....	35,586,380	71,132 76
Personal property....	39,072,373	77,943 67

The Auditor's aggregates from his several footings in his table of taxes are, for

1858.....	\$762,337 15
1857	615,288 89

Increase (nearly 20 per cent).....\$147,048 26

EXPENDITURES.

The amount subject to appropriation from the Revenue Fund for the two years was, as before stated, \$1,683,268:

Expenditures, ordinary and special....	\$1,132,175
Common Schools.....	309,115
State Library.....	1,000
State Interest Fund	93,607
Wolf Scalp Certificates.....	6,001
Glover's Default.....	37,045
Balance in Treasury, Oct. 1, 1858.....	54,265

\$1,638,268

Of the amount in default by a former State Treasurer, \$15,000 was paid into the treasury by a compromise with his securities, and \$22,045 remitted or given up by the State, by an act passed March, 1857.

Besides the balances shown above of revenue fund, there are balances belonging to the special funds amounting to \$337,799. These balances are mostly applicable to special objects.

Among the objects of expenditures we enumerate the following:

Civil officers, (salaries, &c.).....	\$248,696
General Assembly, (pay)	119,134
" (contingent expenses)	58,492
Laws and journals.....	49,893
Assessing and collecting revenue.....	65,987
Criminal costs.....	86,742
Contingent expenses of Ex. departments.	7,343
Benevolent institutions:	
Blind	\$26,000
Deaf Mutes	22,259
Lunatics	70,037-118,296
Geological Survey	28,687
Agriculture	9,600
River Improvements	26,666
Capitol Grounds.....	46,288
Penitentiary	46,151

STATE DEBT.

This was on October 1st, \$19,658,000, consisting of—

Miscellaneous bonds.....	\$602,000
Railroad bonds	19,056,000

Total.....\$19,658,000

Of the miscellaneous, about half were issued to

Estimating this coal as worth, at this point, 5 cents per bushel, its value would be \$1,820,604. It must, however, net more than this, on a fair average, and we may, therefore, safely set down this trade as worth two millions of dollars a year, in its present state of development.

Railway Share List.

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares	NAME OF COMPANY.	Length of Road	Capital paid in	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares
Atlantic & St. Lawrence	146	2,494,900	3,482,000	6,923,941	645,762	150,224	6	---	Brunswick and Florida, Ga.	30	151,887	463,645	538,649	In progr.	208,771	9	---
Androscog. & Kennebec	56	457,099	1,836,309	2,291,407	189,518	83,368	---	---	South. Western	143	1,389,100	441,292	2,262,323	366,214	---	---	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,261	213,255	---	---	---	Tennessee and Alabama	30	309,754	626,889	679,906	53,775	28,406	---	---
Port. & Sag. & Portland	51	1,398,400	1,869,377	3,263,717	263,717	120,909	6	50	Tennessee and Mass.	64	767,449	611,812	1,161,152	101,001	99,88	---	---
Boston, Concord & Montreal	93	1,104,596	2,438,977	3,543,573	324,767	174,025	10	10	Memphis and Charleston	247	2,228,177	3,496,288	5,672,470	642,022	334,504	---	---
Cheshire	61	899,313	3,179,637	3,855,629	113,077	---	---	---	Mobile and Ohio	305	6,784,819	2,066,459	10,701,428	156,882	278,428	---	---
Concord	36	1,500,000	8,242	1,412,676	371,085	125,664	6	50 1/2	Miss. Central	59	1,575,474	2,066,459	2,503,098	115,879	---	---	---
Northern, N. H.	92	3,068,400	408,286	3,068,400	385,890	106,996	4	47 1/2	Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	284,256	150,789	---	---
Count. & Passumps. Riv.	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	N. O., Opelousas & G. W.	80	2,800,000	760,000	3,775,525	284,173	127,450	---	---
Rutland & Burlington	117	2,233,376	4,168,765	4,584,008	332,218	41,688	none	---	N. O. Jackson & G. N.	206	4,035,000	1,816,610	7,142,562	189,003	---	---	---
Vermont and Canada	47	1,350,000	---	1,380,695	Leads to Vt Cent	---	---	---	Vickab, Shreveport & Tex.	21	833,766	108,285	992,051	In progr.	104,992	---	---
Vermont Central	122	5,000,000	5,276,299	8,402,085	705,883	173,399	---	---	East Tennessee and Ga.	111	1,192,974	1,735,669	2,703,428	227,863	104,992	---	---
Boston and Lowell	2	1,830,000	438,920	2,412,251	435,863	171,982	6	91	East Tennessee and Vt.	130	626,075	1,728,664	3,208,135	61,314	39,062	---	---
Boston and Maine	74	4,076,974	4,229,281	770,002	305,507	---	---	---	Nash. and Chattanooga	159	2,263,905	1,632,797	3,896,703	641,652	219,26	---	---
Boston and Providence	43	3,160,000	339,730	3,554,458	564,176	245,144	6	93	Covington & Lexington	98	1,394,850	3,055,917	4,091,604	438,408	220,006	---	---
Boston and Worcester	44	4,500,000	599,974	4,834,779	1,019,149	388,613	6	94	Lexington and Frankfort	29	430,055	186,899	655,255	95,807	45,712	---	---
Cape Cod	47	881,690	291,007	1,001,625	122,960	39,899	3	69 1/2	Lexington and Danville	13	694,444	71,000	765,500	In progr.	---	---	---
Connecticut River	50	1,591,110	275,772	1,801,244	267,710	68,096	---	---	Louisville and Frankfort	65	741,039	625,216	1,502,095	245,750	109,059	---	---
Eastern, Mass.	60	2,583,400	2,441,373	5,082,607	616,156	272,479	4	48 1/2	Atlantic & Gt. Western	---	868,939	77,494	613,281	In progr.	---	---	---
Fitchburg	67	3,540,000	100,000	3,872,821	688,974	250,313	6	92	Belleville and Ind.	118	1,874,396	1,515,237	2,998,392	348,482	120,836	---	---
N. Bedford and Taunton	21	500,000	none	641,580	188,925	27,927	---	---	Olev. Col. and Cin.	141	4,746,210	90,400	7,523,207	1,149,741	511,740	9	92 1/2
Old Colony and Fall River	77	3,015,100	260,100	3,362,940	683,357	305,140	6	100	Cleveland and Toledo	200	3,333,712	4,225,658	7,193,016	930,282	433,790	---	29
Vermont and Mass.	69	2,232,541	1,019,148	3,241,975	240,133	52,267	none	13 1/2	Olev. and Mahoning	65	---	---	1,920,958	In progr.	---	---	---
Western, Mass.	165	5,160,000	5,839,090	10,495,096	211,972	899,763	8	106	Olev. and Pittsburg	133	2,780,744	3,043,992	5,837,466	581,877	309,518	---	8
Worcester and Nashua	46	1,410,000	205,565	1,615,271	216,885	82,720	4	46	Olev. P. & Ashtabula	95	3,000,000	1,495,648	4,040,978	1,251,538	581,454	15	---
Providence and Worcester	43	1,510,020	300,000	1,781,048	344,773	155,044	7	87	Cin. Hamilton & Dayton	60	2,155,800	1,526,092	3,130,315	487,421	260,763	---	53
Hartford and N. Haven	72	2,359,700	944,000	3,329,602	799,065	304,836	10	124	Cin. Wilm. & Zanesville	131	2,421,178	3,782,064	6,996,210	223,500	30,288	---	---
Hart'd, Prov. and Fishkill	122	1,936,246	2,182,692	4,205,966	273,428	112,325	none	---	Columbus and Xenia	55	1,490,450	149,000	1,682,475	403,212	181,688	10	---
Housatonic	74	2,000,000	423,885	2,423,885	318,476	109,344	none	---	Dayton, Xen. & Beire	63	437,838	422,658	860,496	In progr.	---	---	---
Wangunk	67	1,031,800	524,244	1,580,723	237,416	114,237	---	---	Dayton and Michigan	140	1,070,602	893,011	1,185,826	In progr.	---	---	---
N. York and N. Haven	62	990,836	2,328,240	6,258,232	157,055	264,569	3	45	Dayton and Western	35	310,000	700,481	1,035,178	125,940	65,253	---	---
N. Haven and N. London	50	738,258	761,482	1,450,318	88,007	30,318	none	---	Katon and Hamilton	42	469,763	832,668	1,175,163	140,936	50,008	---	---
N. London, W. & Palmer	66	510,000	1,062,000	1,603,230	120,571	51,844	none	---	Little Miami	85	2,981,282	1,266,000	8,926,157	775,442	200,123	10	87
Norwich and Worcester	66	2,122,300	724,183	2,598,671	265,417	44,547	---	31	Sandusky, Dayton & Cin.	171	2,697,090	3,368,005	6,005,090	692,614	---	---	---
Albany Northern	32	439,006	1,025,098	1,840,696	117,716	9,904	---	---	Central Ohio	138	1,927,907	2,622,056	4,696,822	770,092	164,697	none	---
Black River and Utica	35	643,830	317,455	974,822	In progr.	---	---	---	Pittb. Ft. Wayne & Chicago	423	6,247,040	9,822,560	14,279,704	1,546,359	577,787	---	10
Buffalo, Corn. and N. Y.	100	1,487,374	1,501,183	2,819,096	172,476	66,333	none	---	Pittsb. May's & Cin.	50	871,350	81,000	909,350	In progr.	---	---	---
Buffalo and N. Y. City	92	798,439	2,573,849	3,401,668	298,392	31,896	none	---	Sand'y, Mansf. & Newk.	127	1,850,000	2,206,357	3,552,357	328,958	164,479	none	---
Buffalo and St. Line	99	1,800,000	1,040,000	2,494,864	977,750	355,763	10	---	Scioto & Hocking Valley	56	408,975	509,050	888,585	In progr.	---	---	---
Canandaigua and Elmira	47	434,111	922,893	1,275,706	174,089	69,006	---	---	Spring, Mt. Vernon & P.	118	1,000,000	950,000	2,194,000	In progr.	---	---	---
Canandaigua & Niagara F's	98	1,516,000	2,279,584	3,496,832	135,433	48,649	none	---	Tol. Washab & St. Louis	242	2,965,100	7,577,500	10,542,600	Recently opened.	---	---	---
Canandaigua & Susquehanna	36	687,000	506,689	1,187,862	1,902,828	688,880	none	32	Cin. Log. and Chicago	255	4,196,097	1,006,125	2,080,433	In progr.	---	---	---
Oayaga & Susquehanna	144	3,768,466	2,502,362	12,737,898	826,131	56,186	none	11 1/2	Evansv. & Crawfordsv.	109	995,061	1,270,872	2,168,713	249,868	124,140	---	---
Hudson River	96	3,000,000	647,193	2,555,966	326,131	56,186	none	11 1/2	Ind. and Cincinnati	68	1,696,890	1,564,581	3,029,989	491,743	246,622	7	---
Long Island	66	24,182,400	14,402,635	30,732,618	5,543,413	5,041,120	8	80 1/2	Indiana Central	66	612,350	1,261,179	1,908,911	368,189	204,685	---	---
New York Central	144	11,000,000	28,081,461	34,469,324	1,742,607	1,454,032	none	10 1/2	Ind. Olev. & Pittsburg	83	833,791	1,07,694	1,829,425	253,19	85,248	none	---
New York and Erie	134	6,717,100	4,822,498	8,758,203	1,040,393	324,891	none	13	Jeffersonville	74	1,014,252	694,000	1,839,576	222,737	94,318	none	---
New York and Harlem	138	1,633,022	4,406,874	6,470,714	520,153	135,764	none	1	Madison and Indianapolis	87	1,647,700	1,336,816	2,991,516	260,214	118,628	---	---
Northern, N. Y.	35	303,130	213,025	750,039	149,373	78,764	8	---	New Albany and Salem	288	2,565,121	5,281,848	7,029,494	645,827	371,402	none	---
Oswego and Syracuse	29	467,200	294,189	749,683	In progr.	---	---	---	Penn and Indianapolis	73	---	858,314	2,000,000	160,000	90,000	none	---
Pottsdam and Watertown	25	610,000	140,000	896,423	241,149	82,600	7	---	Terre Haute and Ind.	73	1,361,450	250,125	1,586,809	481,272	206,070	10	---
Rensselaer & Saratoga	48	500,000	895,600	1,771,909	71,909	21,089	none	---	Chicago and Rock Is'd	182	6,248,000	1,734,318	6,023,272	1,886,196	850,839	---	61 1/2
Saratoga & Bingham'n.	80	768,369	1,875,804	2,772,777	169,844	22,503	none	---	Chicago, Burl. and Quincy	210	4,631,540	8,862,970	8,402,426	1,505,167	811,767	---	45
Syracuse & Bingham'n.	27	437,830	737,079	1,109,322	156,363	55,184	---	---	Chic. St. Paul & F'd du Lac	178	2,800,000	1,325,000	3,625,000	In progr.	---	---	10
Troy and Boston	97	1,500,000	700,979	2,200,500	440,299	162,087	3 1/2	50	Galena and Chicago	259	6,023,800	3,899,015	9,355,455	2,315,786	1,192,042	8	70 1/2
Watertown and Rome	64	1,000,000	1,619,000	2,844,000	243,393	114,632	---	---	Illinois Central	704	6,558,435	20,311,492	23,377,669	2,293,968	565,972	---	69 1/2
Belvidere Delaware	94	8,000,000	11,407,200	8,794,096	1,640,787	604,114	12	120	Peoria and Okawika	181	1,569,889	2,200,000	4,400,000	In progr.	---	---	---
Camden and Amboy	30	3,485,000	1,560,834	1,738,171	117,389	46,542	---	---	Olev. & Miss. (Wat. Div.)	147	1,780,256	3,292,403	4,870,586	Recently opened.	---	---	---
Camden and Atlantic	30	3,485,000	785,844	3,680,017	911,611	534,961	10	131 1/2	Terre Haute, Alt. & St. Louis	208	8,011,150	4,925,927	8,728,741	823,767	247,757	---	---
New Jersey	63	2,000,000	3,692,828	6,621,329	682,940	357,193	---	---	Detroit and Milwaukee	185	898,000	1,128,964	1,966,996	Recently opened.	---	---	---
New Jersey Central	63	1,167,806	304,000	1,084,127	327,766	101,542	3 1/2	---	Mich. Central	282	6,057,840	3,866,639	12,847,238	2,743,768	794,936	8	52 1/2
Morris and Essex	44	1,571,900	809,046	1,700,000	83,000	45,000	---	---	Mich. South'n & N. Ind.	475	8,574,400	10,468,618	19,336,044	2,309,487	544,311	---	18 1/2
Alleghany Valley	63	1,700,000	1,940,000	3,640,000	219,265	52,450	---	---	Green Bay, Ml. & Ch.	40	1,000,000	780,000	1,780,000	---	---	---	12
Cataw. Wil. & Erie	52	1,018,900	213,500	1,228,676	156,463	77,92	---	---	Milwaukee and Miss.	235	4,400,673	4,610,583	8,051,256	882,816	372,091	---	---
Cumberland Valley	170	3,292,772	619,451	3,913,761	155,768	41,139	6	43	Milwaukee & Watert'n	72	254,881	132,000	514,238	In progr.	---	---	---
Del. Lack. &																	

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$888,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	80	
Buffalo and State Line	500,000	Do. convertible	7	April, October		1866	92 1/2	96
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July		1866	75	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July		1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.		1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers		1861-64	60	70
Do. do.	800,000	2d do. Inconvertible	7	March, Sept.		1865	41	43
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July		1867	90	92 1/2
Do. do.	465,000	2d do. do.	7	May, Novemb.		1869	76	77
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July		1863		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.		1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August.		1861	97 1/2	98
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August.		1860	67 1/2	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.		1873	50	55
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August.		1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October		1862-72	30	55
Do. do.	1,200,000	Do. inconvertible	7	April, October		1862-72	0	55
Covington and Lexington	400,000	Do. do.	7	April, October		1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.		1863	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October		1875	88	90
Florida Free Land	1,500,000	Do. not convertible	7	March, Sept.		1891	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July		1873		72 1/2
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August.		1863	94 1/2	95 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.		1875	91	92
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October		1863	87 1/2	93
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	7	10 April, 10 Oct.		1873		
Jacksonville	300,000	Do. 2d sec. inconv.	7	April, October		1866		85
Indiana Central	600,000	Do. convertible	7	May, Novemb.		1866	70	80
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July		1860-61	77	85
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.		1866	75	85
La Crosse and Milwaukee	650,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.		1874	69 1/2	70 1/2
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1869	7	Feb'y, August.		1863	83	83 1/2
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.		1863	95	97
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1869	91 1/2	93
Do. do.	600,000	Do. do.	8	March, Sept.		1869		80
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862		77 1/2
Do. do.	650,000	Do. 2d do.	8	April, October		1863		75
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.		1877		75
New Albany and Salem	500,000	Do. 1st section	10	April, October		1868-62		90
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.		1864-75		90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July		1873		75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.		1867		80
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July		1866-66		75
Do. do.	2,000,000	Income, convertible	7	April, October		1872	50	60
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	100 1/2	101 1/2
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August.	N.Y.	1875		75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.		1861		75
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July		1866		75
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.		1866		65
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.		1862-77	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	92 1/2	95
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.		1867	95 1/2	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.		1859	83 1/2	84 1/2
Do. do.	6,000,000	3d mortgage	7	March, Sept.		1863	72 1/2	73 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October		1860	55	55
Do. do.	4,000,000	Not conv. Sunk Fund, \$420,000	7	Feb'y, August.		1875	39	41
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August.		1871	37	40
Do. do.	3,500,000	Convertible	7	Jan'y, July		1862	38 1/2	40
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.		1869-70	101 1/2	102 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.		1860	92 1/2	94
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.		1870	74 1/2	75
Illinois Central	17,000,000	Mortgage, Inconvertible	7	April, October		1870	90	90 1/2
Do. (Free Land)	8,000,000	M'pge 345,000 acrs.-priv. 7 shar's	7	March, Sept.		1860	90	91
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.		1860	87	88
New York and Harlem	1,200,000	Do. do.	7	May, Novemb.		1861-72	92	92 1/2
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.		1855-60	96	96
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July		1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.		1861	81 1/2	82 1/2
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.		1868	73	73 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.		1863	91 1/2	92
Do. do.	3,000,000	om'ge conv. from June 57-69	7	15 June, 15 Dec.		1864	102 1/2	103
Panama, 1st issue	900,000	Convertible till 1855	7	Jan'y, July		1866	115	
Do. 2d do.	1,470,000	Do. till 1858	7	Jan'y, July		1866	90	91
Reading	1,000,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	3,469,000	Do. convertible	6	Jan'y, July		1870	82 1/2	83
Do. do.		Do. inconvertible	6	April, October		1866	72 1/2	73

CITY SECURITIES.			Int't payable.	Off'd.	Ask	CITY SECURITIES.			Int't payable.	Off'd.	Ask
New York, 5 per ct. ....1858-'60	{		98	99	Milwaukee, 7 per ct. corp. X	Divers	45	70			
Do. 5 do. ....1870-'75		May,	93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	72	77 1/2			
Do. 6 do. ....1883		August, and	101 1/2	102 1/2	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	87	90			
Do. 6 do. ....1890-98		November.	92	94	Philadelphia, 6 per ct. ....1876-'98	Jan'y, July	99 1/2	99 1/2			
Albany, 6 per ct. corp. ....1871-'81 X		Feb'y, August.	98	101	Pittsburgh, 6 per ct. corp. X	Divers	45	51 1/2			
Alleghany, 6 per ct. corp. X		Jan'y, July	55	70	Quincy, 8 per ct. corp. ....1868 X	Jan'y, July	67	75			
Baltimore, 6 per ct. ....1870-'90		Quarterly.	99	100	Racine, 7 per ct. corp. ....1873 X	10 Feb'y, Aug		80			
Boston, 5 per ct. corp. X		April, October.	100	101	Rochester, 6 per cent. corp. X	Divers	90	97 1/2			
Brooklyn, 6 per ct. corp. Long X		Jan'y, July	101 1/2	102 1/2	St. Louis, 6 per ct. corp. Long X	Do.	84 1/2	85 1/2			
Clev'nd, 7 per ct. cp. W.W. 1879 X		Jan'y, July	100	103 1/2	Do. do. Municipal X	Do.	66	67 1/2			
Cincinnati, 6 per ct. corp. X		Divers	91 1/2	95	Sacramento, 10 p. ct. cp. 1862-'74 X	Do.	37	45			
Chicago, 6 per ct. corp. ....1873-'77 X		Jan'y, July	85	87	S.F. & C. 7 p. a. cp. 1865 pay N.Y. X	May, Novemb.	60	70			
Do. 7 per ct. corp. ....1880 X		Jan'y, July	97 1/2	99 1/2	Do. 10 p. ct. cp. ....1871 X	Do. do.	69	71			
Detroit, 7 per ct. cp. W.W. 1873-'78 X		Feb'y, August.	100	102	Do. 10 do. cp. pay N.Y. X	Jan'y, July					
Dubuque, 8 per ct. cp. Long X		March, Sept.	100	100	Do. 6 per ct. pay N.Y. 1875 X	Do. do.	58	60			
Jersey City, 6 p. ct. cp. W.W. 1877 X		Jan'y, July	99 1/2	101	Washing, 6 per ct. corp. X	Divers	80	81 1/2			
Knoxville, 6 per ct. cp. ....1880-'83 X		Divers	71 1/2	72 1/2	Do. 6 p. ct. cp. Mun. ....1874 X	March, Sept.	80	81 1/2			
Memphis, 6 per ct. corp. ....1882 X		Jan'y July	65	65 1/2	Zanesville, 7 do. X	April, October					

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending March 7, 1869.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6 1/2	83
Covington and Lexington, 1st Mortgage	6 1/2	60
Do. do. 2d do.	7 1/2	45
Do. do. Income	10 1/2	10
Ohio & Miss., E. D., Construction	7 1/2	
Cinc. Ham. and Dayton, 1st Mortgage	7 1/2	90
Do. do. 2d do.	7 1/2	80
Indianap. & Cincinnati, do. do.	7 1/2	80
STOCKS.		
Cincinnati, Hamilton & Dayton	56	
Columbus and Xenia	41	43
Indianapolis & Cincinnati	59	
Little Miami	85	
Ohio and Mississippi (E. D.)	3	

Railroad Earnings.

The earnings of the New York and Harlem Railroad for February were—

1859	\$92,069 28
1858	76,610 82
	\$15,458 46

These are net receipts, after paying all amounts due other roads.

The receipts of the New York and New Haven Railroad for February, 1859, were as follows:

Passengers	\$67,647 28
Freight	13,000 00
Total	\$80,647 28
Due other roads	17,924 51
	\$62,722 77
Receipts for February, 1858	50,475 86
	Increase \$12,246 91

The following figures show the receipts of the Long Island Railroad for February, 1859:

Passengers	\$9,327 80
Freight	9,348 04
Mail	685 42
Total	\$19,361 26
February, 1858	16,668 87
	Increase \$2,692 39

The following are the February earnings of the Little Miami and Columbus and Xenia Railroads:

1859	\$86,477 52
1858	77,993 83
	Increase \$8,483 69

In the above is included the receipts of the Dayton and Xenia Railroad, now operated by these companies, those receipts for February amounting to about \$4,000.

The earnings of the Stonington Railroad Company in February were:

1859	\$16,811 56
1858	11,360 26
	Increase \$5,451 30

The earnings of this Company for 6 months, ending Feb'y 28, were:

1859	\$101,260 48
1858	84,262 64
	Increase \$16,997 84

The following are the receipts of the Michigan Southern road:

February, 1859	\$106,059 26
1858	97,312 96
	Increase \$8,746 30

The earnings of the Cleveland and Toledo road in February were:

1859	\$56,937
1858	55,140
	Increase \$1,797

The earnings of the Cincinnati, Hamilton and Dayton road for February were:

Very important reforms have been made in operating the road. For almost the first time in its history, it is thoroughly looked after by competent parties at the head of it. The result has been that the interest on the company's indebtedness is promptly paid. The net earnings are at present used in discharging some over-due bonds. In a year or two more there is every probability that the Company will resume payment on its preferred stock, which, in expectation of such an event, has gone from 8 to nearly 40 per cent. The road and equipment are in good condition, and are capable of being worked at high speed. The upper part of the line is especially in good order. The prospects of the Company are quietly and steadily improving, and there is every prospect that this road will yet become a productive work, covering at least all the charges against it on account of its indebtedness and preferred stock. It may, in time,

It is assumed in the above calculation, that it takes the same quantity of anthracite, as bituminous coal, to the ton of iron puddled. We under-

\$364,185 99

The following is a comparative statement of the earnings and expenditures for four years:

1855.....	\$268,103 33	\$199,351 33
1856.....	270,317 66	194,369 09
1857.....	212,664 40	149,249 96
1858.....	206,114 16	123,481 78

No statement is given of the capital stock, bonded indebtedness, or cost of the road. During the year the Company have renewed 25,000 ties, re-rolled 103 tons of rails, laid 550 yards of stone masonry for abutments to 23 small bridges and culverts, to replace those originally constructed with wood, and which had become so defective as to need renewing; relaid five, and ballasted seven miles of the track of the road; renewed the superstructure of six mile bridges, and purchased the timber necessary to rebuild the two bridges at Vernon. That portion of the above, which might properly be considered as extra, from the ordinary repairs of the road, involves an outlay of over \$11,000.

The track of the road, bridges, and the machinery, and rolling stock, have been kept in good condition, and were believed to have been worth as much at the end, as at the commencement of the year.

President, F. H. SMITH.
Superintendent, D. C. BRANHAM.
Treasurer, R. P. JONES.

Finances of Indiana.

There were outstanding on the 1st day of November, 1858, of foreign debt, 413 bonds, of \$1,000 each, making\$413,000 00
The amount of interest due thereon to same date..... 370,175 00

Total.....\$783,175 00

Including full amount of said bonds and interest, the liabilities of the State are as follows:

1. Amount of said bonds and int'l.	\$783,175 00
2. Amount of 5 per cent. State stock, not redeemed.....	5,162,500 00
3. Amount of 2½ per cent. State stock, not redeemed.....	1,803,701 00
4. Amount of Vincennes University bonds.....	66,585 00
5. Amount due school fund, for advance from sinking fund....	1,100,342 67
6. Amount due sinking fund.....	165,000 00
7. Amount due swamp land fund..	145,410 57
8. Amount due school fund.....	184,861 64
9. Amount due State debt sinking fund.....	105,715 32
10. Amount due township library fund.....	1,792 00
11. Amount due other trust funds..	50,000 00
12. Amount due Shelby County, for tax illegally collected.....	2,076 63

Making in all.....\$9,964,969 83

To meet the ordinary and extraordinary expenses of the State for 1859, as estimated by the Auditor, will require.....\$559,335 10

To meet the ordinary and extraordinary expenditures of the State for 1860, as estimated by the Auditor, will require..... 473,985 10

Total.....\$1,033,320 20

The receipts for the year ending Oct. 31, were:
Balance on hand, November 1, 1857. \$650,653 48
Receipts..... 844,416 84

Total.....\$1,495,070 32
Public debt.....\$325,244 75
Wabash Canal..... 255,202 56
Other..... 783,280 78

Balance, November 1, 1858 ... \$131,342 28

The Auditor estimates that the assessment of real and personal property in the State will be about \$325,000,000, yielding, at 25 cents, a revenue of \$812,500, with a poll tax, at 50 cents, yielding \$100,000, or in all \$912,500; or, deducting delinquencies and cost of collection, giving collections of \$692,500, which, with the balance on hand October 31st, of \$131,342 28, gives a total resources of \$823,842 28, leaving an excess for 1859 of \$254,507 18, to be applied towards the payment of the State's indebtedness to the several funds. He estimates an increase by a re-appraisal in 1860.

Mobile and Ohio Railroad.

We have received the report of this company for the fiscal year ending December 31, 1858, which was presented to the stockholders at their eleventh annual meeting held in Mobile February 21st. From this we learn that the earnings from transportation on the *southern division* of the road, extending from Mobile to West Point, 232 miles, which was in operation most of the year, were:

From passengers.....	\$163,993 25
" up freight.....	189,787 13
" down ".....	381,642 45
" mails and express.....	16,458 14

\$751,880 97

And the working expenses:

Repairs of roadway.....	\$106,458 86
Do. bridges.....	11,245 17
Do. engines.....	19,657 24
Do. cars.....	25,768 79
Fuel—wood.....	18,198 46
Oil, waste, etc.....	7,251 67
Loss and damage.....	5,481 99
Conducting transportation.....	123,182 38
Miscellaneous.....	14,404 50

331,649 06

Net revenue equal to 85% per cent. on its entire cost.....\$420,231 91

Of this amount there has been paid:

For interest on debt for road between Mobile and West Point.....	\$260,663 54
Do. in Kentucky and Tennessee.....	68,951 90

329,615 44

\$90,616 47

The average length of road in operation upon the southern division in 1857 was 204 miles; in 1858, 232 miles—an increase of 28 miles, or 13½ per cent. The earnings per mile of road in operation were:

	1857.	1858.
From freight.....	\$2,034 26	\$2,463 05
From passengers.....	647 17	706 86
From mails and express.....	60 61	70 94

\$2,742 04

And the expenses per mile.....1,352 52

\$1,389 52

The *Northern division* of the road, extending from Jackson, Tenn., to Columbus, Ky., a distance of 87 miles, was opened through on the 13th of November last; 68 miles of the track were laid during the year. This part of the line connects the northern and western improvements with the southern lines, and will become, when the connections with Mobile and New Orleans are completed, equally productive with the portion of the road in Mississippi and Alabama. So short a time had elapsed since its completion, that no reliable facts had been developed in reference to its capacity for business. The earnings from trans-

portation, which was done principally by construction trains, were:

From freight.....	\$12,488 66
" passengers.....	4,916 74
" mail from Dec. 20th.....	500 42

\$17,905 82

And the expenses.....18,135 72

Expenses over receipts.....\$229 90

The cost of transporting the iron and materials alone at the usual rates would have been \$14,390.

The *third division* extends from West Point to Pontotoc county line, and includes the Columbus branch; the *fourth division*, from Pontotoc county line to the Tennessee State line. The estimates for the completion of the local work and track-laying is as follows:

West Point to Pontotoc county line.....	\$89,000
Columbus branch.....	144,000
Pontotoc county line to Tennessee State line.....	225,000

\$458,000

The cost of the work in Tennessee and Kentucky, exclusive of equipment, has been, \$1,412,610 54. The amount to be expended between Jackson and the Mississippi line, exclusive of rails, fastenings and rolling stock, is \$187,115. The total amount to be expended on construction, exclusive of iron and equipment, to complete the road from Mobile to Columbus, Ky., including the Columbus, Miss., branch, is \$556,115.

The equipment of the southern division consists of 21 engines and 337 cars of all kinds. Upon the northern division, 5 engines and 52 cars.

The following extracts from the reports of the President, will show the present condition and future prospects of the road:

The first and most important responsibility imposed on the present Board of Directors, was to relieve the Company from its embarrassments growing out of extensive hypothecations of the Company's Bonds as collateral security for floating liabilities. The debts were not large, compared with the Company's resources and means of ultimate payment, but they were floating with bonds pledged as collaterals subject to sale without limit, which in a time of great commercial embarrassment and prostration of confidence, especially in railroad enterprises, exposed us to the danger of ruinous sacrifices.

Among the liabilities demanding immediate adjustment was one to the State of Alabama of \$300,000. This was secured in part by personal responsibilities, and in part by bonds pledged as collaterals. Under a law of Alabama authorizing it, this debt was extended and made payable, \$50,000 January, 1860—\$50,000 January, 1861—\$100,000 January, 1862, and \$100,000 December, 1862, bearing eight per cent interest payable annually. By this settlement, made with the Governor, under authority conferred by the Legislature, the personal liabilities were released and the collaterals returned, substituting a lien on real estate belonging to the Company in lieu of the securities delivered up.

Another matter pressing for immediate settlement was a liability for the rails and fastenings purchased for the road through Kentucky. This was amicably adjusted by dividing the debt into several payments and giving the Company's notes accordingly, bearing eight per cent. interest. These notes, in the aggregate, amount to \$137,501 39. By this arrangement we took up \$450,000 of our Sterling Mortgage Bonds, substituting in lieu of them, \$277,000 of Income Bonds. We have since paid \$65,001 11 of this debt and taken up \$132,000 of the Income Bonds above named.

The heaviest debts of the Company were in England, contracted in the purchase of rails and fasten-

ings for the road. We had paid the interest punctually, but our creditors there were impatient, under the long delay in the discharge of the principal. These debts were due to various parties in London, and in the aggregate, amounted to \$849,443 62. They were secured by deposits of Sterling Mortgage Bonds as collaterals, with the power of sale without any limitation. These debts have all been settled and funded by our creditors taking bonds in payment. After the adjustment, by the sale of Bonds, of all our London debts above referred to, we received back from our London creditors \$398,000 of our Sterling Mortgage Bonds.

The settlement of the several liabilities above referred to, put the Company in condition to enter the market for the purchase of rails and fastenings with reasonable certainty of success.

On the 29th of July, 1858, contracts were made in London for rails necessary to finish the entire trunk line of the road, including the Columbus, Mississippi, branch, amounting in all to 17,200 tons. At the same time another contract was entered into for the necessary amount of fishing bars, bolts and nuts. These purchases were made payable, one-half in our Sterling Mortgage Bonds, and the other half in cash, or at our option, in London acceptances at six months' time from each shipment, bearing five per cent. interest.

The confidence inspired by the funding of our debts on favorable terms, and the further sale of the Company's Bonds in the purchase of iron, enabled us to provide the London acceptances necessary to secure and close these contracts.

This being done, it became necessary to raise the money to meet the cash part of our purchases. To aid in this, loans on one year's time were obtained to the extent of \$110,000. And, by order of the Board, a sale of our Sterling Mortgage Bonds was authorized, at 80 per cent on their par value. \$250,000 of these Bonds were promptly taken by the citizens of Mobile, and \$32,000 by the citizens of Columbus, Miss. The proceeds of the loans and sales of Bonds at Mobile is to be applied in payment of the cash part of the purchase of iron, and the freight on the same, for the trunk line of the road. The amount received and to be received at Columbus, Miss., is to be applied exclusively in the completion of the Branch road to that place.

By these sales of Bonds and the loans referred to, we have provided \$335,600 to meet the cash part of our purchases of rails and fastenings. \$147,000 of this has already gone to London, which is quite in advance of the obligations of the contract.

The amount of cash means already raised, with the aid of the Tennessee fund applicable to the part of the road lying in that State, will enable us to pay the foreign cost of all our iron including the ocean freights and insurance. The iron for the whole road, including the Columbus, Miss., Branch is, therefore, perfectly secure.

During the year, \$2,118,000 of Bonds have been released from hypothecation and delivered up to the Company.

The floating debt of the Company has been reduced \$1,155,562 51. In the remaining floating debt is included \$50,000 borrowed and paid over on the recent iron purchase. The funded debt has increased \$1,652,600. This increase has been by funding debts to that amount, nearly all of which had their origin in previous years.

At the commencement of the year we could only control \$681,000 of our Sterling Mortgage Bonds. We now have on hand (including those set apart on account of the recent contracts in London) \$1,713,000. After deducting the amount necessary to complete the purchases of rails and fastenings, we still have an ample amount, in connection with the Tennessee fund to complete and equip the entire road, including the Columbus, Miss., branch.

By a resolution of the Board the Sterling Mortgage Bonds have been set apart and solemnly pledged to the completion of the road. Without a violation of good faith they cannot be diverted to any other object. But for this pledge the Com-

pany could not have funded their iron debts or purchased the iron to complete the road. It is deemed of the highest importance that this policy should be steadily and firmly adhered to.

The southern portion of the road, including machine shops, rolling stock and equipments of every kind, cost \$4,895,349. The net earnings of this part of the road, after paying all expenses, is equal to 8½ per cent. on its entire cost. The receipts for the year ending December 31st, 1858, were \$751,880 97. The increase of receipts in 1858 over 1857 is \$197,498 73. The net income for 1858, after paying all expenses, is \$420,131 91.

This fixes the fact beyond contingency, that even without the road being extended, we can command our interest account now, and in all time to come, from our net earnings, leaving each year a handsome surplus. The net earnings per mile in 1857 was \$1,389 42, in 1858 \$1,747, showing a decrease of net earnings per mile of nearly twenty-six per cent. The number of bales of cotton brought down by the road in 1857 was 88,768, in 1858 the number has run up to 152,528—an increase of 63,820 bales. This is not because the crop has increased. On the contrary there has been almost a failure of crop in large portions of the black lands of Mississippi. The explanation is found in the fact that the road is drawing cotton from the river. While cotton and other freights have largely increased by the road, they have decreased by the Bigbee river.

With these facts in view, it is believed, that when the road is finished to Columbus, Miss., and to Okalona, with an ordinary crop in the black lands, the receipts of the south end of the road alone will fall but little short of a million of dollars.

The following is a condensed statement of the receipts and expenditures of the company, from its organization to December 31, 1858, inclusive.

RECEIPTS.

Capital stock—	
Mobile instalments ..	\$308,565 08
Mississippi do.	1,202,814 84
Tennessee do.	
Requisitions f. w'rk done in Tenness., paid by stock ..	622,229 86
Kentucky instalmt's.	105,681 84
City tax, 1850	20,316 80
Do. 1851	25,896 79
Do. 1852	161,201 92
Do. 1853	215,405 74
Do. 1854	223,571 44
Do. 1855	223,267 71
Do. 1856	216,826 22
State of Mississippi subscription	100,000 00
Sundry subscriptions,	16,074 72
	\$3,441,852 96
Bonds and State Loans—	
Proceeds from—	
City tax bonds	\$400,000 00
Tennessee State bonds	674,860 72
Alabama State loan..	389,410 37
Income bonds, 1861..	759,415 00
Do. 1862..	354,723 00
Do. 1865..	375,182 00
Do. 1867..	18,700 00
Sterling bonds, 1883..	878,034 86
Mississippi State loan	200,970 82
	4,051,246 77
Lands	91,128 85
Gross receipts from transit	2,086,997 34
Mill machinery sold	14,530 47
Suspense account	3,258 38
Bills payable	\$547,823 67
Requisitions—Northern Division—outstanding	70,372 99
Individual balance—for cars, contracts, iron, etc.	7,954 20
Local balances	100,895 91
	726,546 77
	\$10,415,561 54

EXPENDITURES.

Construction	\$6,274,091 64
Engineer's department	368,049 28
Real estate	49,792 04
Expenses	264,357 50
Machinery	681,858 71
Mills for sawing	13,302 30
Right of way	17,101 63
Donated lands—expenses, surveys, etc.	15,803 38
Interest—	
On City b'ds, 1856-7, \$119,355 96	
On State loan	86,225 13
On Sterling bonds	41,131 40
On foreign iron debt	202,464 79
On Income b'ds, 1861, 177,240 38	
Do. 1862, 48,843 20	
Do. 1865, 49,052 00	
On Tenn. State b'ds..	74,920 40
On Miss. State loans ..	14,939 85
On general account ..	199,015 12
	1,013,788 23
Paducah branch—superstructure...	114,894 08
Transportation—expenses, trains, etc.	1,041,071 10
City tax bonds, 1856, 1857, paid ..	400,000 00
Alabama State loans paid	100,000 00
Materials for whistler, for repairs, etc.	8,811 28
Suspense account	3,093 38
City tax scrip	658 35
Cash balance	48,888 62
	\$10,415,561 54

President—Hon. MILTON BROWN.

Chief Eng'r and Gen. Supt.—L. J. FLEMING.

The Value of the New Canadian Coin.

The new coins issued in England for circulation in Canada have made their appearance in that country, and some of them have crossed the border and reached our citizens. Several sets of them have been obtained by the directors of the Mint in Philadelphia, to whom frequent inquiries have been made as to their value compared with our own silver coin. In order to give information on this subject, Mr. Snowden has furnished the following statement from the assayer of the Mint:

ASSAY OFFICE, U. S. MINT, Feb. 17, 1859.

Hon. J. R. SNOWDEN, Director of the Mint, &c.

In compliance with your request, we present the following statement in regard to the new issue of silver coins for the Canadas by the British Government. You are aware that the coins have been awaiting some previous formality of proclamation, and have just been put in circulation, consequently we have been able to obtain very few specimens; our examination will afford, however, a satisfactory conclusion as to the intended standards of weight and fineness, and will answer the question whether there is a designed conformity to the currency of the United States.

In respect to nomenclature, they have abandoned shilling and pence, and have adopted the decimal system, in accordance with which there are three silver coins of 20, 10 and 5 cents, besides copper cents, which we have not seen. The amount of coinage is said to be quite large.

First, as to weight, they do not harmonize with us; the coinage indicates a standard of 15 hundredths of an ounce (three pennyweights) for the 20 cent piece, the smaller pieces in proportion. Our half dollar, being 40 hundredths, would make 16 hundredths for 20 cents. Next as to fineness: they do not harmonize with us; they adhere to the British or sterling standard of 925 thousandths fine. This is a departure from the decimal system of nine-tenths, which being practically the standard in almost every country of North and South America, may be considered American. Thirdly, in respect to value, this must be stated in two ways. If it be asked what is the intrinsic value, as compared with our coins, then the 20 cent piece falls below two of our dimes by three-fourths of a cent nearly. If it be asked what will their 20 cent piece, full weight, produce at our mint, at bullion price, then it is worth 18½ cents, nearly. It is therefore not interchangeable with our currency. But by a calculation based upon the in-

trinsic relations of the British coinage to our own, so as to be able to turn pence into cents, we find the 20 cent piece is regulated in its weight by the silver shilling, and is in due proportion thereto, or so nearly that the advantage of having an even number of pennyweights was taken into account.

What effect it will have upon the currency of the two countries, especially along the boundary line, to have two kinds of dimes, it is not easy to foresee.

J. R. ECKFELDT,
Wm. E. DUBOIS.

Locomotive Building in Paterson.

We hear of orders for fifteen or twenty engines recently received by our builders. One is to go to the Sussex road; others to the Mobile and Ohio; and some to Texas. At the Rogers Works they are completing two splendid first-class machines for the Southern road in Chili. This Company are preparing to turn out a large amount of work; the wider spread reputation of the concern being fully maintained by its present efficient Superintendent, Mr. Hudson. The engines for Chili are provided with heaters upon a principle which appears to be novel in locomotive engines. The Danforth Works are doing something at stationaries as well as locomotives. We observe several machines completed and in progress at the New Jersey Works. On the whole, this industrial interest begins to exhibit something of its former prosperity.—*Guardian*.

Finances of Maryland.

The report of the Comptroller for the fiscal year ending September 30th, 1858, gives the value of the assessed property in this State at \$255,447,588, upon which a State tax of ten cents on the hundred dollars is levied. The receipts from internal improvements were \$172,873. The total receipts into the treasury during the year were \$1,019,228; which, added to the balance in the treasury, September 30, 1857, makes the aggregate amount in the treasury during the fiscal year, \$1,737,706.

JOURNAL

OF THE

American Geographical and Statistical SOCIETY.

The Second Number of this Journal is now ready.

The American Geographical and Statistical Society have commenced the publication of a monthly JOURNAL of 32 pages, the principal object of which is to furnish information on the important subjects to which the Society is devoted: such as the physical features and meteorological phenomena of our own continent, as well as other countries; our internal and foreign commerce; geography, population, and general statistics of various countries.

In the absence, in our own country, of Governmental Bureaus special devoted to these subjects, it is believed that a work of the character of that now undertaken by this Society is indispensable to their proper elucidation and publication.

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The principal contents of the first number are as follows:—

Proceedings of the Society.
Northwest America.
Paraguay.
Geography of the United States
Mountains of North Carolina.
Meteorology of the Proposed Territories.
India: Its Extent and Population.
Republic of Ecuador.
Miscellaneous Statistics.
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NEW YORK.

RAILROAD MAP

OF THE UNITED STATES AND CANADAS.

Price, Mounted, \$3.00.—In Pocket form, \$1.00.
FOR SALE AT THIS OFFICE.

IMPORTANT TRUST SALE.

SALE OF THE SAN ANTONIO AND MEXICAN GULF RAILROAD.

BY virtue of a Deed in Trust, made and executed the thirtieth day of September A. D. 1857, by the San Antonio and Mexican Gulf Railroad Company, of the State of Texas, conveying to the undersigned as Trustees, the property and rights hereinafter described, to secure the payment of certain notes, in said Deed set forth, (amounting with interest, to about \$80,000), which notes have become due and remain unpaid—we shall, on the first Monday in April next, being the 4th day of said month, between the hours of 10 A. M. and 4 P. M. at the Railroad Depot, in the town of Lavaca in the State of Texas, proceed to sell, at public vendue, to the highest bidder, for cash, "All the iron rails, chairs, spikes, turn-tables, locomotives, cars, road-bed, ties, and all other material's pertaining to, or in any manner designed for the construction of the San Antonio and Mexican Gulf Railroad, now constructed or delivered, whether the same be laid down or not."

JOHN JAMES,
JOHN O. FRENCH, } Trustees.

SAN ANTONIO, Texas, Feb. 1st, 1859.

The Trustees, for the information of purchasers, refer to the subjoined statement, furnished by the President and Directors, of the Franchisee, Property, etc., of said road:

The rights and privileges of the purchaser or purchasers at this sale, are defined by an act of the Legislature of the State of Texas approved December 19th, 1857, entitled "An act supplementary to and amendatory of an act to regulate Railroad Companies, approved February 7, 1855."

"SEC. 5. The road-bed, track, franchise and chartered rights and privileges of any railroad company in this State, shall be subject to the payment of the debts and legal liabilities of said company, and may be sold in satisfaction of the same; but the said road-bed, track, franchise and chartered powers and privileges shall be deemed one entire thing and sold as such; and in case of the sale of the same, whether by virtue of an execution, order of sale, deed of trust, or any other power, the purchaser or purchasers at such sale, and their associates, shall be entitled to have and exercise all the powers, privileges, and franchises granted to said company by its charter, or by virtue of the general laws of this State; and the said purchaser or purchasers and their associates, shall be deemed and taken to be, the true owners of said charter, and corporations under the same, and vested with all the powers, rights, privileges and benefits thereof, in the same manner and to the same extent, as if they were the original corporations of said company; and shall have power to construct, complete, and work the road upon the terms, and under the same conditions and restrictions as are imposed by their charter and the general laws of the State."

DESCRIPTION OF THE PROPERTY.—A section of five miles and 1,034 feet completed ready for and in actual use; twenty miles of the grading examined and approved by the State Engineer, and five miles of additional grading nearly completed; one twenty ton locomotive in good running order; and eight platform freight cars, and one hand car. About 10,000 cross-ties of the best quality, not laid down upon the road. One new turn-table which has not been put up.

The FRANCHISE is regarded as very valuable, the charters granted to this company being among the most favorable of those granted to any Railroad Company by the Legislature of the State of Texas.

The original charter is dated September 5th, 1850, and invests said company "with the rights of locating, constructing, owning and maintaining a Railway, commencing at any suitable point on the Gulf between Galveston and Corpus Christi, and thence running by such course and to such point near the City of San Antonio, as said company shall deem most suitable;" and has been amended and continued in force by successive Legislatures, to the present time.

The act of November 14th, 1857, provides that "if twenty-five miles of said road be not completed and equipped, on or before the first day of January, 1860, their said charter shall become null and void, and said company shall forfeit all their rights and privileges."

By section 10, of the original charter, it is provided "that the said company shall have power to borrow money on their bonds or notes, at such rates as the directors shall deem expedient."

"SECTION 16. That said company shall have the right to charge and receive such rates and prices for the transportation of passengers and freight, as shall not exceed eight cents per mile for passengers, and for freight not exceeding seventy-five cents per one hundred pounds, for every hundred miles the same may be carried."

By Section 1, of the act of February 14th, 1852, it is provided, "that there shall be granted to the San Antonio and Mexican Gulf Railroad Company eight sections of land of 640 acres each, for every mile of railway actually completed by them and ready for use, upon the application of the President of the company, stating that any section of five miles or more of said railway has been completed and is ready for use," etc.

By section 1, of the act of February 13th, 1854, the San Antonio and Mexican Gulf Railroad Company is "invested with the power of continuing their road from the City of San Antonio, by the nearest practicable route, to intersect with the Mississippi and Pacific Railroad, west of the Red Fork of the Colorado River." And by Section 5, of said act "the franchise of said San Antonio and Mexican Gulf Railroad Company, in case they accept the benefits of this Supplemental Act, shall cease and determine at the end of ninety-nine years."

By the act of November 14th, 1857, said company is entitled to the benefits of the act approved January 30, 1854, entitled "An act to encourage the construction of railroads in Texas by donations of lands," granting sixteen sections of land, of 640 acres each, or 10,240 acres of land for each mile of railroad constructed, to be received when a section of 25 miles or more is completed. It is also provided by said act, that said company shall be entitled to all the benefits of an act, entitled "An

act to provide for the investment of the Special School Fund, in the Bonds of Railroad Companies (previously) incorporated by the State, approved August 13th, 1856," whereby \$6,000 per mile is loaned to Railroad Companies, by the State, in United States five per cent. Bonds, on the completion of a section of twenty-five miles of railroad, and the grading of an additional section of twenty-five miles, ready for the cross-ties.

By the foregoing it will be seen that this company is entitled to receive sixteen sections, or 10,240 acres of land in all, for each mile of road on the completion of a section of twenty-five miles. This land may be received entirely under the provisions of the General Land Law, or half of it under that law, and the other half under the Supplemental Charter approved February 14th, 1852. By the former act the lands are required to be surveyed in "sections of 640 acres each, and in square blocks of not less than six miles, unless prevented by previous surveys or a navigable stream;" the State reserving the alternate sections of such blocks; but by the latter act the company may locate "upon any unappropriated domain of the State of Texas," and make its surveys to any extent that may be desirable, without being compelled to reserve alternate sections for the State. A privilege of very great value, whether the company locates the certificates or chooses to sell them.

The Engineer of the Company, in a late Report, states that "upon neither the first, nor second sections of the road are there any important or expensive bridges, and this item of expense, usually so large will, upon this road be merely nominal," and the average grade is only 5.25 feet per mile, on the next section of grade.

The right of way has been secured on nearly the whole extent of the road.

All the maps, plates, surveys, profiles, plans and specifications, in the possession of the company, will be delivered to the purchaser or purchasers.

619

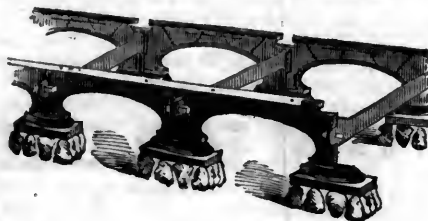
BEERS'

CAST-IRON ENDLESS RAIL,

FOR CITY RAILROADS;

Now being laid in Philadelphia and elsewhere;

THIS road is exclusively of cast iron, without tie, string-piece, or chair; Rail 85 to 100 lbs. per yard; Durability four fold over the present roads, with 65 lbs. groove rail: And with a saving on first cost; effecting a reduction in current yearly repairs, and relays, of at least \$1,000 per mile.



Also,—

BEERS'

ELASTIC IRON RAILWAY,

FOR LOCOMOTIVE USE;

This road can be built and equipped, without additional cost over a road with 56 lbs. T rail; saving not less than 60 per cent. on motive power, 50 per cent. on dead weight, and 80 per cent. on repairs of way; thus reducing the yearly expenses from \$1,500, to \$2,000, per mile. For full particulars, with drawing, relating to both roads, see a recent Treatise, entitled Railroads, their construction and management, with the remedy from twenty-five years experience, by S. A. BEERS, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

S. A. BEERS.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,

54 Exchange Place,
NEW YORK.

Eric Rails, 57 to 58 lbs. per yard, on hand
NEW YORK and NEW ORLEANS.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

CASWELL & PERKINS,

Brokers, 69 Wall st.

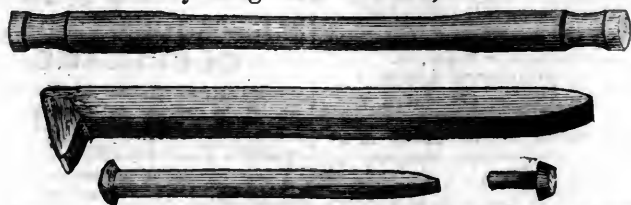
New York, January 1 1859.

OFFICE OF THE ILLINOIS CENTRAL R. R. Co.,
New York, Feb'y 15, 1859.

THE Annual Meeting of the stockholders of the ILLINOIS CENTRAL RAILROAD COMPANY, for the election of Directors and the transaction of any other business, will be held at the office of the Company, in the City of Chicago, on WEDNESDAY, the 16th March, 1859, at 10 o'clock A. M. The Transfer Books will be closed on the 10th of March, and re-opened on the 18th.

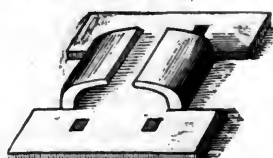
W. K. ACKERMAN, Secretary.

RAILROAD SPIKES, BOAT AND SHIP SPIKES, ENGINE AND CAR (FAGGOTTED) AXLES, BOILER RIVETS, CAST STEEL for Railway Frogs and Switches, DRAWN TO PATTERN.



MANUFACTURED TO ORDER, QUALITY AND WORKMANSHIP WARRANTED, BY
ALBANY IRON WORKS, } CORNING, WINSLOW & CO.,
TROY, N. Y. } TROY, N. Y.

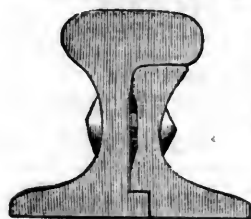
WROUGHT IRON RAILROAD CHAIRS.



WE manufacture to order both the Solid Lip, and Folded Lip WROUGHT IRON RAILROAD CHAIRS, and, as we make our own Iron, can guaranty the quality. The SOLID LIP CHAIR is in much favor, and we commend it to Railway Managers, with entire confidence; made of all weights from 9 pounds to 16, and to fit any width or thickness of base. Address

ALBANY IRON WORKS, } CORNING, WINSLOW & CO.,
TROY, N. Y. } TROY, N. Y.

COMPOUND RAILS, WITH SOLID HEAD.



J. F. WINSLOW'S PATENT.

THE above RAIL is now being manufactured by the RENNELAER IRON COMPANY, and its complete success upon the New York Central Railroad after more than 4 years' use, justifies our commending it to Railroad Companies, as by far the most economical, smooth-riding and durable RAIL in use. No chairs or other joint fastenings are required, while the cost of keeping it in adjustment upon the track is very trifling compared with other forms of Rails. Address

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

FINANCIAL.

G. M. TRACY & CO.,
STOCKS, BONDS, ETC.
LOANS NEGOTIATED.
No. 49 EXCHANGE PLACE,
NEW YORK.

H. MEIGS, Jr. & SMITH,
BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)
STOCKS and BONDS Bought and Sold on Commission.
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH.
New York, May 11, 1858.

SIMEON DRAPER, Auctioneer.

By SIMEON DRAPER,
Office, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES
AT THE MERCHANTS' EXCHANGE EVERY DAY.
STOCKS and BONDS bought and sold at private sale.
Sales every day at 12 1/4 o'clock. See Catalogue.

MORSE & CO.,
BANKERS and DEALERS in Stocks, Bonds, Exchange
and Commercial Paper, on commission, No. 49 Wall
street, and 41 William street, NEW YORK.
Orders for the purchase and sale of Stocks and Bonds, at the
Brokers' Board, by letter or otherwise, promptly executed.
Cash advanced on sound saleable securities.

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Stocks, Bonds, Mortgages, & Commercial Paper Bought & Sold.

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Bankers, " Hon. M. Levy, Banker, " "
Messrs. Sewell, Ferris & Co., " Hon. Franklin Steele, Minne-
Geo. P. Rogers, Esq., " sota.
A. Gridley, President McLean A. & W. A. Saunders, Bankers,
Co. Bank, Illinois. Mt. Pleasant, Iowa.

A. H. DYETT,
STOCK AND BOND BROKER,
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NEW YORK.

DUNCAN, SHERMAN & CO.,
BANKERS,
Corner PINE and NASSAU Sts.,
NEW YORK,

1858
CIRCULAR NOTES and LETTERS OF CREDIT,
FOR TRAVELERS,
AVAILABLE IN ALL THE PRINCIPAL CITIES OF THE WORLD.
ALSO, MERCANTILE CREDITS,
For use in EUROPE, CHINA, etc.

PETERS, CAMPBELL & CO.,
BANKERS and DEALERS IN
DOMESTIC EXCHANGE and BANK NOTES,
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NEW YORK.

SPECIAL ATTENTION GIVEN TO
COLLECTIONS
IN ALL PARTS OF THE UNITED STATES.
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N. H. CAMPBELL, } DEXTER OTEY.

REFER TO
JAS. T. SOUTER, Esq., Pres't Bk Republic, } New York City
American Exchange Bank,
Banks and Bankers, Richmond and Lynchburg, Va.

A. T. MILLS. D. W. C. JUDAH.
To Railroad COMPANIES & CONTRACTORS.
MILLS & CO.,
55 EXCHANGE PLACE,
Negotiate RAILROAD BONDS and STOCKS.
PURCHASES of Railroad Equipments made upon
order, for moderate commissions.

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MINING AGENT & STOCK BROKER,
Office No. 21 Nassau st., NEW YORK.

BUYS and sells MINING SHARES, MINES and
MINERAL LANDS on commission, will examine
Mines and Mineral Lands in any part of the United States, and
report on their value, etc., etc.

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Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A.
Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., Post
& Forrest, Com. Mer's N.Y., John F. Butterworth, Esq., N.Y.,
G. O. Williams & Co., Detroit, Mich., Capt. D. Tyler, Norwich,
Conn., Rittenhouse, Pant & Co., Bankers, Washington, D. C.
Particular attention given to Lake Superior business.

CINCINNATI STOCK EXCHANGE.
KIRK & CHEEVER,
Stock Brokers and Railroad Agents,
No. 83 WEST THIRD STREET,
CINCINNATI, OHIO.

Railroad Stocks, Bonds, &c., bought and sold on commission.
Regular sales at public auction at the MERCHANTS' EXCHANGE.

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STOCKS and BONDS Bought and Sold on Commission.
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Advances made on all approved Securities.
COLLECTIONS MADE throughout the United States and
Canada.

T. A. HOWLAND & CO.,
BROKERS IN
RAILROAD IRON
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EQUIPMENTS,
54 WILLIAM ST., NEW YORK,
ARE prepared to furnish either Foreign or American
Rails, also Equipments of every kind desired, on
the most favorable terms.

CHAS. A. FISHER,
Late of the firm of FISHER, DENNY & CO.,
No. 18 Exchange Place.
STOCKS and Bonds bought and sold on commission. Loans
negotiated.

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NONE BUT bona fide QUOTATIONS FURNISHED THE PRESS. THE MARKET VALUE OF SECURITIES WILL NOT BE SUPPRESSED OR ALTERED, AND DECEPTIVE OR IRRESPONSIBLE CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES.—Messrs. Wm. and Jno. O'Brien, Thos. Denny & Co., Horace Greeley & Co., Cragin & Co., Todd & Co., J. & C. Berrian, Geo. F. Nesbitt & Co., Eugene Plunkett, Esq., (President Excelsior Ins. Co.), John G. Storm, Esq., (President Lenox Ins. Co.), L. G. Irving, Esq., (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Grierson, M.D., Rev. Edwin P. Hatfield, D.D., Rev. Theo. H. Cuyler, John Camerden, Esq., Bunj. F. Manierre Esq., New York; O. S. A. Co., Esq., Albany N.Y.; Messrs. Gorham Co. Providence, R.I.

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THE SCIENTIFIC AMERICAN, a Journal of Mechanical Art, Science, and useful Information. All the prominent new inventions are illustrated with handsome engravings in this paper. Official list of all new patents granted, with the claims published every week. \$2 a year. Sent by mail everywhere. MUNN & Co., publishers, No. 37 Park Row and 145 Nassau st., Park Buildings, N.Y.

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ORSON D. MCUNN, Solicitor of American and Foreign Patents, No. 37 Park Row, and 145 Nassau st., N.Y., "Scientific American" office. Circulars of advice sent free.

Inventors' Patent Agency.

SALEM H. WALES, Solicitor of American and Foreign Patents, No. 37 Park Row, and 145 Nassau st., N.Y., at the "Scientific American" office. Circulars of advice sent free.

Inventors Take Notice.

ALFRED E. BEACH, Solicitor of American and Foreign Patents, No. 37 Park Row, and 145 Nassau st., N.Y., at the "Scientific American" office. Circulars of advice sent free.

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Ex-Chief Engineer of Explorations in South America, e/c, MECHANICAL AND CONSULTING ENGINEER, Times Building, 41 Park Row, Room No. 4, NEW YORK.

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DRAWINGS, Specifications, and Models (metal or wood) Applications for Patents, and all business whatever connected with Patents attended to with economy and despatch. Application for PATENT, including drawings, specifications and Patent Office fees, \$60.

Patents for Inventions.

T. D. STETSON, Agent for procuring patents, No. 5 Tryon St. Row, (near City Hall). A circular with full information sent free by mail. American correspondent *Prac. Mechanics' Jour.* from 1864

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,

No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.

The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER Free on Board at Shipping Ports in England, or At Ports of Discharge in the United States, RAILS OF SUPERIOR QUALITY, And of Weight or Pattern as may be required.

VOSE, LIVINGSTON & CO.,

New York. Aug. 1, 1855

9 South William Street.

Railroad Iron.

500 TONS 56 lbs. and 1,500 tons 60 lbs. best Welsh make, Erie pattern, now in port, for sale.

T. A. HOWLAND & CO.,
64 William st., New York.

THE ROUGH AND READY ROLLING MILLS OF DANVILLE, PA.,

ARE prepared to fill orders for RAILS of the best quality at the market price.

T. A. HOWLAND & CO., Agents,
64 William st., NEW YORK.

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The undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES, ARE PREPARED TO CONTRACT FOR DELIVERY

On board ship at Liverpool, or Welsh port.

C. CONGREVE & SON,
18 Cliff St., N. Y.

RAILROAD IRON.
CONTRACTS FOR RAILS, AT A FIXED PRICE OR ON COMMISSION, DELIVERED AT AN ENGLISH PORT, Or at a Port in United States,

WILL BE MADE BY THE UNDERSIGNED, THEODORE DEHON,
10 Wall st., near Broadway, New York.
500 tons T rails on hand 64 to 67 lbs. per linear yard.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER,
BALTIMORE.
And 17 Nassau st., New York.

IRON BOILER FLUES.

Lap-Welded Boiler Flues, 1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes, From ½ to 6 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY MORRIS, TASKER & CO., PASCAL IRON WORKS. Established 1821. Warehouse—209 South Third st., PHILADELPHIA.

STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR. STEPHEN P. M. TASKER.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS, of every variety of pattern.

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Agents for the United States,
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BALTIMORE.

And 17 NASSAU STREET, NEW YORK.

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE, OAR AXLES,
BOILER RIVETS, RAILROAD IRON,
OUT NAILS and SPIKES, FIG IRON, etc.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854

1733

American Railroad Iron.

THE undersigned is prepared to contract for delivery of American Railroad Iron at points on the Mississippi, Ohio and Tennessee Rivers. Rails can be furnished 27 to 30 feet long when required.

JAMES HENDERSON,
13 Cliff St., New York.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address

N. WILKINSON, Secy,
WHEELING, VA.

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation.

February, 1855.

RAILROAD IRON. WOOD, MORRELL & CO.,

Having leased the extensive Works of the

Cambria Iron Company,

Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

Philadelphia Office, } North Penna. R. R. Building,
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RAILROAD IRON AND COMMON BARS.

THE UNDERSIGNED,

Sole Agents to Messrs. GUEST & CO.,

The Proprietors of the Delaware Iron Works,

Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAXIN, 70 Broad st.

RAILROAD IRON. THE RENSSELAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

BUSSING, CROCKER & DODGE,
32 Cliff St.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnesian Ores from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails of the following weights per linear yard, viz:—25, 30, 35, 40, 45, 50, 60, 62, and 75 lbs.

Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.

Address J. H. SCRANTON, President,

or THEO. STUBBS, Treasurer,

46 Exchange Place,
New York

GEO. M. FREEMAN,

SUCCESSOR TO

PRATT & FREEMAN,
PHILADELPHIA
RAILWAY SUPPLY AGENCY,
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PHILADELPHIA.

Railroad Materials, Locomotive and Car Findings,
MACHINERY AND MACHINISTS' TOOLS,
MINERS' TOOLS, ETC.

COTTON WASTE.
WHITE AND YELLOW CAR GREASE,
LOCOMOTIVE BRASS WORK,
Baggage Checks, Barrows, etc., etc.,

RAILROAD LANTERNS, SIGNAL LIGHTS,
STEAM GAUGES, COCKS AND WHISTLES,
INDIA RUBBER HOSE PACKINGS, ETC.
LANTERNS OF ALL DESCRIPTIONS,
ENGINE, STATION, AND SIGNAL BELLS,
Superior Car Upholstery, etc.

AGENCY OF THE KEROSENE OIL COMPANY.

Orders solicited, promptly filled, and forwarded with
despatch and care at the manufacturers' lowest prices.

HOLT, GILSON & CO.,
MANUFACTURERS AND DEALERS

RAILROAD & STEAMBOAT
SUPPLIES,

5 WATER ST., BOSTON.
LOCOMOTIVES AND CARS.

Rails, Sleepers, Chairs, Spikes, Wheels, Axles and Tires.
BOILER TUBES AND FELTING.
BOLTS, NUTS & WASHERS.
CAR, SHIP AND BRIDGE BOLTS.

Locomotive, Hand and Ship Lanterns; Car Trimmings of all
descriptions; Steam and Water Gauges; Signal Bells, etc., etc.

AGENTS FOR CAR HEAD LININGS.
Sole Agents for TOMES' celebrated GAUGE GLASSES,
and PACKER'S IMPROVED RATCHET DRILL.
Orders filled with despatch and at the lowest prices.

RAILROAD SUPPLIES.

GILBERT, MURDOCK & CO.,
No. 9 NASSAU STREET,
NEW YORK,

ARE agents for, and prepared to furnish at manu-
facturers' prices,

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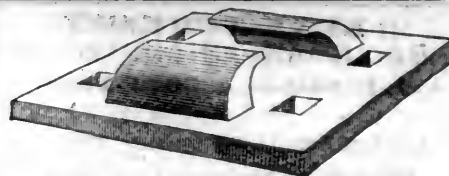
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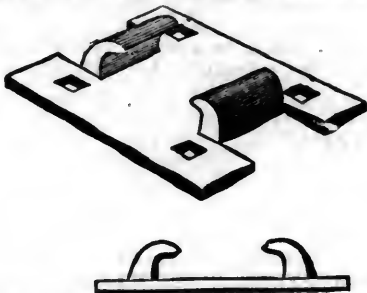
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STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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SECOND QUARTO SERIES, VOL. XV., No. 12.]

SATURDAY, MARCH 19, 1859.

[WHOLE No. 1,196, Vol. XXXII.

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, March 19, 1859.

York and Cumberland Railroad of Maine.

The line of this road extends from Portland to Great Falls, N. H., a distance of 52 miles; there connecting with the Boston and Maine Railroad. Of this distance, only 18½ miles, from Portland to the Saco river, are completed. The first section, extending from Portland to Gorham, a distance of 10½ miles, was opened February 8th, 1851; and the second section, from Gorham to Saco river, 8 miles, on the 15th of February, 1853.

Up to the first day of January, 1857, there had been expended on the road, (embracing about \$60,000 expended on the western end of the line, in grading,) \$1,090,000, as represented by the following sums:

Stock sold.....	\$370,000
1st Mortgage bonds.....	40,000
2nd Mortgage bonds, J. G. Myers.....	410,000
Judgment in favor of J. G. Myers.....	200,000
Floating debt.....	50,000
Land claims.....	20,000

\$1,090,000

The claim in favor of Myers took priority of the second mortgage, and as the company were unable to pay it, the road was sold on the 30th of April, 1856, for a sum of \$80,000, (subject to the first mortgage,) leaving the stockholders liable,

under the laws of Maine, for the balance of the of the judgment. On the first of January, 1856, however, a compromise was effected between all parties in interest as follows:

A new mortgage was executed upon all the property of the company for the sum of \$950,000, into which the creditors agreed to convert their claims at the following rates:

Land claims at par.....	\$20,000
First mortgage at par.....	40,000
Myers' judgement.....	200,000
Second mort. bds, (\$410,000) at 30 per ct.....	123,000
Floating debt at same rate.....	15,000

\$398,000

Which amount represented the cost under the new management of the finished portion of the road—the stockholders agreeing to cancel their stock in consideration of being released from any further claim upon them.

Of the balance of the bonds, \$553,000 were to be appropriated toward the completion of the unfinished portion of the road, 33½ miles, at the rate of \$15,000 per mile, and \$49,000 toward the purchase of additional equipment.

This agreement has been substantially carried out, so that the finished portion of the road is represented by bonds to the amount above stated. At the same time a contract was made with Myers for the completion of the road to Great Falls, at a cost of \$30,000 per mile—the same to be paid for, one-half in bonds, and one-half in new stock. The work is now progressing under this contract, with a probability of its being completed from Saco river to Alfred, 14 miles. Should the whole road be completed under the new arrangement, its total cost to the then owners of it will be as follows:

Bonds paid for 18½ miles.....	\$398,000
Bonds to be paid for construction.....	503,000
“ “ “ equipment.....	49,000
Stock to be issued.....	503,000

Total for 52 miles of road.....\$1,453,000
—or equal to \$27,770 per mile.

The first mortgage bonds were issued February 6th, 1851, and were payable in 20 years, principal and interest payable in Portland, the latter semi-annually. The second bonds were issued Oct. 15, 1851, and were payable in 20 years—principal and interest payable in Portland, the last semi-annually. The last issue in which the other

two are now merged, was made January 1, 1857, payable in 20 years, principal and interest payable in Portland, the latter semi-annually.

It is anticipated that on the completion of this road to Great Falls, it may be extended to Nashua, to connect with the roads at this point running toward New York, saving something like 30 miles over other routes.

New York Canals.

We have received the report from the Auditor of the Canal Department. It is a document of unusual interest, and we give the major portion of it notwithstanding its great length. There are parts of it to which we shall take occasion to refer:

The receipts from all sources the past year were as follows:

Toll on boats and passengers.....	\$158,478
“ products of the forest.....	\$479,576
“ animals.....	32,043
“ vegetable food.....	1,026,965
“ other agricultural products.....	6,912
“ manufactures.....	103,398
“ merchandise.....	159,439
“ other articles.....	143,943
	1,952,276

\$2,110,754

The whole amount of tonnage transported on the canals, during the last season of navigation:

Products of the forest.....	1,232,968
Products of animals.....	65,166
Vegetable food.....	1,208,589
Other agricultural products.....	6,136

1,279,891

Manufactures.....	295,903
Merchandise.....	188,441
Other articles.....	667,989

Total.....3,665,192

The value of such tonnage is as follows:

Products of the forest.....	\$8,963,443
Products of animals.....	\$8,795,510
Vegetable food.....	40,064,541
Other agricultural products.....	1,282,267

50,142,318

Manufactures.....	9,352,955
Merchandise.....	61,236,319
Other articles.....	8,873,809

Total.....\$138,568,844

The total number of tons carried one mile, was.....564,842,095

The total movement of the several classes of freight:

Products of the forest	174,576,073
Products of animals	10,697,582
Vegetable food	248,619,507
Other agricultural products	1,086,750
	<u>260,403,839</u>
Manufactures	32,111,933
Merchandise	40,877,250
Other articles	56,873,000

Total

The whole amount of tonnage arrived at tide-water, by way of the Erie Canal, from Western States and Canada, during the last season of navigation, was 1,273,099 tons. The whole amount of tonnage arrived at tide-water, the produce of this State, during the same period, was 223,588 tons. The whole number of barrels of flour arriving at tide-water through the canals during the last season of navigation, was

The whole number of bushels of wheat arriving during the same period was 8,324,966, which, turned into flour, calculating five bushels to the barrel, would make

Total in barrels

The whole number of bushels of corn arriving at tide-water during the same period was 6,660,893. The total number of new boats registered during the last year was 255, with a total tonnage of 27,830, making an average tonnage of 109.

	Tons of each class carried on the canals.	Tons of each class carried on the railroads.
Products of the forest	1,232,968	303,236
Produce of animals	65,166	734,995
Vegetable food	1,208,589	914,206
Other agricultural products	6,136	77,174
Manufactures	295,903	325,596
Merchandise	188,441	562,378
Other articles	667,989	556,140

Total tons carried

The whole number of tons carried one mile on the canals was 564,842,095, and on the railroads, 420,604,609.

The whole railroad investment, including stock, floating and funded debt, was \$149,262,311 81 on the 30th of September last, and this, of course, includes the accommodation for passenger business as well as the freight traffic. The earnings of all the roads on their freight business was \$10,532,714 97, and the cost of operating the roads, or expense of carrying on this traffic was \$6,254,049 15, excluding the city roads, leaving, as the net earnings of the roads, \$4,278,665 82. This sum, divided by the total movement, or number of tons carried one mile, gives an average of 1.017 cents a ton per mile net, while the gross canal receipts for the year, without any deductions for repairs and collections, were only 3.71 mills a ton per mile on the total canal movement.

The above comparative statement shows the tonnage of the railroads was largely in excess of the canals in the "product of animals," "other agricultural products," "manufactures and merchandise," which formerly paid high rates of toll on the canal.

FOREIGN SHIPMENTS AND CANAL MOVEMENTS.

The statements below show the export of bread-stuffs from the United States to Great Britain and Ireland, for the years ending on the 1st of September, 1856, '57 and '58, and the receipts at tide-water, on the New York canals, of the same articles, for the years 1855, '56 and '57:

Ending Sept. 1.	Flour, bbls.	Meal, bbls.	Wheat, bushels.	Corn, bushels.
1856	1,665,552	8,721	7,939,955	7,060,821
1857	863,179	686	7,567,001	4,793,134
1858	1,300,906	607	6,656,639	3,372,444

Agg'gate. 8,829,637 10,214 22,163,595. 15,226,399

Arrived at tide-water by the canals:

	Flour, bbls.	Meal, bbls.	Wheat, bushels.	Corn, bushels.
1855	1,290,149	2,530	5,426,285	9,343,744
1856	1,130,509	13,851	11,776,366	9,587,714
1857	835,546	14,860	5,763,400	5,515,828

Agg'gate. 3,255,204 31,241 22,960,061 24,447,286

The tide-water receipts given above include the whole season of navigation of each year, and correspond as to time as near as the published statistical accounts will allow. The object of the comparative table is to show that during the above period the tide-water receipts by the canal alone have been equal, or nearly so, to the foreign exports to Great Britain and Ireland. There is no account of the quantity of flour carried forward by the two railroads.

MOVEMENTS OF TRADE.

The following is a series of comparative statements of the movement of freight on the two railroads connecting New York with Lake Erie, and the State canals, during the last three years, showing the tons carried each year, the total movement, or number of tons moved one mile, and the freight and tolls received therefrom.

	Tons carried by railroad	1856. 1,719,327	1857. 1,816,857	1858. 1,582,371
Do. canal	4,116,082	3,344,061	3,665,192	

Agg'gate of both. 5,835,409 5,160,918 5,247,563

The railroad traffic in 1858 is 136,956 tons less than in 1856, and 234,486 less than in 1857. The commercial crisis of the latter year affected the railroad traffic in the former part of the fiscal year, covered by the report, quite as much, in proportion, as it did the canal traffic during the navigation season of 1857. The gain on the canal tonnage the last year is 321,131, and there is a falling off, compared with 1856, of 550,890. The aggregate falling off on the canal and railroads, compared with 1856, being 587,936 tons.

	Total movement by railroad	1856. 329,191,724	1857. 312,974,641	1858. 308,586,813
Do. canal	592,009,603	484,750,864	564,842,095	

Agg. of both. 921,201,327 797,725,505 873,428,908

This embraces the total movement on both railroads, and shows a gain in 1858, over 1857, of 75,703,403 tons moved one mile, and a loss of 47,772,419, compared with 1856.

The statement showing tons of total movement for three years, the freight and tolls paid, and the average cost per ton a mile on railroads and canals.

	Tons moved one mile.	Freight and tolls.	Aver. per ton one mile.
1856	145,733,678	\$4,328,041	2.97 cents.
N. Y. Central	183,458,046	4,545,782	2.48
N. Y. & Erie	592,009,603	2,748,212	4.22 mills.

Totals

1857	145,873,791	\$4,559,276	3.13 cents.
N. Y. & Erie	167,100,850	4,097,610	2.45
Canals	484,750,864	2,045,641	4.21 mills.

Totals

1858	142,691,178	\$3,700,270	4.26 cents.
N. Y. & E.	165,895,635	3,843,310	7.23
Canals	564,842,095	2,110,754	0.37 mills.

Totals

The canal averages do not cover the forwarder's charge for transportation, which may be assumed at one cent a ton per mile, although the succeeding tables will show this assumed cost too high by nearly one-half. The gross receipts are only given, so that the net receipts or net earnings do not appear in these statements.

The following table shows the separate tonnage of the canals and two railroads, and the aggregate of both for six years from 1853 to 1858, inclusive,

with the losses and gains of each compared with the preceding year. The table also shows the remarkable fact that the whole tonnage of 1853 and 1858, are about the same:

	New York Canals.	New York Central Railroad.	New York and Erie Railroad.	Total.
1853	\$4,247,853	\$360,000	\$631,039	\$5,238,892
1854	4,165,863	549,804	743,250	5,458,916

Loss

Gain

1854

1855

Loss

Gain

1855

1856

Loss

Gain

This table shows the tolls and freight paid on the tonnage in the preceding table. The tons of property carried in 1853 and 1858, are nearly the same; but it will be noticed that the aggregate cost of transportation was \$2,073,572 more in 1858, owing to the large proportion of tonnage being carried by rail. The losses and gains show a large difference from year to year:

	New York Canals.	New York Central Railroad.	New York and Erie Railroad.	Total.
1853	\$3,204,718	\$1,838,830	\$2,537,214	\$7,580,762
1854	2,773,566	2,479,820	3,269,590	8,622,976

Loss

Gain

1854

1855

Gain

1855

1856

Loss

Gain

1857

1858

Gain

Loss

CANAL AND CENTRAL RAILROAD COMPARED.

The following statement is compiled for the purpose of showing the freight traffic on the canals of this State, from 1853, inclusive, and the New York Central Railroad, since its consolidation to the present time. These exhibitions of trade on these great central lines afford the most striking illustrations of the tendency of the traffic destined to pass over them:

	Canals. Tons carried.	Tolls received.	Av. per ton cts.
1853	4,247,853	\$2,955,697	69.51
1854	4,165,862	2,547,438	61.15
1855	4,022,617	2,610,420	64.89
1856	4,116,082	2,554,215	62.05
1857	3,334,061	1,897,451	56.91
1858	3,665,192	1,952,276	53.27

New York Central Railroad.

	Tons carried.	Freight received.	Average per ton.
1853.....	360,000	\$1,838,530 00	\$5 10 74
1854.....	519,805	2,479,820 00	4 50 00
1855.....	670,073	3,189,603 00	4 76 00
1856.....	776,112	4,371,389 20	5 67 09
1857.....	838,791	4,559,275 88	5 43 55
1858.....	765,407	3,700,270 44	4 83 46

The above table shows all the tonnage, through and way, of the canal and railroad in the above years, and the gross amount received in each year for tolls on the canals, and for freight on the railroad. The tons carried in 1858 on the road were only 73,384 less than in 1857, and the total mileage in 1858 was only 3,182,594 less than in 1857, while it will be noticed that the loss in receipts on freight was \$859,005 44.

The above figures show another important fact not unworthy of note. The 73,384 tons, at the average of 1858, would, if carried, have paid \$254,682 28, so that the difference in the rates charged and received between the two years, in the aggregate, amounts to \$605,323 16, or very nearly two-thirds the canal tolls at the present rates, if all the road tonnage of 1858 had been carried through both ways. The through freight of all classes carried both ways on the road, during the last year, was 312,408 tons, an increase of 19,531 tons over 1857. The canal tolls on this through tonnage of 1858, at two mill rates, would have been \$440,495 28; on the tonnage of 1857, \$412,956 57. In 1857 the receipts from through

freight were.....\$2,518,785 93
In 1858 the receipts were.....2,125,726 85

Loss, compared with 1857.....\$393,059 08

Here is a difference which shows the freight rates on the road have been reduced on through traffic, to meet the reduction of tolls in March last on the canals. And if we deduct from the road receipts of the last year the freight on the 19,531 tons, increase over 1857, or give the same through tonnage both years to the road, the difference would be \$516,245 86, instead of the above loss, and more than \$100,000 less than the receipts on the tonnage of 1857.

But we can state the proposition in a more brief and perhaps satisfactory manner.

	Receipts.	Average.
In 1857 the through tonnage was..	292,877	\$2,518,785 93 \$8 60 00
In 1858 do. 312,408	2,125,726 85	6 80 43

Difference—

Gain.....19,031 Loss..\$393,059 08 \$1 79 57

The road carried more freight, through and way, the year ending Sept. 30, 1857, than at any other period since the consolidation, and carried more through freight in 1858 than was ever before carried by it. The average receipts, per ton, on through freight, were in 1858 \$1 79 57 less than in 1857, showing that if this freight had paid \$1 41 per ton tolls to the State, the average would have been thirty-eight and a half cents below that of 1857. The average receipts per ton in 1857 would, upon the through tonnage carried in 1858, have swelled the receipts from this source to \$2,686,608 80, which would have been \$560,981 95 over the actual receipts of the year on this branch of traffic. No pretence can or will be alleged that this reduction in price was rendered necessary to protect the traffic of the road against competition outside of the State, or to prevent the diversion of trade from the State during the season of navigation. It is too well known to be disputed, that the two rail lines in the State for months carried on an active, vigorous and hostile competition between themselves, and this competition, as was intended, reached the canals, and nullified the efforts made last spring, to restore the trade to them by the reduction in the rates of tolls. In this conflict the road lost the \$560,981 95 of freight receipts, which it must pocket, and the State lost about half a million of dollars in the effort to retain the trade. The road has already advanced half way

to meet a reduction to a one mill rate. The increased through tonnage on vegetable food brought eastward was 47,297 tons over 1857, equal to 437,935 barrels of flour. Up to the close of September last, the canal exports of flour at Buffalo had been 446,786 barrels less than the lake imports for the season; and up to the close of October, only 732,428 barrels of flour, out of 1,336,428 lake imports, had been sent forward by the canal. Thus, notwithstanding the reduction in tolls, and a corresponding reduction in canal freight, the road has carried nearly half a million more barrels of flour the last, than the previous year, and the canal has only been enabled to obtain a little over one half of the whole lake imports of flour at Buffalo. While the exterior trade or transit through the State is largely benefited by these reductions and competitions, our own State seems not to have been so highly favored during the past year in regard to freight traffic on the railroad. The averages show the reduction on through freight was \$1 79 57 per ton, while on the way freight it was only 26 19 cents.

We have arrived at the interesting period of our history when we must decide whether the local and class interests of a few shall be consulted and promoted in preference to the well being of the whole community—whether the many shall be taxed for the benefit of the few. The theory of the Constitution of 1846 undoubtedly is, that canal tolls shall be imposed with a view to revenue, and not for the benefit of trade, until the debt pledges of the 7th article have been satisfied. During the first five years of that Constitution, no statesman or high public officer mooted or moved the imposition of rates of toll other than for revenue. The public faith required such action, and justice to the public creditor demanded it; while the people had a constitutional pledge, sanctioned by their own sovereign act, by which they were exonerated from the imposition of equitable taxes to increase the revenues of the sinking funds, so long as the canals then completed and in contemplation of being finished, could be made subservient to that end.

By a recent report of the New York and Erie Railroad, it appears that during the year ending Sept. 30, 1858, the road carried 816,964 tons of through and way freight, and received therefor \$3,843,310 77, giving an average of \$4 70 32 per ton. The average on the New York Central Railroad is 13 14 cents per ton over the New York and Erie Railroad. The line of the latter road, from Piermont to Dunkirk, is 446 miles, and of the former, from Albany to Buffalo, 297 75 miles. According to the mileage accounts given by these roads, the receipts of the New York Central Railroad on freight carried, were two cents and six mills per ton per mile, and the New York and Erie Railroad, two cents and three mills. In 1857, the tonnage and receipts on the canals averaged four mills and a quarter per ton per mile, and in 1853, three mills and three-quarters. During the last fourteen years the carriers' charge on the canal has never reached a cent a ton per mile over tolls. These two last items cover the cost of repairs and expense of transportation. The deductions to be drawn from the foregoing facts appear to the Auditor to be plain and conclusive as to the policy of the State in respect to the rates of toll on the canals.

The State is now without resources except by taxation, and the canals are without revenues adequate to their wants. They have been despoiled of their income by a semblance of legal enactment, and their rightful heritage bestowed upon chartered competitors. It is enough to say, that until this despoliation was consummated, they brought to the treasury more revenue, and were the direct means of promoting a more extended commercial traffic and development than their original projectors ever anticipated, or their warmest advocates ever claimed for them. To what extent those revenues shall be reclaimed, or whether they shall be reclaimed at all, remains with the Legislature to determine. The Auditor has endeavored, by the above statement, and the deductions drawn from them, to show that this re-

clamation can be made without any probable injury to trade or the traffic through this State, and even without any serious inconvenience to any of the parties concerned. In our present condition, and so long as that condition shall last, the burthens of trade and the inconvenience of an inadequate revenue, are thrown upon the tax-paying portion of our people, who have no interest in railroad receipts, nor capital invested in canal, lake and river navigation.

Canal and Railroad Tonnage through this and other States compared.

The following table shows the through and way tonnage in the year 1857, of the canals of this State and of the several railroads named in the statement. These are actual results taken from the reports of the railroad companies and of the Canal Department:

	Through, Tons.	Way. Tons.	Total. Tons.
North'n Ogdens'b...	166,150	71,378	177,528
N. Y. Central R. R.	292,877	545,914	838,791
N. Y. & Erie R. R.	243,621	734,445	978,066
Penn'a Railroad ..	172,073	358,347	530,420
Balt. & Ohio R. R.	167,384	708,855	876,239
	982,105	2,418,939	3,401,044
New York canals...	1,150,977	2,193,084	3,344,061
Totals.....	2,133,082	4,612,023	6,745,105

The way tonnage of the Baltimore and Ohio railroad includes 490,954 tons of coal.

In 1857 there were 193,692 tons less delivered at tide-water by the way of the Erie canal, of the produce of the western States and Canada, than in 1853. There were 637,748 tons of the produce of this State delivered at tide-water by the Erie and Champlain canals in 1853, and in 1857 only 197,201 tons, showing a falling off in four years of 440,547 tons. What direction did this tonnage take to reach tide water? Let us see how this matter stands. For 1853 the aggregate of the through and way freight of the New York railroads was 991,039 tons; we cannot designate how much of this was through or way freight, because the reports of the roads do not show it; but we know that in 1857 the aggregate of the through freight of these two roads was 536,498 tons; of way, 1,280,359 tons—total tons carried, 1,816,857. Hence we see where the 634,239 tons lost by the canals has been diverted to, and how these products have reached tide-water. Comparing 1857 with 1853, the canals have lost 903,792 tons, and the roads have gained 825,818 tons, and the difference in the aggregate of these two periods is 77,974 tons less in 1857. Referring to this statement it will be seen that the through traffic of the two southern roads was only three-fifths of that of the two New York roads in 1857, and that through traffic embraces all the tonnage taken from and to the north-western terminations of the roads on the Ohio river, and nothing more.

Tables Showing the Cost of Transportation on the Canals.

The following table has been prepared to show the cost of transportation for a series of years, on down freight from Buffalo to Albany. It is designed to show the cost of carrying on the canal, 216 pounds, or a barrel of flour. The first seven columns show the cost, including tolls; the eighth shows the average for the year; the ninth the tolls; and the tenth the forwarders' charge, or earnings after paying tolls. The reduction in tolls on flour was twenty cents a barrel in 1834, below 1830; again four cents in 1846; again eight cents in 1851; and again eight cents in 1858. The reduction in tolls on flour since 1830 has been forty cents per barrel, which is more than the cost of carriage, including tolls during the last year. The average for the first fifteen years make the forwarders charge equal to the tolls, and in the next fourteen years, the average of the carrier's charge is a little over the tolls. The averages on the down freight are considerably higher than on the up.

It will only be necessary to invite attention to the marked difference between the average of the first 15 and the last 14 years, embracing the whole period set down in the table. During the first period the forwarder's charge exceeded the tolls, but during the second period the tolls exceed the freight charges or carriage.

When we look at the difference between the tolls of 1846 and even 1850, and 1858, on 100 lbs. of through freight, we shall not be surprised that the canals yield so little revenue as to throw the cost not only of completing the canals upon the people of the State, by way of a direct tax, but even to pay the interest on loans contracted for the enlargement and completion of them. The difference of \$3.39 a ton, which is more than twice the present toll, can have no other effect than to deprive the canals of their revenue.

The following table exhibits the averages on up and down freight, for the last twenty-nine years, in periods of five years, except the last, which is for four years. The reductions from 1850 to 1854, and from 1855 to 1858, present a very remarkable feature in canal transportation:

PERIODS.	Av. charge on up fr't p. 100 lbs., from Albany to Buffalo.		Av. charge on down f. p. bbl., 216 lbs., from Buffalo to Albany.	
	Toll.	Freight.	Toll.	Freight.
From to	Cts.	Cts.	Cts.	Cts.
1830-1834, inclus., 5 y.	46	45	91	48
1835-1839, " "	33	56	89	35
1840-1844, " "	33	33	66	35
1845-1849, " "	26	15	41	32
1850-1854, " "	18	11	29	25
1855-1858, " 4 y.	13	10	23	21
The per cent. of reduction from the period ending with 1834 to the period ending with 1849, is.....				
1849, is.....				
The per cent. of reduction from the period ending with 1849 to the period ending with 1858, is.....				
1858, is.....				
The per cent. of reduction from the period ending with 1834 to the period ending with 1858, is.....				
1858, is.....				
(To be continued.)				

Journal of Railroad Law.

THE ESSENTIALS OF A CONTRACT FOR TRANSPORTATION.

Sullivan vs. the Philadelphia & Reading R. R. Co.

On the 7th of July 1854, the plaintiff in this suit, Eugene Sullivan, took passage in the defendants cars from Philadelphia to Phoenixville. It appears from the evidence adduced upon the trial that, when near Phoenixville, the locomotive struck a cow which was passing across the track and knocked her off, but in her struggles she threw herself under the wheels of the second car, in which plaintiff was seated, overset it, and thus caused the injury which it is alleged he received. At or near where the accident happened, the railroad crossed, on a bridge, a public highway, fifteen feet below the track; and on one side of this highway, a private way raised the bank to a level with the railway, while on the other side a path conducted to the same level, neither side having any fence to protect the railroad from intrusion.—The Engineer saw the cow as she was climbing the upper part of the pathway, reversed the engine, gave notice to the brakemen to put down the brakes, and used all the means in his power to stop the train, but had not sufficient time to accomplish his purpose, and the accident we have noticed occurred.

Up freight, per 100 lbs., from Albany to Buffalo.											
Year.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1830.....	\$1 00	\$0 99	\$0 97	\$0 86	\$0 99	\$1 01	\$1 02	\$1 00	\$1 00	\$1 00	\$1 00
1831.....	1 04	97	91	92	90	97	1 02	97	99	99	99
1832.....	1 10	97	90	83	90	90	1 00	97	99	99	99
1833.....	91	82	86	83	90	91	91	91	91	91	91
1834.....	87	78	84	81	85	85	88	88	88	88	88
1835.....	70	65	66	64	64	64	64	64	64	64	64
1836.....	80	78	72	72	76	76	76	76	76	76	76
1837.....	80	80	82	82	83	83	83	83	83	83	83
1838.....	80	80	82	82	83	83	83	83	83	83	83
1839.....	88	87	86	85	85	85	85	85	85	85	85
1840.....	80	78	74	74	76	76	76	76	76	76	76
1841.....	75	65	68	68	66	66	66	66	66	66	66
1842.....	72	60	60	62	62	62	62	62	62	62	62
1843.....	80	60	60	62	62	62	62	62	62	62	62
1844.....	75	61	65	64	64	64	64	64	64	64	64
Total.....	\$12 32	\$11 40	\$11 14	\$10 85	\$11 64	\$11 90	\$13 26	\$11 76	\$6 89	\$5 88	\$5 88
Av. 15 yrs.	82	76	74	72	77	80	88	78	39	39	39
Down freight per bbl., 216 lbs., from Buffalo to Albany.											
Year.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1830.....	\$1 00	\$0 99	\$0 97	\$0 86	\$0 99	\$1 01	\$1 02	\$1 00	\$1 00	\$1 00	\$1 00
1831.....	1 04	97	91	92	90	97	1 02	97	99	99	99
1832.....	1 10	97	90	83	90	90	1 00	97	99	99	99
1833.....	91	82	86	83	90	91	91	91	91	91	91
1834.....	87	78	84	81	85	85	88	88	88	88	88
1835.....	70	65	66	64	64	64	64	64	64	64	64
1836.....	80	78	72	72	76	76	76	76	76	76	76
1837.....	80	80	82	82	83	83	83	83	83	83	83
1838.....	80	80	82	82	83	83	83	83	83	83	83
1839.....	88	87	86	85	85	85	85	85	85	85	85
1840.....	80	78	74	74	76	76	76	76	76	76	76
1841.....	75	65	68	68	66	66	66	66	66	66	66
1842.....	72	60	60	62	62	62	62	62	62	62	62
1843.....	80	60	60	62	62	62	62	62	62	62	62
1844.....	75	61	65	64	64	64	64	64	64	64	64
Total.....	\$12 32	\$11 40	\$11 14	\$10 85	\$11 64	\$11 90	\$13 26	\$11 76	\$6 89	\$5 88	\$5 88
Av. 15 yrs.	82	76	74	72	77	80	88	78	39	39	39

The following table shows the cost of transportation on the canals on up freight from Albany to Buffalo, from 1830 to 1858, the average cost for the year, the tolls charged upon 100 lbs. of freight carried, and the average charges of the carrier. These prices are assumed, and understood to cover the whole cost of transit to the shipper.

It is proper to remark, that the road was in good order, the wheels had been carefully examined during the day, the cars were sound, and the train was running, when the cow was discovered, at the rate of eighteen miles an hour, which was below the usual speed.

Upon the first trial a verdict was found, in accordance with the Judge's instructions, for the defendants, upon the appeal, the following was the opinion of the court, as delivered by

WOODWARD, J.—When a railroad company undertakes the transportation of a passenger for an agreed price, the contract includes many things.

On the part of the passenger his consent is implied to all the Company's reasonable rules and regulations for entering, occupying, and leaving their cars, and if injury befall him by reason of his disregard of regulations which are necessary to the conduct of business, the company are not liable in damages even though the negligence of their servants concurred with his own negligence in causing the mischief. On the part of the company the contract implies that they are provided with a safe and sufficient railroad to the point indicated; that their cars are staunch and road-worthy; that means have been taken beforehand to guard against every apparent danger that may beset the passenger, and that the servants in charge are tried, sober, competent men. When in performing this contract they hurt a passenger, without fault of his, the law raises, *prima facie*, a presumption of negligence, and throws on the company the onus of showing it did not exist. This may be shown, and the legal presumption repelled, by proving that the injury resulted from inevitable accident, or, as it is commonly called, the act of God, or that it was caused by something against which no human foresight and prudence could provide. Whatever these can do for the safety of the passenger, the law requires the transporting company to do. But as presumptions of law are always for the Court to pronounce, so are the repelling circumstances relied on for the jury. The legal presumption, which is only an inference from general experience, remains of force until a countervailing presumption of fact is established; and as this is a conclusion drawn from particular circumstances, it is for the jury to consider these circumstances, and to determine what is the reasonable deductions. Yet the court below not only failed to presume negligence from the fact of injury, but instructed the jury that if they believed the testimony in the cause, there was no negligence on the part of the defendants or its agents. Again even more pointedly, the learned Judge said, "No proof of negligence has been exhibited against the agents and engineer which would authorize me to submit it to the consideration of a jury." This was withdrawing from the jury a case that ought to have been submitted with very different instructions. The plaintiff was in no fault. He had taken his seat within the car, and in all respects had demeaned himself as an orderly passenger. Yet he was injured by the overthrow of the car in which he was seated. Here was a breach of the company's contract, and here was what has several times been said by this court to the evidence of the company's negligence: then if the court thought there was evidence which was calculated to repel this *prima facie* presumption of negligence, they should have submitted it to the

jury. Whether that spot in the road was not so commonly infested with cows as to require a fence or cattle guard of some sort; whether the speed of the cars was not too great for a curve exposed at all times to the incursions of cattle; whether the engineer discovered the cow as soon as he might, and used his best endeavors to avert the collision; in a word, whether the accident was such as no foresight on the part of the company or its servants could have prevented—these were questions, and grave ones too, that ought to have been submitted to the learned Judge, after stating correctly the extreme care and vigilance which the law expects of railroad companies, asks if they are required to provide suitable fences and guards to keep cattle off the road? In answering his question in the negative, the judge seems to have mis-applied the reasoning of Judge Gibson in Skinner's case, (7. Harris 298.) That was an action by the owner of a cow killed on a railroad, to recover her value from the company, and the doctrine laid down was that the owner was a wrong-doer in suffering his cow to wander on a road engaged in transporting passengers, and was rather liable for damages than entitled to recover them. The owner of the cow could not insist that the company should fence their road for the protection of his stock. It was his business to keep his cattle within his own bounds. Now such reasoning between a railroad company and a trespasser commends itself to every man's understanding, because it tends to the security of the passenger. If farmers cannot make companies pay for injured cattle, but they involve themselves in liability by suffering their cattle to run at large, passengers are all the more secure from this kind of obstruction. But when, notwithstanding this strong motive for keeping cattle off the road, a cow is found there and causes an injury to a passenger whom the company have undertaken to carry safely, is it an answer to the passenger suing for damages that the owner of the cow had no right to let her run at large? Grant that she was unlawfully at large, and grant that the owner is bound to indemnify the company for the mischief she caused, yet, as between the company and its passenger, liability is to be measured by the terms of their contract. Having undertaken to carry safely, and holding themselves out to the world as able to do so, they are not to suffer cows to endanger the life of the passenger any more than a defective rail or axle. Whether they maintain an armed police at cross-roads, as is done by similar companies in Europe, or fence, or place cattle guards within the bed of their road, or, by other contrivance, exclude this risk, is for themselves to consider and determine. We do not say they are bound to do one or the other, but if by some means they do not exclude the risk, they are bound to respond in damages when injury occurs. Perhaps the passengers would have remedy against the owner of the cow—it is clear from Skinner's case that the company would—but the passenger has unquestionable remedy against the company. If he be injured by reason of defective machinery, nobody would think of setting up the liability of the mechanic who furnished the bad work, as a defence for the company against the claim of the passenger. Yet it would be a defence exactly analogous to that which satisfied the court in this case. We do not wish to be un-

derstood as laying down a general rule that all railroad companies are bound, independently of legislative enactment, to fence their roads from end to end, but we do insist that they are bound to carry passengers safely, or to compensate them in damages. If a road runs through a farmer's pasture grounds, where his cattle are wont to be, possibly, as between the company and the farmer, the latter may be bound to fence; but, as between the company and the passenger, the company are bound to see that the cattle are fenced out. If cattle are accustomed to wander on unenclosed grounds, through which the road runs, the company are bound to take notice of this fact; and, either by fencing in their track, or by enforcing the owner's obligation to keep his cattle at home, or by moderating the speed of the train, or in some other manner, to secure the safety of the passenger. That is their paramount duty. To enable them to perform it, the law entitles them to clear a track. Neither cows nor men, not even the servants of the company engaged in the company's work, are permitted to obstruct it. And because their right to a clear track is absolute, their duty to carry safely is imperative. If they tolerate obstructions, they must avoid the danger by reduced speed and increased vigilance, or answer for the consequences.

The doctrine in the Skinner's case, designed for the safety of the passenger, was so applied in this case as to compromise it. Herein was manifest error. The case must go back to be tried on the question whether there was any thing in the particular circumstances of the accident to repel the *prima facie* presumption of negligence. It is impossible to regard the accident as inevitable. If cattle were in the habit of coming upon the road at that place, or if there was nothing to prevent them, it was a contingency that the company were bound to anticipate and provide against.

Judgment reversed and a new trial granted.

THE MECHANIC'S, MACHINIST'S AND ENGINEER'S Practical Book of Reference, and Railroad Engineer's Field Book, by Charles Haslett, Civil Engineer, and Charles W. Hackley, Prof. of Mathematics in Columbia College, N. Y. 520 pages, containing 176 diagrams, New York, W. A. Townsend & Co.

The publishers have just laid upon our table a copy of the new edition of this excellent work.—Its success has fully sustained the favorable opinion which we expressed respecting it on the appearance of the first edition, and we cannot do better now than to repeat the notice we then gave:

"The 'Practical Book of Reference' is one of real value. In a volume of convenient size for the pocket, an immense amount of matter has been arranged, that cannot be found in any Cyclopaedia—matter of value to all practical men, because the result entirely of the practical man's experience. A part of the work is written by Mr. Haslett, a well known engineer: it is principally devoted to the operations of running in curves; the author has opened a new track for this practice; it will be found of great value in locating side tracks, turnouts, &c. More than all, we are glad to see a truly American book. General engineers testify to the value of the new rules, and we are glad to bear similar testimony. We think this part of the book worth the price of the whole volume."

We are also informed that the work is having a fine sale in England, which speaks well for its practical value.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	NAME OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,923,941	545,752	150,224	6	---	Brunswick and Florida, Ga.	30	151,857	463,648	538,649	In progr.	---	---	---	---
Androscog. & Kennebec	58	457,909	1,338,308	2,210,947	159,518	83,368	none	---	South. Western	143	1,399,100	441,292	2,266,323	366,214	208,771	9	---	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	213,255	---	none	---	Tennessee and Alabama	80	309,754	626,889	679,906	83,775	29,408	---	---	---
Portland, Saco, & Portsmouth	51	1,396,400	---	1,369,373	263,157	120,809	6	10	Tennessee and Mississ.	64	757,740	611,812	1,161,152	161,001	99,838	---	---	---
Boston, Concord, & Montreal	93	4,004,000	1,104,584	2,843,977	329,767	174,025	16	16	Memphis and Charleston	247	2,228,177	3,495,288	5,672,470	642,622	334,604	---	---	---
Cheshire	54	4,086,326	899,813	8,179,687	355,629	113,077	6	6	Mobile and Ohio	306	6,784,829	2,066,459	10,701,428	561,382	278,428	---	---	---
Ogden	36	1,500,000	8,242	1,412,676	317,050	126,664	50 1/2	---	Miss. Central	89	1,575,474	926,790	2,603,098	115,679	---	---	---	---
Northern, N. H.	82	3,068,400	406,286	3,068,400	186,996	---	4 1/2	---	Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	284,258	150,789	---	---	---
Conn't & Passumps. Riv.	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	N. O. Opelousas & G. W.	80	2,800,000	750,000	3,477,525	284,178	127,450	---	---	---
Island & Burlington	117	2,233,376	4,168,769	4,684,008	332,218	41,688	none	---	N. O. Jackson & G. N.	206	4,036,000	1,815,610	7,142,563	189,003	---	---	---	---
Vermont and Canada	47	1,350,000	---	1,380,695	768,838	---	30	---	Vicksburg, Shreveport, & Tex.	21	883,766	109,285	992,051	In progr.	---	---	---	---
Vermont Central	122	5,000,000	5,276,299	8,402,055	109,838	127,359	---	---	East Tennessee and Ga.	111	1,192,974	1,735,609	2,703,428	227,363	104,992	---	---	---
Boston and Lowell	28	1,830,000	438,920	2,412,251	438,963	171,332	6	91	Nash. and Chattanooga	130	626,075	1,728,664	3,208,138	61,344	39,062	---	---	---
Boston and Maine	74	4,076,074	---	4,229,281	707,802	303,502	6	90 1/2	Ovington & Lexington	98	1,334,850	3,066,917	4,091,004	426,408	220,906	---	---	---
Boston and Providence	43	3,160,000	239,720	3,534,458	594,176	245,194	6	91 1/2	Lexington and Frankfort	29	430,655	1,585,920	658,258	95,807	45,719	6	---	---
Boston and Worcester	44	4,500,000	599,074	4,843,779	1,019,149	388,613	6	---	Lexington and Danville	13	694,444	71,000	765,500	In progr.	---	---	---	---
Cape Cod	47	681,690	200,007	1,031,625	122,960	39,899	49 1/2	---	Louisville and Frankfort	65	741,039	625,216	1,602,095	245,750	109,059	6	---	---
Connecticut River	60	1,591,110	275,732	1,801,244	267,710	65,096	3	69 1/2	Atlantic & Gt. Western	118	866,939	77,294	613,231	In progr.	---	---	---	---
Eastern, Mass.	60	2,583,400	2,441,873	5,082,607	61,156	272,479	4 1/2	---	Bellefontaine and Ind.	118	1,874,395	1,315,237	2,988,392	348,462	120,836	none	---	---
Fitchburg	67	3,640,000	100,000	8,872,821	608,974	250,833	6	92 1/2	Clev., Col., and Cin.	141	4,746,220	90,400	7,752,900	1,149,741	511,740	9	63 1/2	---
N. Bedford and Taunton	21	600,000	---	541,586	168,325	27,327	6	100	Cleveland and Toledo	200	3,333,712	4,235,558	7,193,016	900,292	433,790	26 1/2	---	---
Old Colony and Fall River	77	3,015,000	260,100	3,362,949	683,257	306,140	6	---	Clev. and Mahoning	65	---	---	1,920,953	In progr.	---	---	---	---
Vermont and Mass.	69	2,232,541	1,019,148	3,241,975	240,133	62,267	13 1/2	---	Clev. and Pittsburg	138	2,780,744	3,045,992	6,837,466	681,877	300,518	8	---	---
Western, Mass.	156	6,150,000	5,839,090	10,495,906	2,117,932	889,763	8	105 1/2	Clev. P. & Ashtabula	95	3,000,000	1,495,548	4,040,978	1,251,538	581,454	15	---	---
Worcester and Nashua	46	1,141,000	206,665	1,351,271	216,888	82,726	4	46	Cin., Hamilton & Dayton	60	2,155,800	1,528,092	3,180,316	487,421	260,763	---	---	---
Providence and Worcester	43	1,610,020	300,000	1,781,048	344,773	156,014	7	87	Cin., Wilm. & Zanesville	131	2,421,176	3,782,040	6,696,210	223,600	30,288	---	---	---
Hartford and N. Haven	72	2,360,000	944,000	3,329,602	769,065	340,395	10	126 1/2	Columbus and Xenia	55	1,490,450	149,000	1,582,476	403,212	181,638	10	---	---
Hartford, Prov. and Fishkill	122	1,936,246	2,182,692	4,205,956	737,428	112,325	none	---	Dayton, Xen. & Belpre	63	437,838	422,658	860,496	In progr.	---	---	---	---
Housatonic	74	2,000,000	423,835	2,438,547	318,475	109,344	none	---	Dayton and Michigan	140	1,076,602	393,011	1,185,826	In progr.	---	---	---	---
Wangtuck	57	1,031,800	624,244	1,680,723	237,416	114,237	---	---	Dayton and Western	35	310,000	700,481	1,035,173	125,940	65,253	---	---	---
N. York and N. Haven	62	2,990,836	2,232,340	5,258,232	1,167,055	254,560	3	45	Raton and Hamilton	42	469,763	832,698	1,176,164	140,936	50,008	---	---	---
N. Haven and N. London	60	738,258	761,462	1,450,318	88,007	30,318	none	---	Little Miami	65	2,981,282	1,266,000	3,925,167	775,442	290,123	10	88	---
N. London, W. & Palmer	66	610,700	1,052,000	1,663,230	120,571	51,644	none	---	Sandusky, Dayton & Cin.	171	2,697,000	3,368,000	6,065,000	692,614	---	---	---	---
Norwich and Worcester	68	2,122,300	724,185	2,598,671	265,471	43,647	31	---	Central Ohio	138	1,627,907	6,228,656	4,696,822	570,092	164,697	none	---	---
Albany Northern	32	439,065	1,625,098	1,840,695	117,716	9,904	---	---	Pittsb., Ft. Wayne & Chicago	123	6,247,040	9,822,550	14,279,704	1,646,859	577,787	10	---	---
Black River and Utica	35	645,330	317,359	974,323	In progr.	---	---	---	Pittsb., Mayv. & Cin.	60	371,350	31,000	900,933	In progr.	---	---	---	---
Buffalo, Conn. and N. Y.	100	1,487,874	1,501,183	2,819,096	172,476	66,333	none	---	Sand'y, Mansf. & Newk'	127	1,350,000	2,206,357	3,552,357	328,958	164,479	none	---	---
Buffalo and N. Y. City	92	798,339	2,587,819	3,401,568	283,292	31,896	none	---	Scioto & Hocking Valley	56	403,975	509,050	888,858	In progr.	---	---	---	---
Buffalo and St. Line	99	1,300,000	1,040,000	2,494,364	679,750	355,703	10	---	Springf., Mt. Vernon & P.	118	1,000,000	950,000	2,194,000	In progr.	---	---	---	---
Canadawaga and Elmira	47	434,111	922,393	1,275,706	174,089	89,506	---	---	Tol. Wabash & St. Louis	242	2,965,100	7,577,500	10,542,800	Recently opened.	---	---	---	---
Canadawaga & Niagara F.R.	98	1,316,000	2,279,854	3,495,832	135,433	48,649	none	---	Cin., Log. and Chicago	255	4,196,679	1,006,125	2,090,453	In progr.	---	---	---	---
Cayuga & Susquehanna	144	3,768,466	9,250,362	12,737,898	1,902,828	688,880	31 1/2	---	Evansville & Crawfordsv.	109	986,061	1,207,872	2,188,713	249,668	124,140	---	---	---
Hudson River	95	3,000,000	647,193	2,555,986	323,913	56,198	10 1/2	---	Ind. and Cincinnati	88	1,685,809	1,564,584	3,029,989	491,743	246,622	7	---	---
Long Island	56	24,132,400	14,402,635	36,733,518	6,523,413	3,041,120	8	79 1/2	Indiana Central	60	612,350	1,261,179	1,909,911	368,189	204,685	---	---	---
New York Central	404	11,000,000	23,061,463	34,469,324	5,742,607	1,451,032	none	11 1/2	Ind., Clev. & Pittsburg	83	835,791	1,075,694	1,826,425	263,119	85,248	none	---	---
New York and Erie	56	5,717,100	4,432,498	8,758,203	1,040,393	321,891	none	12 1/2	Jeffersonville	74	1,014,262	604,000	1,830,676	222,737	94,318	none	---	---
New York and Harlem	118	6,633,922	4,866,874	8,470,714	620,163	135,754	none	1	Madison and Indianapolis	87	1,647,700	1,336,816	2,984,516	260,214	113,628	none	---	---
Northern, N. Y.	36	806,130	213,025	762,039	149,378	78,784	8	---	New Albany and Salem	238	2,535,121	6,281,944	7,020,490	645,827	371,402	none	---	---
Oswego and Syracuse	29	467,200	294,159	749,683	In progr.	---	---	---	Port and Indianapolis	73	---	868,314	2,000,000	150,000	90,000	none	---	---
Pottsdam and Watertown	25	610,000	140,000	896,423	211,149	82,600	7	---	Terre Haute and Ind.	78	1,361,450	250,125	1,555,809	481,272	206,079	10	---	---
Kenselae & Saratoga	48	500,000	395,600	---	71,909	21,089	none	---	Chicago and Rock Is'd	182	6,248,000	1,734,318	6,628,272	1,886,196	850,039	59 1/2	---	---
Saratoga and Whitehall	30	708,389	1,678,804	2,272,777	150,484	22,503	none	---	Chicago, Burl. and Quincy	210	4,631,640	3,852,970	8,042,426	1,605,167	81,767	43	---	---
Syracuse & Binghamton	27	437,830	737,079	1,109,822	150,363	65,184	---	---	Chic., St. Paul & P'd du Lac	178	2,300,000	1,325,000	3,625,000	In progr.	---	---	---	---
Troy and Boston	97	1,500,000	700,979	2,200,500	440,290	162,037	3 1/2	50	Galena and Chicago	259	6,023,800	3,899,016	9,395,455	2,316,786	1,192,042	8	68 1/2	---
Watertown and Rome	64	1,000,000	1,619,000	2,644,000	213,391	114,632	12	120	Illinois Central	704	6,566,435	20,316,992	28,487,609	2,293,956	565,972	68	---	---
Belvidere and Albany	94	3,000,000	11,407,000	8,704,096	1,640,787	604,114	12	---	Peoria and Oquawka	181	1,669,889	2,200,000	5,400,000	In progr.	---	---	---	---
Camden and Atlantic	30	3,485,000	788,844	3,680,017	911,611	534,951	10	132	Ohio & Miss. (West. Div.)	147	1,780,295	2,892,463	4,670,586	Recently opened.	---	---	---	---
New Jersey Central	63	2,000,000	3,592,828	6,621,329	682,940	357,193	---	---	Terre Haute, Alt. & St. Louis	208	3,011,160	4,925,927	8,726,764	823,767	247,757	---	---	---
Morris and Essex	53	1,157,805	340,000	1,684,127	237,765	101,612	3 1/2	---	Detroit and Milwaukee	185	838,000	1,128,964	1,906,969	Recently opened.	---	---	---	---
Albany Valley	44	1,597,900	609,046	1,700,000	80,000	45,000	---	---	Mich. Central	2-2	6,057,840	3,866,639	12,847,258	2,248,758	764,936	8	61	---
Cataw. Wil. & Erie	63	1,700,000	1,940,000	3,640,000	219,253	52,450	---	---	Nich. South'n & N. Ind.	475	8,876,400	10,459,63	19,326,054	2,309,487	644,311	15	---	---
Camden Valley	52	1,013,900	1,315,509	1,226,675	156,463	77,92	---	---	Green Bay, Mil. & Ch.	40	1,000,000	1,800,000	1,780,000	---	---	6	---	---

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are as interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	80	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	92 1/2	96
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866		
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	41	46
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	92 1/2
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	79	79 1/2
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1865		
Cincinnati, Wilmington, and Zanesville	1,500,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Fairview, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	99	100
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	60	67
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	30	50
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72	50	50
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1867	60	65
Covington and Lexington	400,000	Do. do.	7	April, October	"	1863	47	55
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	89	90
Dela ware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1876	77	78
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1891		
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		72 1/2
Galeta and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876	91	92
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	87 1/2	93
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		85
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianap. & Cin'ti (for Lawb. & U. M.)	600,000	Do. conv. till 1857	7	March, Sept.	"	1866	77	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wahash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	8	Feb'y, August	"	1865	70	73
Little Miami	1,500,000	Do. inconvertible	6	2 May, 2 Nov.	"	1863	83 1/2	84
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	96	97
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	92	93
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862		80
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863		77 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877		75
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1858-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		80
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	60	70
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	50	55
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	100 1/2	101 1/2
Racine and Mississippi	650,000	Do. conv. sink'g f'd	6	Feb'y, August	N.Y.	1876		75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,123,500	Mortgage	6	Jan'y, July	Balt.	1875	85	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	94	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95 1/2	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	84	85
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	72 1/2	73 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1860	55	56
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	36	36 1/2
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	33	35
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	34	40
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1860-70	102	102 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	93 1/2	94
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	74 1/2	76
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	90	90 1/2
Do. (Free Land)	3,000,000	M'ge 345,000 acrs. priv. 7 aban's	7	March, Sept.	"	1860	91	91 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	87	88
New York and Harlem	1,300,000	Do. do.	7	May, Novemb.	"	1861-72	83 1/2	84
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	96	98
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	83	84
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1863	73	74
New York Central	6,227,000	No mortgage, do.	6	May, Novemb.	"	1863	92	92 1/2
Do. do.	3,000,000	Income conv. from June 57-59	7	15 June, 15 Dec	"	1864	102 1/2	102 1/2
Panama, 1st issue	900,000	Convertible till 1855	7	Jan'y, July	"	1866	115	
Do. 2d do	1,470,000	Do. till 1863	7	Jan'y, July	"	1866	90	91
Reading	1,300,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	300,000	Do. convertible	6	Jan'y, July	"	1870	82 1/2	83 1/2
Do. do.	8,409,000	Do. inconvertible	6	April, October	"	1886	73	78 1/2

CITY SECURITIES.	Int't payable.	Off'd Ask	CITY SECURITIES.	Int't payable.	Off'd Ask
New York, 5 per ct. 1858-60	May, 98	99	Milwaukee, 7 per ct. coup.	X	Divers 45 70
Do. 5 do. 1870-72	August, 102	102 1/2	New Orleans, 6 per ct. cp. R.R. X	Do. 72 77 1/2	
Do. 6 do. 1883	November, 92	94	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July 85 90	
Do. 6 do. 1860-68	February, 98	101	Philadelphia, 6 per ct. 1876-98	Jan'y, July 99 99 1/2	
Albany, 6 per ct. coup. 1871-81 X	Jan'y, July 50	60	Pittsburgh, 6 per ct. coup. X	Divers 45 51	
Allegheny, 6 per ct. coup. X	Quarterly, 59	100	Quincy, 8 per ct. coup. 1868 X	Jan'y, July 67 75	
Baltimore, 6 per ct. 1879-90	April, October, 100	101	Racine, 7 per ct. coup. 1873 X	10 to Feb'y, Aug 80	
Boston, 6 per ct. coup. X	Jan'y, July, 101 1/2	102	Rocheater, 6 per cent. coup. X	Divers 90 97 1/2	
Brooklyn, 6 per ct. coup. Long X	Do. do. 100	103	St. Louis, 6 per ct. coup. Long X	Do. 84 85 1/2	
Clev'rd, 7 per ct. cp. W.V. 1878 X	Divers 92 1/2	95	Do. do. Municipal. X	Do. 86 87 1/2	
Cincinnati, 6 per ct. coup. X	Jan'y, July, 97 1/2	99 1/2	Sacramento, 10 p. ct. cp. 1862-74 X	Do. 37 45	
Chicago, 6 per ct. coup. 1873-77 X	February, August, 100	102	San Francisco, 7 p. ct. cp. 1866 pay. N.Y. X	May, Novemb. 90 91	
Do. 7 per ct. coup. 1880 X	March, Sept., 99	100	Do. 10 p. ct. cp. 1871 X	Do. do. 89 90	
Detroit, 7 per ct. cp. W.V. 1873-78 X	Jan'y, July, 99	101	Do. 10 do. pay. N.Y. X	Jan'y, July 56 60	
Dubuque, 8 per ct. cp. Long X	Divers 71 72 1/2	74	Do. 6 per ct. pay. N.Y. 1875 X	Do. do. 50 50	
Jersey City, 6 p. ct. cp. W.V. 1877 X	Jan'y, July, 64	67	Wheeling, 6 per ct. coup. X	Divers 50 50	
J. valisville, 6 per ct. cp. 1850-55 X			Do. 6 p. ct. cp. Mun. 1874 X	March, Sept. 80 81 1/2	
Mompha, 6 per ct. coup. 1882 X			Zanesville, 7 do. X	April, October	

Cincinnati Stock Sales.
By KIRK & CHEEVER.

For the week ending March 14, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	68	83
Covington and Lexington, 1st Mortgage	68	66
Do. do. 2d do.	70	45
Do. do. Income	10	10
Ohio & Miss. E. D., Construction	78	78
Cinc. Ham. and Dayton, 1st Mortgage	78	90
Do. do. 2d do.	78	80
Indianap. & Cincinnati, do. do.	78	80
Cincinnati, Hamilton & Dayton	86	
Columbus and Xenia	84	
Indianapolis & Cincinnati	89	
Little Miami	86	
Ohio and Mississippi (E. D.)	3	

Railroad Earnings.

The following shows the earnings of the North Pennsylvania railroad during the month of Feb'y, 1859 \$22,588 19
1858 18,501 51

Increase \$3,686 68
In three months ending Feb'y 28, 1859, \$70,720 25
To same date last year 59,714 45

Increase \$11,005 80
The earnings of the Norwich and Worcester road continue to show a good increase, which would have been larger but that one of the boats was taken off for repairs. The figures for February were:

	1858.	1859.
Passengers	\$5,140 84	\$5,934 74
Freight	9,218 37	13,768 45

Total \$14,359 21 \$19,703 19
Increase in 1859 \$5,343 98

The comparative earnings for seven months past were as annexed:

	1858.	1859.
August	\$30,660	\$31,571
September	32,314	31,837
October	19,835	27,310
November	17,240	27,014
December	15,916	24,092
January	13,540	21,688
February	14,259	19,703

Total \$143,854 \$183,210
Gain for last seven months, \$39,456 (over 20 per cent.)

The earnings of the Cleveland, Columbus and Cincinnati Railroad for February were as follows:
By freight trains \$13,346 89
By passenger trains 23,383 67
From rents 6,192 86

Total \$72,928 42
Earnings for February, 1858 68,138 49

Increase \$4,784 93

The earnings of the Terre Haute, Alton and St. Louis Railroad for the month of February, 1859, were as follows:

Passengers	\$26,376 98
Freight	31,419 74
Mail	1,837 49
Miscellaneous	1,056 26

Total \$63,720 47
Receipts for February, 1858 52,327 72

Increase in 1859 \$11,392 75

The traffic of the Great Western Railway of Canada, for the week ending 4th of March, 1859, was as follows:

Passengers	\$18,498 13
Freight and live stock	20,290 81
Mails and sundries	1,329 38

Total \$40,028 82
Corresponding week, 1858 41,829 93

The following is a comparative statement of the earnings of the Pacific railroad for the month of February.

	1859.	1858.
Freight.....	\$24,700 87	\$12,307 61
Passengers.....	22,803 85	14,850 80
Mails.....	2,037 50	1,300 09
Total.....	\$49,542 32	\$28,458 50

Increase.....\$21,083 82

The revenue of the Baltimore and Ohio Railroad for February was:

<i>Main Stem.</i>	
Passengers.....	\$42,523 87
Express.....	6,201 20
Mails.....	7,833 33
Tonnage.....	208,306 01
	\$264,954 41

<i>Washington Branch.</i>	
Passengers.....	\$28,409 31
Express.....	1,200 00
Mails.....	1,000 00
Tonnage.....	5,915 41
	36,524 72

<i>Northwestern Virginia.</i>	
Passengers.....	\$2,665 92
Express.....	
Mails.....	862 75
Tonnage.....	16,383 80
	19,911 97

Total.....\$321,391 10

Compared with the same month of last year the following result is shown:

	Feb'y, 1859.	Feb'y, 1858.	Inc., 1859.
Main Stem.....	\$264,954.41	\$227,393.40	\$37,561.01
N. W. Va. ...	19,911.97	16,254.63	3,657.34
Wash. Br. ...	36,524.72	33,396.46	3,128.26

Totals.....\$321,391.10 \$277,044.49 \$44,346.61

The financial year of the Company commenced with October. The receipts of the first 5 months of the present year compare with those of the previous year as follows:

	1858-'9.	1857-'8.
October.....	\$392,503 02	\$396,191 85
November.....	383,159 22	364,443 38
December.....	336,861 01	379,259 02
January.....	327,176 63	317,513 73
February.....	321,391 10	277,044 49
	\$1,761,090 98	\$1,734,452 47
	1,734,452 47	

Increase present year...\$26,638 51

The receipts of the Grand Trunk Railway of Canada for the week ending February

26, were.....	\$42,274 71
Week ending February 27, 1858.....	41,939 83

Increase.....	\$334 87
Total traffic from July 1st.....	\$1,480,388 97
Same period last year.....	1,569,330 15

Decrease.....\$88,941 18

The earnings of the New York Central Railroad in January and February, as compared with the same months last year, were as follows:

	January.	February.	Total 2 mos.
1859.....	\$382,308 49	\$372,224 53	\$754,533 02
1858.....	430,375 86	390,430 67	820,806 53

Dec. 1858.....\$48,067 37 \$18,206 14 \$66,273 51

The earnings of the Central Railroad Company of New Jersey, for February, were:—

February, 1859.....	\$65,809 06
" 1858.....	49,625 54

Increase, 32 per cent.....\$16,183 52

The earnings of the Buffalo and State Line Railroad for February, 1858 and 1859, were as follows:

	1858.	1859.	Increase.
Passengers ..	\$21,213 42	\$21,510 71	\$297 29
Freight	38,800 29	44,189 48	5,389 19
Other sources	1,150 00	1,276 75	126 75
Total.....	\$61,163 71	\$66,976 94	\$5,813 23

The earnings of the New York and Erie Railroad for February were as follows:—

1859.....	\$301,593 33
1858.....	378,048 67

Decrease.....\$26,455 34

American Railroad Journal.

Saturday, March 19, 1859.

White Mountain Railroad.

This road was built in 1852 and '53, and opened for business from Bath to Littleton, a distance of 21 miles, in August, 1853. It early became embarrassed, from the inadequacy of its earnings to meet its indebtedness. This consisted of a funded debt of \$180,000, secured by a mortgage on the road, and bills payable, and overdue interest equal, probably, to nearly \$100,000. The amount of stock issued on the first day of May, 1858, was \$106,776 common, and \$33,988 preferred, making the total cost of the road something over \$400,000.

The bonded debt was created March 1, 1853. It had ten years to run. We believe no interest was ever paid on it. The overdue interest on the first of March, 1858, was nearly \$70,000. On the third of this month the road was sold by the bondholders for the sum of \$24,000, subject to some contingent claims, chiefly, if not entirely, for right of way—equal to about \$15,000. In this sale, bondholders, to the amount of \$165,300, were interested. These, under an act of Legislature, passed June, 1857, have organized themselves into a new corporation, under the title of the White Mountain N. H. R. R. Co., with a fixed capital of \$200,000. The new Company took possession of the road on the first day of February last, at which date they executed a lease of the road to the Boston, Concord and Montreal Company, for a term of five years, at a rental of \$10,000 per annum out of the receipts—the lessee to make all necessary repairs, and to return the road in as good condition as when received by it.

The sum of \$200,000 represents the entire cost of the road to the present stockholders, though this is somewhat less than the amount of bonds, with the accrued interest, held by them. All other claims against it have been cut off by the foreclosure.

The Earnings and Expenses for Operating the Road since Its Completion.

Earnings from date of operating to Feb.	
1855.....	\$27,529
Expenses for same period.....	6,962
Net earnings.....	\$15,537
Earnings for 1856.....	28,164
Expenses.....	23,000
Net earnings.....	5,164
Earnings for 1857.....	21,954
Expenses.....	20,000
Net earnings.....	1,954
Earnings for 1858.....	20,984
Expenses.....	19,697
Net earnings.....	1,284

These figures are taken from the reports of the Railroad Commissioners of the State. It is probable that the amount placed to expenses embraced items not properly chargeable to them. The road was in the hands of parties whose interests were hostile to those of the bondholders, nearly up to the day of sale.

It is probable that the earnings of the road may be considerably increased under the management of the B. C. & M. Co., and that the arrangement will be a profitable one for both parties.

Milwaukee and Mississippi Railroad.

We give in another column a full abstract of the late annual report of this Company. Notwithstanding the embarrassments of the Company, the result of the past year's operation is an encouraging one. Under the most adverse circumstances, the Company have earned nearly one million of dollars, which may be taken as conclusive evidence of the strength of the line. With an improvement in the financial condition of the North-West, that of this road must be most marked. It has clearly touched its lowest point. Its embarrassments have risen rather from inadequacy of means provided to carry out the undertakings of the Company, than from mismanagement of the road, which we believe to have been always conducted with ability and integrity. The road has a most excellent line, and a business not only entirely adequate to pay the interest on its indebtedness, but, in time, to pay on the stock.

McCallum's Indeflexible Truss Bridge.

We are in receipt of a pamphlet of about 50 octavo pages, by D. C. McCallum, Esq., late Superintendent of the New York and Erie Railroad, explaining and illustrating the general principles of Truss Bridges. This is not designed to be a treatise on the science of Bridge framing, but rather a history of Wooden Bridges—showing the progressive steps by which the present improved and perfected structures have been arrived at. It presents no abstruse calculations or formulae for measuring the extent of the strains to which the different parts of a bridge are subjected, but clearly and briefly explains the nature of these strains. It gives a narrative of facts connected with Mr. McCallum's experience, and describes the experiments made by him with a view to perfecting structures of such great importance in the economical and safe working of our railways. The pamphlet is handsomely illustrated with plans and diagrams, and the subject presented in so clear and popular a manner, that it requires no book learning to understand it.

Mr. McCallum has had peculiar facilities for pursuing and experimenting upon this branch of engineering. During his connection with the N. Y. & E. R. R., permission was given him by the company to institute a series of experiments with models, with a view to perfect a plan of bridge which could be relied upon, and which might be substituted for those then upon the road. Various plans had been tried, but all had been more or less defective. Simple trusses of all kinds had failed from the tension of the lower chord; and combinations of arched beams and trusses for avoiding this difficulty, had proved unsatisfactory from the impossibility of so adjusting them, that each should do its respective duty. Experiments were made upon models built upon a perfect scale, the details being in every respect the same as in a

full-sized bridge, and in all cases the models were loaded to a breaking weight, the load being carefully and equally distributed over the entire length. These experiments were prosecuted to an extent and at an expenditure of time and money unprecedented in the history of bridges, not even excepting the tubular bridge across the Menai straits. Models with every conceivable combination and proportion of materials were made and broken; and as faults of proportion or arrangement were developed, the required changes were made, and new models constructed, until it was believed a framed truss was arrived at, which fulfilled all the requirements of strength and rigidity of which a wooden bridge was capable.

The result was the adoption of the plan now known as the "McCALLUM INFLEXIBLE ARCHED TRUSS BRIDGE."

The principal peculiarities of this plan are an *arched* upper chord—abutment braces from this chord passing through the lower chord to the masonry, thus relieving the latter from a large portion of its tensile strain, and *adjustable* counter-braces so arranged that the structure can without load, be subjected, within itself, to a strain far greater than it could ever be subjected to in use; thus rendering it absolutely rigid for the passing of an ordinary train. Mr. McCallum's reasonings are logical and seem to be conclusive upon the point of an adaptation and arrangement of parts which give a strength and rigidity with a given amount of material hitherto unapproached in the art of wood-bridging. At all events, the bridges have now been in use on the New York and Erie Railroad for several years, as well as on the Ohio and Mississippi, and other western roads, and not a single failure has occurred within our knowledge, although they have been subjected to the most severe tests—one of which on the Ohio and Mississippi road is so remarkable that we give the statement as written by the Superintendent of Bridges on that road:—

On the night of March 12th, 1858, an engine attached to a passenger train, was thrown from the track about 300 feet distant from bridge No. 15. The train was running at high speed, and before it could be brought to a stand, the engine had reached the centre of the bridge, with all of its wheels off the rails, and upon it was piled one baggage car and two passenger cars. The concussion broke the lower chords of both trusses of the bridge, together with six posts, twelve braces, and thirty floor beams. The engine, after having passed through the floor timbers, was arrested in its course by coming in contact with the track stringers and lateral rods. The lower chords being broken, the whole train was prevented from plunging into the stream by the sustaining power of the arch and arch braces alone. This proves the truth of what I have frequently heard you assert, that the arch and arch braces alone were of sufficient strength to sustain the whole structure, independent of any aid which might be derived from the tensile strain of the lower chord. I may further say, that when the bridge was in the condition as above stated, in order to raise the engine from its position, a heavy stick of timber was laid upon the arch chords across the bridge, to which blocks and fall and raising apparatus was attached, and although the latter was strained until it gave way, there was not the slightest evidence of failure in arches or arch braces, there being no supports from the bed of the stream whatever.

The certificates of Engineers and Superintendents who have adopted this plan of bridge, show that they are rapidly coming into use. Several have lately been constructed in New England, and

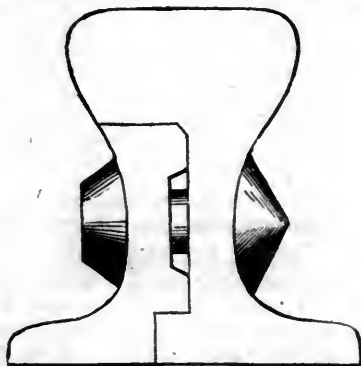
on the Grand Trunk Railway of Canada, where hitherto they have been so wedded to iron. With in the past year one of 17 spans, of 210 feet each, has been constructed across the Susquehanna River, near Harrisburg, for the Northern Central Railroad.

Mr. McCallum's pamphlet is written for gratuitous distribution, and as no subject can be of more interest to railroad managers than the safety of their passengers, and as there is no part of a railroad, upon the perfection of which so much depends for this safety, as the bridges, we commend it to their careful perusal. The advertisement of the McCallum Bridge Co. will be found in our advertising columns.

Upon application at the office of the Co., 110 Broadway, N. Y., either personally or by mail, the pamphlet may be obtained.

Winslow's Compound Rail.

We have previously spoken of a *Compound Rail*, which has been in wear for some time past on the New York Central Railroad, with such satisfaction to the Company, that they are using it exclusively, we believe, in their renewals. The following is a



section view of it. It has been in use a sufficient length of time to test its qualities. We have had opportunities of minutely examining it, and believe it accomplishes the object, upon which so much time and money has been expended,—a joint that thoroughly protects the end of the rail. It can be rolled at a slightly increased expense over the ordinary pattern. Its trial, we think, is well worthy the attention of railroad companies. It is being manufactured by CORNING, WINSLOW & Co., Troy, N. Y.

Debt of California.

The following letter has been received by Messrs. Duncan, Sherman and Co., from the Governor of California:

STATE OF CALIFORNIA, EXECUTIVE DEPT., }
Sacramento, Feb. 19, 1859. }

"GENTLEMEN: I regret that in the midst of pressing public engagements your letter of the 29th ult. remains unanswered until the present moment.

"In regard to the indebtedness of the State unprovided for, I have to say that, in my opinion, a vote of the people will be necessary before bonds can be issued.

"It is possible that there are still legal and equitable demands unfunded, to the amount of say \$250,000; and it is understood that a bill will be passed at the present session making provision for payment.

"I do not doubt that this will receive the ratification of the people, as they have already shown that the disgrace of repudiation shall not attach to them.

I am, very respectfully, your obedient,
(Signed) JOHN R. WELLER."

Milwaukee and Chicago Railroad.

The earnings of this road for the year ending Dec. 31, 1858, were as follows:

From passengers.....	\$105,599 50
" freight.....	89,455 68
" express and extra baggage.....	3,010 42
" mails.....	3,498 16
" miscellaneous.....	2,444 56
" steamer Traveller.....	1,447 86
	\$159,466 18

PASSENGER TRAFFIC.

No. through passengers, 1st class.....	71,023
No. " " 2d ".....	11,262
No. " " emigrant.....	8,182

Total number of through passengers on this road.....	90,475
No. way passengers, 1st class.....	85,566
No. " " 2d class and emigrant.....	396

Total No. of way passengers on the road.. 86,062

Total number of passengers transported.. 176,537

No. of miles traveled by passengers, or number of passengers carried in cars one mile..... 5,068,292

Passengers forwarded from Milwaukee..... 55,695

Passengers landed at Milwaukee.. 73,271

It is a noticeable feature that the number of passengers landed in Milwaukee exceeds the number taken from Milwaukee, by 17,576, showing that this road forms one of the main arteries immigration to Wisconsin.

At the recent annual election the following officers were elected, who operate the road under the mortgagees, Bishop & Co., in possession:

C. B. HALL, *President*, Milwaukee.
JOHN V. AYER, *Vice-President*, Kenosha.
A. V. H. CARPENTER, *Secretary*, Milwaukee.
C. P. LELAND, *Treasurer*, Milwaukee.
C. E. SCOTFIELD, *Ass't Treas.*, pro tem., N. Y.
C. B. HALL, J. T. MOODY, S. B. SCOTT, *Executive Committee*.

East Tennessee and Virginia Railroad.

This road is 138.23 miles in length, extending from Knoxville; Tenn., via. New Market Russellville, and Jonesboro', to Bristol, on the Virginia State line, at which point it connects with the Virginia and Tennessee Railroad, running thence to Lynchburg. The width of the track is 5 feet.

The Ninth Annual report of the President and other Officers of this Company, bearing date November 25th, 1858, has just been received.—The earnings from transportation for twelve months ending November 1st, were—

From passengers.....	\$106,499 98
" freight.....	64,956 14
" mail.....	19,742 24

And the expenses attending the same 95,967 21

Leaving as net earnings \$ 95,231 15

A large amount of the expense account is properly chargeable to construction, for the use of engines, cars and men, in hauling cross-ties and iron to lay track between Limestone and Bulls' Gap.

At the date of the previous report, 48 miles of the eastern end of the road, extending from Bristol to Limestone; and 50 miles of the western end, extending from Knoxville to Bulls' Gap, were in operation, upon which were disconnected trains, doing a partial business, leaving 31 miles, much of the grading of which was already completed,

though a considerable amount of heavy work remained to be done, to close up the gap. In its incomplete condition, its net earnings would have been insufficient to meet the interest on the funded debt alone, much less have yielded any revenue to relieve the floating debt. It was therefore believe that if by any possible means it could be completed, it would be to the interest of the company to press the works through, notwithstanding the heavy sacrifices necessary to effect this object. After obtaining all the means that could be procured upon loan—upon the personal responsibility of members of the board—together with their own credits; the contractors with uncommon energy and perseverance, finished the work. Much of this debt to contractors still remains unpaid. The earnings of the road, the only resource of the company, were constantly applied to debts and interest; but this was quite inadequate to meet the debts promptly;—\$630,000, including stock bonds, embraces the actual stock yet returned; and but \$400,000 of this sum consists of private and county subscriptions. The remainder of the work has been done on credit through State loan and county bonds. The interest upon the debts, already amounted to \$250,000; and not less than \$25,000 additional had been paid, or was due, upon stock bonds upon which the company had pledged interest until the completion of the road; after which time they ceased to bear interest, thus making the sum of \$275,000 paid for interest. The whole cost of building and equipment, including rolling stock, depots, etc., has been \$2,800,000—deducting from this the interest paid, leaves \$2,525,000 as the actual cost of the road—or \$19,423 per mile. The revenues of the past two years had contributed about \$50,000 to the above sum. The floating debt to July 1, 1858, was about \$350,000; to meet which the company have on hand about \$175,000 of second mortgage bonds. Such as are already pledged, are redeemable in one or two years. The amount so pledged is \$125,000, which the company expect to redeem. Besides which there are due to the company \$30,000 in uncollected stock and bills receivable. These, together with the income from the road, constitute the only means of reliance for the payment of the debts, and meeting the interest and sinking fund, of two per cent. per annum.

The road was completed through on the 14th of May last, and the regular through trains commenced their trip on the 17th.

The earnings of the last five months after the completion of the road, viz: from June 1, to Nov. 1, were \$126,367 48, or more than double the amount of business for the seven months preceding. At this ratio on the completed road, the earnings for the whole year would have exceeded \$300,000. The estimate of the gross receipts for the current year are \$340,000. This would provide the interest, \$114,000, and leave about \$61,000 to meet the floating debt.

The equipment of the road consists of 10 locomotives; 6 first class and 3 second class passenger cars; 4 baggage and 55 freight cars.

The opening of the above road marks an important event in the railroad history of the country. It nearly completes a great central line of railroad traversing the United States from southwest to northeast—from New Orleans to the eastern portion of Maine—2,000 miles long. Only one

short link is wanting—the Mississippi Central road—which will be completed early in the Fall. With the whole line in operation, every portion of it must have a large and profitable business. The construction of that portion of the line from Lynchburg to New Orleans reflects great credit upon all parties to it, as it has been carried forward with great steadiness of purpose, and often without adequate means—and in all cases without any great disaster. There is no portion of the line to which these remarks will apply with greater force than to the East Tennessee and Virginia road.—This work has progressed, steadily, through a period of seven years—under the management of the same parties, who have well earned and secured the confidence of the people on its line.

The following is a condensed statement of the receipts and expenditures of the company from its organization to June 30, 1858:

	DR.
Capital stock	\$629,800 00
Bonds of the State of Tennessee	1,602,000 00
Bonds of the company endorsed by the State	200,000 00
First work after and subject to the States' liens	100,000 00
Bonds redeemable in stock	66,950 00
Exchange account	29,632 56
Bills payable	159,448 82
Due contractors and others	232,963 42
Miscellaneous	15,557 32
Net earnings to June 30, 1858	73,816 21
	\$3,110,168 33
	CR.
Construction	\$1,012,639 45
Iron, Equipment, depot, etc.,	1,398,602 19
Interest account	140,912 90
of iron & equipment fund	108,263 28
Due from stockholders and others	239,069 82
Sinking fund	6,000 00
Profit and loss	68,228 15
First mortgage bonds	3,500 00
County bonds	3,000 00
Engineering, Salaries, etc.,	100,124 87
Real and personal estate	5,677 93
Land damages	22,153 68
Insurance, etc.,	1,129 59
Cash	839 47
	\$3,110,168 33

OFFICERS.

President—S. B. CUNNINGHAM.

Secretary and Treasurer—JOHN KEYES.

Chief Engineer—C. A. MEE.

Superintendent—M. S. TEMPLE.

Iron Bridges on the Central Railroad.

Following the example of the Grand Trunk Railway of Canada, the Baltimore and Ohio, and other important roads, the New York Central Company are about to construct their more important bridges of iron, whenever their renewal becomes necessary. A beginning has been made with the long bridge, over the Mohawk river, at Schenectady, which has already been twice renewed in wood, and is now being permanently built of wrought iron. The river at this point is about 730 feet wide, which distance is divided by stone piers into ten bays or spans of about 68 feet each. The form of truss or girder adopted is, in general principle, similar to that known as the Fairbairn Tabular girder in the construction of which no material is used but their rolled plates riveted together as in boiler work, with this difference, that in the Fairbairn girder the upper and lower member or chords are connected by solid sides, while in the Schenectady bridge, a double system of triangular bracing is introduced, to serve the same purpose, in which the diagonal pieces which are of T iron bear the thrust, and the vertical pieces which are of flat plates sustain tensile strain, thus securing an equal amount of strength with a much smaller weight of

material. The roadway, which is designed for a double track, rests upon three trusses, the centre of which weighs about 16 tons; each of the outer trusses weighing about nine tons; their depth is seven feet. On Saturday last the bridge was tested, previous to its being opened for traffic; 21 tons of iron were laid upon the floor of one of the spans over which latter a train 66 feet in length and weighing 77 tons was moved at a speed of 15 miles per hour. Under this load of 98 tons the outer truss deflected not quite half an inch, and the centre truss one quarter of an inch, both trusses resuming their original form immediately on the removal of the load.

The bridge which is remarkable for its light and elegant appearance and will well repay a visit, was designed by Mr. Howard Carroll, one of the Assistant Engineers of the road, and was erected by him for the company under the supervision of Mr. George E. Gray, the efficient Chief Engineer. —*Albany Argus.*

Messrs. Corning, Winslow & Co., of the Albany Iron Works, are now prepared to furnish the materials for bridges of the above description.

Milwaukee and Mississippi Railroad.

The amount received from operations of this road for the fiscal year ending December 31, 1858, as stated in the 10th annual report of the directors, were:

From freight eastward	\$340,300 76
" westward	175,644 65
" through passengers	110,408 26
" way	195,397 67
" express companies	18,419 50
" Milwaukee & Watertown R.R.	21,496 90
" mails, rents and storage	21,518 28
	\$883,186 02

The operating expenses for same time were:

Fuel	\$82,254 97
Repairs of road	76,346 05
" locomotives	30,849 24
" cars	30,376 17
Enginemen and firemen	30,559 72
Train service	27,969 49
Oil and waste	14,775 25
Station service, including salary of Superintendent	87,008 98
Salaries and expenses of directors and officers	16,936 77
Miscellaneous	46,165 85
	443,242 49

Net earnings

Net earnings	\$439,943 53
To which add amounts received from other sources, viz:	
Sale of bonds	290,329 00
Sale of iron, etc., and from miscellaneous sources, including \$121,337 76, due from other companies Dec. 31, 1857, and from sale of tickets over other roads, now refunded	166,878 52
On capital stock in cash and otherwise	22,542 05
	\$919,693 10

From which deduct—

Interest on 1st mort. b'ds, \$229,480 00	
" 2nd " " 60,000 00	
" 3rd " " 1,600 00	
" city " " 44,400 00	
" other indebtedness	151,841 96
Construction account	277,445 18
Sinking funds of 1858	53,500 00
	818,267 14

\$101,425 96

The interest and expenses represented above have not all been paid, but have been charged to the appropriate accounts, and the liability for the unpaid amount is embraced in the following statement of indebtedness:

First mortgage bonds on different portions of the road.....	\$2,850,000 00
Second mortgage bonds.....	600,000 00
Third ".....	149,000 00
Loan of Milwaukee city secured by a second mortgage on Southern Wisconsin line.....	300,000 00
Increased indebtedness—including \$148,000 construction bonds, and credits to farm mortgagors.....	818,584 64
Unpaid sinking funds, coupons, etc.,.....	92,268 00

\$4,809,852 64

The amount due the corporation on bills, accounts, etc., is.....	\$61,141 56
Operating materials on hand.....	104,814 34
Sinking funds in Trustees' hands.....	174,543 20
Due from income account of 1859.....	12,137 50
In hands of Treasurer.....	17,532 49

\$362,409 20

The whole cost of the road is as follows:

Grading.....	\$1,468,856 83
Superstructure, including iron, ties, laying of track, etc.....	2,168,543 79
Bridging.....	426,419 10
Right of way and fencing.....	220,642 65
Real estate, including cost of depot grounds.....	286,775 58
Depot buildings.....	288,621 49
Discount on bonds.....	890,069 48
Loss on stock hypothecated.....	547,592 24
Interest.....	402,503 51
Loan expenses and commissions, and losses in negotiations.....	94,660 19
Engineering.....	98,180 03
Shop tools and fixtures.....	23,521 37
Salaries and expenses of directors and officers.....	67,070 71
Original cost of Southern Wisconsin railroad, and other purposes.....	124,569 33

\$7,108,026 30

Equipment.....	1,006,100 13
----------------	--------------

\$8,114,126 43

The amount of stock actually subscribed is 38,555 shares.....	\$3,855,600 00
Upon which there has been paid.....	3,696,693 08

Leaving unpaid.....	\$158,906 92
---------------------	--------------

The company have in operation 234.41 miles of single track road, and 28.28 miles of sidings; total 262.69 miles.

In March, 1858, an estimate was made of the floating debt, and not having any available means to pay it other than the earnings of the road, and believing that in the state of credit that then prevailed with reference to railroads, it would be useless to appeal to the stockholders for aid, the Board on the 15th of that month, executed a mortgage on all its road, to secure four classes of bonds to be issued under it, amounting to \$1,800,000.

The first issue of bonds, in amount five hundred thousand dollars, bearing eight per cent. annual interest payable in four years from surplus earnings, was appropriated to the payment of the floating debt, and the other classes are intended to provide for the bonds of the company hereafter to become due. Of the first class of bonds, to wit: the \$500,000 issued to pay the floating debt, \$150,000 have been canceled by the payment of that amount of the floating debt, and \$149,000 more have been issued in funding the floating debt, which remain unpaid and uncanceled. The balance of that class, to wit, \$201,000, are still to be applied in funding the floating debt, and the other classes provided for in said mortgage have not been issued.

There is no large amount of judgments now unsettled and outstanding against the company. The total amount is less than \$30,000, and is included in the list of bills payable in the items composing the floating debt, with the exception of the costs accrued in obtaining said judgments.

The sinking fund for the year ending December 31st last, has not been deposited, but will be as soon as the earnings are sufficient to meet it.

The floating debt on the 31st December was found to be \$462,842 64, consisting of the following items, to wit:

Unpaid interest dividend.....	\$182 55
Dividend certificates.....	133 35
Warrants outstanding.....	2,419 91
Scrip payable in freight.....	1,094 00
Dividend certificates.....	973 36
Unpaid dividends.....	1,967 79
Bills payable.....	114,764 57
Due the operatives and for operating expenses.....	92,404 03
3d mortgage bond certificates.....	2,284 00
Unpaid sinking fund of 1858.....	53,500 60
Unpaid coupons on farm mortgage income bonds, etc.....	67,714 50
Credited farm mortgagors.....	125,414 58

\$462,852 64

The amount of \$125,414 58, credited to the mortgagors, is not due, but is a credit to be adjusted when the farm mortgages become due and are paid. Deducting this item, and the floating debt proper is \$337,427 56. The funded debt has been increased during the year by the issue of third mortgage bonds yet outstanding and uncanceled \$149,000 as before stated.

The sum of \$288,097 72 has been charged to construction account during the year.

The road-bed has been improved by new ties, iron, and bridges. Two of the bridges across the Wisconsin river were found to be too low to admit of the passage of boats and rafts in high water, and they have been raised three feet. Much of the track down the valley of the Wisconsin was covered with water during a freshet in June last, and a portion has been raised and the balance is to be completed in the spring. A large amount of ballasting has been done on the Southern Wisconsin line which is not yet fully completed. The road-bed has been much improved from what it was one year ago, but is not yet in perfect repair. The rolling stock and machinery are in good repair.

A large warehouse has been erected at Milwaukee on the grounds of the company, capable of discharging with great ease and dispatch, all the grain and other business of the road, arriving at that point. The depot grounds about the warehouse have been much improved by ballasting, docking, new side tracks, and by dredging the Menominee river in front of the warehouse, all of which were necessary. The facilities now possessed for receiving and shipping goods at Milwaukee without for cartage or dockage, are unsurpassed by any road at the West.

The average length of road operated in 1857 was 200 miles, the expenses of that year \$412,200 10 or \$2,061 per mile. The length of road operated in 1858 is 234 miles, expenses \$443,241 39, or \$1,894 per mile.

The revenue of 1857 was \$4,417 per mile; the revenue of 1858, \$3,700 per mile. It would have increased the expenses of 1858 comparatively but little to have earned \$4,417 per mile, while it

would have added \$150,000 to the revenue. As an illustration, the earnings for May were \$87,737 82, and for June, \$103,699 56, while the expenses for those months differed but \$2,000.

The company require at least 1,000 tons of rails 60 tons of chairs and spikes, and 40,000 ties during the coming year, besides the rebuilding of one truss bridge of 110 feet span, and 10 bridges of about 45 feet span. The cost of this work will be as follows:

1,000 tons rails (re-rolled).....	\$30.....	\$30,000
60 tons chairs and spikes.....	80.....	4,800
30,000 ties.....	25c.....	7,500
10,000 ties.....	40c.....	4,000
New bridges.....		6,000

\$52,300

The number of rails taken up and repaired since March 1st, is 4,711, at a cost for labor besides taking up and putting down, of \$1,956 04, or 41.52 cents per rail. Material used \$1,313, or 30 cents per rail. The whole cost, including taking up, welding and re-laying, is about \$1 per rail.

The company have 43 locomotives; 31 first class passenger cars; 2 second class passenger cars; 13 baggage and post office cars; 411 covered freight cars; 107 platform freight cars; 40 gravel cars; 25 small ditching cars; 37 hand cars.

CONDENSED BALANCE SHEET.

Milwaukee and Mississippi R. R. Co., in General Account, December 31st, 1858.

Dr.

Capital stock.....	\$3,696,693 08
Bond account, outstanding bonds, as follows, to wit:	
10 per cent. R. M., 1st sect.....	\$74,000
8 " " 1st sect.....	526,000
8 " " 2nd ".....	650,000
8 " " & sinking fd.....	1,250,000
10 " second mortg.....	600,000
8 " S. F. on S. W. line.....	350,000
7 " construction.....	448,000
8 " third mortgage.....	149,000
	4,047,000 00
City of Milwaukee Loan of Bonds.....	300,000 00
Floating debt, as above.....	462,852 64

\$8,506,545 72

Cr.

Construction—Main line.....	\$6,108,399 75
Southern Wisconsin Line, including Janesville Branch.....	999,626 55
Equipments for both lines.....	1,006,100 13
	\$8,114,126 43
Operating materials.....	104,814 34
Debts and bills receivable.....	61,141 56
Farm mortgages and stocks.....	22,250 00
Trustee of Sinking Fund.....	174,543 20
Income account.....	12,137 70
Treasurer.....	17,532 49

\$8,506,545 72

OFFICERS.

JOHN CATLIN, *President*.
H. CROCKER, *Vice President*.
WM. JERVIS, *Superintendent*.
WM. TAINOR, *Secretary*.
CHAS. H. WILLIAMS, *Treasurer*.
A. G. MILLER, Jr., *Auditor*.

Pittsburg, Fort Wayne & Chicago R. R.

A Circular over the signature of J. EDGAR THOMSON Esq., President, has just been issued in relation to the present and prospective value of the stock and securities of this Company; copies may be had on application at the Agency, No. 44 Exchange place, M. K. JESUP & Co.

Reciprocity with the British Provinces.

The Portland Board of Trade have sent a memorial to Congress on this subject, from which we make the following extracts:

The great value of the reciprocity treaty of 1854 is shown by the rapid increase of our colonial trade, and the large balance in favor of the United States. By it a right to the fisheries was granted, and a free interchange was allowed of the products of the sea, the forests, the mine and the farm, between the United States and all British North America. The effect of this arrangement is shown in the increase of the trade of the two countries.

We give below a table showing the imports and exports between the United States and British North American Colonies in 1827, in 1849, and since 1852.

The following table shows the trade between the United States and British North America:

	Imports.	Exports.	Total.	Excess of exports.
1827..	\$145,000	\$2,704,014	\$3,149,014	\$2,269,014
1849..	2,826,880	5,932,106	6,758,986	3,105,226
1852..	6,110,299	10,569,016	16,519,305	4,398,717
1853..	7,550,604	13,140,642	20,691,246	5,590,038
1854..	8,927,560	24,566,860	33,494,320	15,639,300
1855..	15,136,734	27,866,020	42,948,754	12,669,286
1856..	21,310,421	29,029,349	50,339,870	7,718,929
1857..	22,124,296	24,262,482	46,386,778	2,138,186
1858..	15,806,510	23,651,727	39,458,246	7,845,208

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Geography of the United States.	Colorado Expedition.
Mountains of North Carolina.	Geography of the United States.
Meteorology of the Proposed	No. 2.
Territories.	American Agriculture.
India: Its Extent and Popula-	Manufactures in the United
tion.	States.
Republic of Ecuador.	Republic of Chile.
Miscellaneous Statistics.	Census of Oregon, 1858.
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IMPORTANT TRUST SALE.**SALE OF THE SAN ANTONIO AND MEXICAN GULF RAILROAD.**

BY virtue of a Deed in Trust, made and executed the thirteenth day of September A. D. 1857, by the San Antonio and Mexican Gulf Railroad Company, of the State of Texas, conveying to the undersigned as Trustees, the property and rights hereinafter described, to secure the payment of certain notes, in said Deed set forth, (amounting with interest, to about \$60,000), which notes have become due and remain unpaid—we shall, on the first Monday in April next, being the 4th day of said month, between the hours of 10 A. M. and 4 P. M. at the Railroad Depot, in the town of Lavaca in the State of Texas, proceed to sell, at public vendue, to the highest bidder, for cash, "All the iron rails, chairs, spikes, turn tables, locomotives, cars, road-bed, ties, and all other material pertaining to, or in any manner designed for the construction of the San Antonio and Mexican Gulf Railroad, now constructed or delivered, whether the same be laid down or not."

JOHN JAMES

JOHN C. FRENCH, Trustees.

SAN ANTONIO, TEXAS, Feb. 1st, 1859.

The Trustees, for the information of purchasers, refer to the subjoined statement, furnished by the President and Directors of the Franchise, Property, etc., of said road:

The rights and privileges of the purchaser or purchasers at this sale, are defined by an act of the Legislature of the State of Texas approved December 19th, 1857, entitled "An act supplementary to and amendatory of an act to regulate Railroad Companies, approved February 7, 1853."

"Sec. 8. The road-bed, track, franchise and chartered rights and privileges of any railroad company in this State, shall be subject to the payment of the debts and legal liabilities of said company, and may be sold in satisfaction of the same; but the said road-bed, track, franchise and chartered powers and privileges shall be deemed one entire thing and sold as such; and in case of the sale of the same, whether by virtue of an execution, order of sale, deed of trust, or any other power, the purchaser or purchasers at such sale, and their associates, shall be entitled to have and exercise all the powers, privileges, and franchises granted to said company by its charter, or by virtue of the general laws of this State; and the said purchaser or purchasers and their associates, shall be deemed and taken to be, the true owners of said charter, rights, privileges and benefits thereof, in the same manner, and to the same extent, as if they were the original corporations of said company; and shall have power to construct, complete, and work the road upon the terms, and under the same conditions and restrictions as are imposed by their charter and the general laws of the State."

DESCRIPTION OF THE PROPERTY.—A section of five miles and 1,034 feet complete, ready for and in actual use; twenty miles of the grading examined and approved by the State Engineer, and five miles of additional grading nearly completed; one twenty ton locomotive in good running order; and eight platform freight cars, and one hand car. About 10,000 cross-ties of the best quality, not laid down upon the road. One new turn-table which has not been put up.

The FRANCHISE is regarded as very valuable, the charters granted to it by a company being among the most favorable of those granted to any Railroad Company by the Legislature of the State of Texas.

The original charter is dated September 5th, 1850, and invests said company "with the rights of locating, constructing, owning and maintaining a Railway, commencing at any suitable point on the Gulf between Galveston and Corpus Christi, and thence running by such course and to such point near the City of San Antonio, as said company shall deem most suitable; and has been amended and continued in force by successive Legislatures, in the present time."

The act of November 14th, 1857, provides that "if twenty-five miles of said road be not completed and equipped on or before the first day of January, 1860, their said charter shall become null and void, and said company shall forfeit all their rights and privileges."

By section 10, of the original charter, it is provided "that the said company shall have power to borrow money on their bonds or notes, at such rates as the directors shall deem expedient."

"Section 10. That said company shall have the right to

charge and receive such rates and prices for the transportation of passengers and freight, as shall not exceed eight cents per mile for passengers, and for freight not exceeding twenty-five cents per one hundred pounds, for every hundred miles the same may be carried."

By Section 1, of the act of February 14th, 1852, it is provided, "that there shall be granted to the San Antonio and Mexican Gulf Railroad Company eight sections of land of 640 acres each, for every mile of railway actually completed by them and ready for use, upon the application of the President of the company, stating that any section of five miles or more of said railway has been completed and is ready for use," etc.

By section 1, of the act of February 13th, 1854, the San Antonio and Mexican Gulf Railroad Company is "invested with the power of continuing their road from the City of San Antonio, by the nearest practicable route, to intersect with the Mississippi and Pacific Railroad, west of the Red Fork of the Colorado River." And by Section 6, of said act "the franchise of said San Antonio and Mexican Gulf Railroad Company, in case they accept the benefits of this Supplemental Act, shall cease and determine at the end of ninety-nine years."

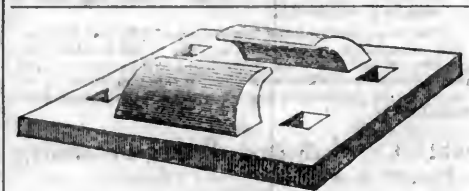
By the act of November 14th, 1857, said company is entitled to the benefits of the act approved January 30, 1854, entitled "An act to encourage the construction of railroads in Texas by donations of land," granting sixteen sections of land, of 640 acres each, or 10,240 acres of land for each mile of railroad constructed, to be received when a section of 25 miles or more is completed. It is also provided by said act, that said company shall be entitled to all the benefits of an act, entitled "An act to provide for the investment of the Special School Fund, in the Bonds of Railroad Companies (previously incorporated) by the State, approved August 13th, 1856," whereby \$6,000 per mile is loaned to Railroad Companies, by the State, in United States five per cent. Bonds, on the completion of a section of twenty-five miles of railroad, and the grading of an additional section of twenty-five miles, ready for the completion of the road.

By the foregoing it will be seen that this company is entitled to receive sixteen sections, or 10,240 acres of land in all, for each mile of road on the completion of a section of twenty-five miles. This land may be received entirely under the provisions of the General Land Law, or half of it under that law, and the other half under the Supplemental Charter approved February 14th, 1852. By the former act the lands are required to be surveyed in "sections of 640 acres each, and in square blocks of not less than six miles, unless prevented by previous surveys or a navigable stream." The State reserving the alternate sections of such blocks; but by the latter act the company may locate "upon any unappropriated domain of the State of Texas," and make its survey to any extent that may be desirable, without being compelled to reserve alternate sections for the State. A privilege of very great value, whether the company locate the certificates or chooses to sell them.

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 The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.
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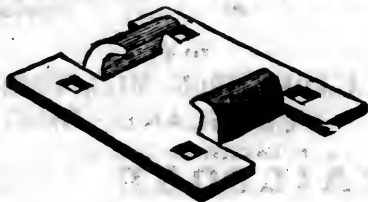
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AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, March 26, 1859.

Pittsburg, Fort Wayne and Chicago R. R.

The circular of this company recently issued, states that a mortgage has been executed on the whole line extending from Pittsburg to Chicago, 467 miles, to secure the payment of \$10,000,000, embracing \$3,500,000 Construction Bonds, and \$6,500,000 Redemption Bonds.

The \$3,500,000 Construction Bonds bear date January 1, 1857, and are intended, as their title implies, for construction purposes. A portion of these bonds has already been expended in payment of liabilities incurred for work done and equipments furnished for the road during 1857 and 1858, upon terms favorable to the company. In order to enable the company to complete the last division of their road, extending from Plymouth, Indiana, to the city of Chicago, a distance of 82 miles, and at the same time withhold those Bonds from market until that object was accomplished, \$650,000 of the issue was pledged to the Pennsylvania Railroad Company, which has also been granted a general control over the affairs of this company, as security for means advanced for that purpose during the past year.

The \$6,500,000 Redemption Bonds are similar in date, tenor and rate of interest to the Construction Bonds, and are intended to provide for the renewal and consolidation of the outstanding funded debt, secured upon three several divisions of the road, as follows:

Ohio and Pennsylvania Bonds secured upon 187 miles in the States of Pennsylvania and Ohio:

First mortgage bonds due in 1865. \$1,000,000
First mortgage bonds due in 1867. 750,000
Income bonds due in 1872 1,991,000

Ohio and Indiana Bonds secured upon

131 miles in Ohio and Indiana:

First mortgage bonds due in 1867. 1,000,000
Second mortgage bonds due in 1873. 380,000
Third mortgage bonds due in 1884. 17,000

Fort Wayne and Chicago bonds secured upon 147 miles in Indiana and Illinois:

First mortgage bonds due in 1873. 1,250,000

Total \$6,388,000

It is stipulated in the general mortgage that these Redemption Bonds can be used for no other purpose than the retiring of the above bonds, either by exchanging them for the outstanding bonds or by sales of the Redemption Bonds, the proceeds of which are to be applied by the Trustees in the payment of the above issues as they mature. The advantage to the holders of the old bonds—which are secured upon but a single division—of exchanging them for bonds having the greater security of a lien upon the whole road, with all its rolling stock and appurtenances, must lead to the exchange of all the issues for the Redemption Bonds at par prior to their maturity.

A sinking fund has been arranged by resolution of the Board of Directors, commencing Jan. 1, 1858, of three-fourths of 1 per cent. per annum for the first ten years, and of 1 and 1½ per cent. per annum thereafter, which it is intended to increase to an amount adequate to the redemption of the whole loan at maturity.

The financial condition and cost of the whole road, when fully equipped, including valuable depots, all the real estate of the company, and discounts on bonds is estimated at \$17,836,500.

This amount will be represented by

Capital Stock now paid in \$6,260,000
Mortgage Construction Bonds 3,500,000
Mortgage Redemption Bonds 6,500,000
Real Estate Bonds, secured by lands other than the roadway, depots, &c... 803,000
Other Securities 773,500

Making total cost of road, equipment, &c..... \$17,836,500

The total debt of the company will not exceed 11,576,000

Of which, the Real Estate bonds, by sales of real estate on which they are based will extinguish 803,000

Balance \$10,773,000

The cost of the road and equipment per mile

will be about \$38,000, and the mortgage debt but \$23,000 per mile.

The interest on the entire debt, when the road is fully completed and equipped, will amount to about \$830,000, to obtain which the company must receive from its traffic \$1,750,000. That this amount will be obtained, it is only necessary to state that the road, extending to Plymouth, 82 miles short of its present terminus at Chicago, received \$1,652,727 in 1857. During 1858, with the same length of line in use, the total receipts were nearly the same, notwithstanding the depressed condition of the trade of the country.

[A table is here given of the earnings, for the last three years, of the ten trunk lines leading into Chicago, for the purpose of showing that the earnings of this company fall off in less ratio than any other. This table, together with another, giving the earnings in 1858, of all the roads leading into that city, will be found in the *JOURNAL* of the 5th inst., under the head of "Chicago and its Railways."]

The table shows a falling off in receipts in these ten lines of \$1,384,727 61 in 1857 from those in 1856, and \$3,230,491 92 in 1858 from those of 1857. The total decrease between the years 1856 and 1858 is \$4,621,219 52—an amount equal to more than 33½ per cent. of the business of all the roads in the first named year. The falling off on the P., F. W. & C. R. R. was only 5 per cent.

If such results have been obtained from an incomplete line, it is fair to estimate that they will be exceeded hereafter to an extent proportionate to the additional length of road in use, and that an increase of revenue will be realized, sufficient to swell the gross receipts to an amount exceeding \$2,000,000 per annum, and net receipts adequate to meet all the current liabilities of the Company.

The route of the road is very favorable. In traversing the whole width of the States of Ohio and Indiana, and a distance in Illinois equal to nearly one-half the breadth of the State, it passes through or near to more than one hundred important towns. The route through Pennsylvania and Ohio is densely populated, and in Indiana and Illinois passes through country either heavily timbered or prairie land, about one-half of which is well adapted for grazing, the remainder is rolling land of the most fertile character, generally in a high state of cultivation. A portion of the 82 miles completed lately, passes through the best part of this region, already developed by the northern lines of railroad, the trade of which will hereafter seek this shorter avenue to Chicago or the seaboard. The lumber from the timber lands now being rapidly cleared, finds a ready market at various points along the road, and affords a remunerative local tonnage.

In every feature of adaptation for a large traffic and economy in the operation and maintenance of the road, it is equal to any line of corresponding importance in this country; and forming, as it does, in connection with the Pennsylvania Railroad the best and shortest practicable route from Chicago and the whole North-west to the seaboard cities of Baltimore, Philadelphia and New York—the distance from the latter city to Chicago, by this line through Philadelphia being but 908 miles, while by the New York Central and Great Western of Canada, the next shortest, it is 953—this road possesses advantages which will hereafter tend to attract to it a large and constantly increasing traffic never to be diverted from it over longer and less favorable lines.

Exploration of the Rocky Mountains in the British Possessions.

At a recent meeting of the Royal Geographical Society, a paper was communicated by Sir E. Bulwer Lytton, Colonial Secretary, giving the results of the explorations of the Rocky Mountains lying in the British Possessions, made by Capt. Palliser, under the direction of the British Government. The paper states that several practical passes had been discovered leading through the mountains, which are enumerated as follows:

1, from the south branch of the Saskatchewan to Kutanie River two—i. e., Kananaski Pass and Vermillion Pass; 2, from Kutanie River to Columbia two—i. e., the Lake Pass and Beaver Foot Pass; 3, from the south branch of the Saskatchewan to north branch one—i. e., the Little Fork Pass; and, 4, from the south branch of the Saskatchewan to the Columbia one—i. e., the Kicking Horse Pass. In addition to these discovered passes, the Northern Kutanie Pass has been laid down, and found to be entirely within the British territory, and has been named British Kutanie Pass. After the reading of these highly important papers, the President, in commenting upon the reports which had been read, reminded the Fellows that the expedition was fostered in the first instance by the Geographical Society, and that they had therefore great reason to be proud of such successful results as those which had attended it. After briefly alluding to the praiseworthy efforts made by Palliser and his associates, Hector, Blackiston and Sullivan, in a preceding year, in defining the nature of the great region between Lake Superior and Lake Winnipeg, and thence extending to the Red River Settlement, (a region also explored by men of science sent thither by the Canadian Government,) he begged the gentlemen who might be disposed to speak to confine their attention chiefly to the last discoveries, which indicated, first, the rich quality of the soil over a vast prairie country, watered by the upper affluents of the north and south Saskatchewan River, and next the existence of passes through the Rocky Mountains within the British Territory—i. e., between 49 deg. and 51½ deg. north latitude, which had been for the first time examined by men of science, who had determined the geographical position, the relative altitudes of the mountains, and their mineral characters. He pointed out that it was a remarkable and satisfactory datum that, although in this portion of its range the chain rose to much loftier summits than in its prolongation to the south, the depressions, or passes, in it were now shown to be about 2,000 feet lower than those by which the Americans can travel into the central parts of California. After adverting to the great interests which necessarily attached to these discoveries in relation to the establishment of a line of intercourse between the great eastern or Atlantic watershed of British North America and the newly-established colony of British Columbia, with its gold fields on *terra firma*, and the great coal deposits of Vancouver's Island on the Pacific, he hoped that persons who had long studied the subject, such as Mr. John Ball, lately of the Colonial office; Mr. Edward Ellice, who had so much knowledge of British North America and so large a stake therein; Lord Bury, who had recently re-

turned from that country, &c., would address the meeting. Mr. Ball and Lord Bury having spoken at some length, the President, in adjourning the meeting, stated that Sir E. B. Lytton, had not only kindly communicated the despatches which had been read, but had further acceded to the request of Capt. Palliser and Dr. Hector that they might be permitted to return to England next summer, revisiting the passes they had discovered, and exploring British Columbia on their road to the shores of the Pacific.

It is to be regretted that the elevation of the above described passes was not given absolutely, instead of by comparison with those over which Americans pass on the central route between the Eastern States and California. One of these, called the Cochetope, is 10,000 feet above the sea. The passes lying next to this, both north and south, are elevated 8,000 feet; so that if those discovered by Capt. Palliser are 2,000 feet lower, still they are equally elevated as the pass on the line of the proposed Railroad, in the parallel of 47°. But it must be borne in mind that the plains at the eastern base of the Rocky Mountains are much lower, probably 1,500 feet, in the British Possessions than in the United States. Their ascent, consequently, may be much more abrupt and difficult than of those in the United States. It is not so much the absolute height of the ground that is the chief obstacle to the construction of a railroad, as the shortness of the distance by which it is to be overcome.

We look forward with much interest to Capt. Palliser's official report. It must prove of great value in illustrating the geography of the country, as well as in reference to the proposed lines of railroad across the continent.

Rock Island Bridge.

Captains A. A. Humphreys, George Meade and Wm. B. Franklin, of the Topographical Engineers, have been constituted a Board of Engineers, with instructions to examine and report upon the construction of the Rock Island bridge, in its bearings on the navigation of the river.

The following is a statement of the points to be considered and made the subject of the report:

1. Whether the railroad bridge, which crosses the Mississippi river between Rock Island and Davenport, is constructed according to correct principles, reference being had to the interests of navigation.
2. Whether the piers of said bridge are of the best form, and if not, whether the best form is practicable at that place, and what is the effect of the defective form.
3. Whether any of the piers are larger than necessary, and if larger, how much larger, and what is the effect of this increased size upon the passage of water and of steamboats.
4. Whether the piers are placed as near as possible parallel with the current, and if not parallel, find the angle as near as possible, and ascertain the effect of the obliquity upon the passage of the water and of steamboats.
5. Ascertain the velocity of the current above and below the bridge, and in the draw passage.
6. Ascertain the size as near as possible and the positions of the eddies near the steamboat passage, and whether they interfere with the passage of steamboats.
7. Ascertain as nearly as possible the height and extent of the *remons*, caused by the pier in which the draw turns.
8. If said bridge is badly located, and is an obstruction to the passage of steamboats and rafts, ascertain if there is any point in the vicinity where a bridge might have been located so as to have caused less obstruction.

9. And to make such other examinations as the Board may deem necessary during the progress of the investigations.

The report of the Board will be made to the Colonel of the Topographical Engineers.

New York Canals.

(Continued from p. 180.)

The following table presents the cost of transportation per ton on the canals during the period embraced in the preceding tables on up and down freight, the tolls paid to the State, and the carriers' charge. The uniform rates of toll maintained from 1834 to 1845, and from 1846 to 1851, inclusive, show that the carrying trade was controlled by the canals, and that revenue was the main object of their imposition. The reduction which took effect upon the business of 1846 was the result of an arrangement between the authorities of this State, Pennsylvania and Ohio, after the completion of the canals in those States. The bonus paid in 1851 for the competition in the canal trade, which has since been actively and successfully carried on, not for the benefit of trade within our State, not to promote or develop a single interest within our borders, or to alleviate the burthens of our people, and the consequent effort in 1852 to retain trade by a further reduction of tolls, are remarkable exhibitions of a mistaken policy and of unwise and inconsiderate legislation. A reduction in tolls from \$10.22 per ton to \$1.46, on up freight, and from \$5.11 per ton to 1.46, on down freight, between 1830 and 1858, will not fail to attract public attention, and excite enquiries in regard to the present rates and the future prospects of the State upon this great and vitally important question.

In another portion of this report the Auditor will show by facts and figures that, although the State has lost revenue by the reduction in rates, it has not retained or secured a ton of traffic to the canals, in consequence of that reduction, if the cost of transportation has any influence upon the course of trade.

The arguments in favor of these positions are that the price of transportation has no influence whatever on the course of the freight traffic of certain property and goods composing a part of our internal trade, and, as to another portion of that trade, there is no competition between the canals and railroads, and the latter take the whole of it. The internal traffic of the country is governed by the same laws of trade as governs the external commerce of the country. Production and consumption, or supply and demand, our internal as well as foreign trade is based on these two elements of commerce. If the supply were illimitable, no more of it would be carried to market than the consumption and export demand called for.—But there is a maximum of production that cannot be exceeded, and which will fall far below the fond anticipation of many of our people.

Up freight, per ton, from Albany to Buffalo.			
Year.	Average per y'r.	Tolls deducted.	Leaving freight.
1830.....	\$20 00	\$10 22	\$9 78
1831.....	19 80	10 22	9 58
1832.....	20 00	10 22	9 78
1833.....	14 80	8 76	6 04
1834.....	16 40	6 57	9 83
1835.....	16 00	6 57	9 43
1836.....	21 00	6 57	14 43
1837.....	18 60	6 57	12 03
1838.....	17 80	6 57	11 23
1839.....	17 80	6 57	11 23
1840.....	16 60	6 57	10 03
1841.....	12 20	6 57	5 63
1842.....	13 20	6 57	6 63
1843.....	11 20	6 57	4 63
1844.....	13 00	6 57	6 43
Total.....	\$248 40	\$111 69	\$136 71
Average.....	16 56	7 45	9 11

1845.....	\$9 60	\$6 57	\$3 03
1846.....	8 00	4 80	3 20
1847.....	7 80	4 80	3 00
1848.....	7 80	4 80	3 00
1849.....	7 80	4 80	3 00
1850.....	7 20	4 80	2 40
1851.....	6 20	4 40	1 80
1852.....	5 20	2 92	2 28
1853.....	5 60	2 92	2 68
1854.....	5 00	2 92	2 08
1855.....	5 00	2 92	2 08
1856.....	5 40	2 92	2 48
1857.....	4 80	2 92	1 88
1858.....	2 80	1 46	1 34

Total.....	\$88 20	\$53 95	\$34 25
Average.....	6 30	3 85	2 45
Total, 29 years.....	336 60	165 64	170 96
Aver. for 29 years.....	11 61	5 71	5 90

Average from to			
1830-1834, incl. 5 y.	\$18 20	\$9 20	\$9 00
1835-1839, do.	18 24	6 57	11 67
1840-1844, do.	13 24	6 57	6 67
1845-1849, do.	8 20	5 15	3 05
1850-1854, do.	5 84	3 59	2 25
1855-1858, 4 years,	4 50	2 55	1 94

Down freight per ton, from Buffalo to Albany.

Year.	Average for y'r.	Tolls deducted.	Leaving freight.
1830.....	\$9 07	\$5 11	\$3 96
1831.....	8 89	5 11	3 78
1832.....	9 26	5 11	4 15
1833.....	8 15	3 65	4 50
1834.....	7 68	3 28	4 40
1835.....	6 29	3 28	3 01
1836.....	7 13	3 28	3 85
1837.....	7 00	3 28	4 22
1838.....	6 76	3 28	3 48
1839.....	6 94	3 28	3 66
1840.....	7 50	3 28	4 22
1841.....	6 57	3 28	3 29
1842.....	6 02	3 28	2 74
1843.....	5 56	3 28	2 28
1844.....	5 56	3 28	2 28
Total.....	\$108 88	\$55 06	\$53 82
Average.....	7 26	3 67	3 59
1845.....	\$6 57	\$3 28	\$3 29
1846.....	5 92	2 92	3 00
1847.....	7 13	2 92	4 21
1848.....	5 37	2 92	2 45
1849.....	5 18	2 92	2 26
1850.....	5 48	2 92	2 56
1851.....	4 71	2 19	2 52
1852.....	4 90	2 19	2 71
1853.....	5 18	2 19	2 99
1854.....	4 81	2 19	2 62
1855.....	4 81	2 19	2 62
1856.....	5 56	2 19	3 37
1857.....	4 26	2 19	2 07
1858.....	3 14	1 46	1 68
Total.....	\$73 02	\$34 67	\$38 35
Average.....	5 21	2 48	2 74
Total, 29 years.....	181 90	89 73	92 17
Yearly Av. 29 y'rs..	6 27	3 09	3 18

Average from to			
1830-1834, incl. 5 y.	\$8 61	\$4 45	\$4 16
1835-1839, do.	6 92	3 28	3 64
1840-1844, do.	6 24	3 28	2 96
1845-1849, do.	6 03	2 99	3 04
1850-1854, do.	5 02	2 34	2 68
1855-1858, incl. 4 y.	4 44	2 01	2 44

SERIES OF TABLES.

The following series of tables have been prepared to show the tendency of trade on the canals.—The remarks preceding each statement explain their object and contents fully.

The total tonnage of all the property on the canals, ascending and descending, its value, and the amount of tolls collected for the twenty-three years preceding, is as follows:

Year.	Tons.	Value.	Tolls.
1836.....	1,310,807	\$67,634,343	\$1,614,342
1837.....	1,171,276	55,809,288	1,292,623
1838.....	1,333,011	65,746,559	1,590,911
1839.....	1,435,713	73,399,764	1,616,382
1840.....	1,416,046	66,303,892	1,775,747
1841.....	1,521,661	92,202,929	2,034,882
1842.....	1,236,931	60,016,608	1,749,196
1843.....	1,513,439	76,276,909	2,081,590
1844.....	1,816,586	90,921,152	2,446,374
1845.....	1,985,011	100,553,245	2,646,181
1846.....	2,268,662	115,612,109	2,756,106
1847.....	2,869,810	151,563,428	3,635,381
1848.....	2,796,230	140,086,157	3,252,211
1849.....	2,894,732	144,732,285	3,268,226
1850.....	3,076,617	156,397,929	3,273,899
1851.....	3,582,733	159,981,801	3,329,727
1852.....	3,863,441	196,603,517	3,118,244
1853.....	4,247,852	207,179,570	3,204,718
1854.....	4,165,862	210,284,312	2,773,566
1855.....	4,022,617	204,390,147	2,805,077
1856.....	4,116,082	218,327,062	2,748,203
1857.....	3,344,061	136,997,018	2,045,641
1858.....	3,665,192	185,568,844	2,110,754

The total tons coming to tide-water from Erie and Champlain canals for each of the last twenty-five years, and the aggregate value thereof in market, was as follows:

Years.	Tons.	Value.
1834.....	553,596	\$13,405,022
1835.....	753,191	20,525,446
1836.....	696,374	26,932,470
1837.....	611,781	21,822,354
1838.....	640,481	23,038,510
1839.....	602,128	20,163,109
1840.....	669,012	23,213,573
1841.....	774,334	27,225,322
1842.....	666,626	22,751,013
1843.....	836,861	28,453,408
1844.....	1,019,094	34,183,167
1845.....	1,204,943	45,452,321
1846.....	1,362,319	51,105,256
1847.....	1,744,283	73,092,414
1848.....	1,447,905	50,883,907
1849.....	1,579,946	52,375,521
1850.....	2,033,637	55,474,637
1851.....	1,977,151	53,927,508
1852.....	2,234,822	66,893,102
1853.....	2,505,797	73,688,044
1854.....	2,223,743	72,120,681
1855.....	1,895,593	74,377,937
1856.....	2,123,469	74,286,734
1857.....	1,617,187	51,190,018
1858.....	1,985,142	61,536,061

The whole quantity of wheat and flour which came to the Hudson river, from 1834 to 1858, inclusive, with the aggregate market value of the same, and the amount of tolls received on all the wheat and flour transported on the canals in each year, from 1837 to 1858, inclusive, is as follows:

Year.	Tons.	Value.	Tolls.
1834.....	130,452	\$5,712,795	Not ascert'd.
1835.....	128,552	7,995,939	do
1836.....	124,982	9,796,540	do
1837.....	116,491	9,640,156	\$301,739
1838.....	133,080	9,833,586	380,161
1839.....	124,683	7,217,841	404,525
1840.....	244,862	10,362,862	700,071
1841.....	201,360	10,165,355	921,046
1842.....	198,231	9,284,778	606,727
1843.....	248,780	10,283,454	731,816
1844.....	277,865	11,211,677	816,711
1845.....	320,463	15,962,950	851,533
1846.....	419,366	18,836,412	1,099,325
1847.....	551,205	32,890,938	1,460,424
1848.....	431,641	21,148,421	1,126,133
1849.....	434,444	19,308,595	1,128,064
1850.....	461,781	20,218,188	1,114,519
1851.....	457,624	16,487,652	867,881
1852.....	576,772	22,564,256	995,160
1853.....	618,858	30,034,571	998,962
1854.....	240,655	18,482,377	363,763
1855.....	301,125	23,163,681	548,946
1856.....	475,385	29,098,973	709,640
1857.....	263,141	14,043,581	456,350
1858.....	454,831	19,632,087	529,254

The tons of wheat and flour shipped at Buffalo and Oswego, from the year 1835 to 1858, at Black Rock, from 1839 to 1858, inclusive, and at Tonawanda, from 1850 to 1858, and the total tons of wheat and flour which arrived at the Hudson river, were as follows:

Year.	Buffalo, tons.	Black Rock, tons.	Tonawanda, tons.	Oswego, tons.
1835.....	15,935	.....	.....	14,888
1836.....	24,154	.....	.....	13,591
1837.....	27,206	.....	.....	7,429
1838.....	57,977	.....	.....	10,010
1839.....	60,082	7,697	.....	15,108
1840.....	95,573	12,825	.....	15,075
1841.....	106,271	24,843	.....	16,677
1842.....	107,522	13,035	.....	14,338
1843.....	146,126	12,882	.....	25,858
1844.....	145,510	15,669	.....	42,293
1845.....	118,614	17,066	.....	44,560
1846.....	247,860	16,564	.....	63,905
1847.....	380,053	18,489	.....	87,329
1848.....	253,325	19,376	.....	90,411
1849.....	229,983	22,196	.....	119,201
1850.....	205,457	24,256	13,815	133,473
1851.....	229,526	25,457	23,316	146,204
1852.....	246,362	33,336	31,868	182,434
1853.....	219,868	33,704	34,697	227,631
1854.....	115,468	13,310	5,147	72,975
1855.....	219,111	11,914	3,255	124,004
1856.....	233,200	4,071	502	222,542
1857.....	209,727	.....	4,097	104,322
1858.....	332,174	.....	8,051	172,674

Total tons arrived at tide-water.

Year.	Total tons.	arrived at tide-water.
1835.....	30,823	128,552
1836.....	37,745	124,982
1837.....	34,635	116,491
1838.....	67,987	133,080
1839.....	82,887	124,683
1840.....	123,473	244,862
1841.....	147,791	201,360
1842.....	134,895	198,231
1843.....	184,866	248,780
1844.....	203,472	277,865
1845.....	180,240	320,463
1846.....	328,329	419,366
1847.....	485,871	551,205
1848.....	363,112	431,641
1849.....	371,380	434,444
1850.....	377,001	461,781
1851.....	424,503	457,624
1852.....	494,000	576,772
1853.....	515,900	613,858
1854.....	206,900	240,655
1855.....	358,284	302,125
1856.....	460,315	475,385
1857.....	318,146	263,141
1858.....	512,899	454,831

NOTE.—Office at Black Rock abolished in 1857.

A Table showing the tendency of the lockages upon the Erie Canal, at various points, for a series of years, is as follows:

Year.	Lock No. 1, Albany.	Port Schuyler side cut lock.	West Troy side cut.	Total to & from the Hudson river.	Lock 3 miles west of Schenectady.
1835.....	21,410	.....	15,703	37,113	25,798
1836.....	22,451	.....	16,001	38,452	25,616
1837.....	24,618	.....	13,942	38,560	21,055
1838.....	23,478	.....	16,418	39,896	25,962
1839.....	.....	.....	.....	.....	24,234
1840.....	.....	.....	.....	.....	26,987
1841.....	.....	.....	.....	.....	30,320
1842.....	.....	.....	.....	.....	22,869
1843.....	17,326	3,258	12,089	32,673	23,184
1844.....	20,845	4,243	13,749	38,837	28,219
1845.....	18,963	9,127	12,968	41,058	30,452
1846.....	18,169	11,495	16,196	45,860	33,431
1847.....	23,743	15,363	15,124	54,230	43,957
1848.....	19,519	6,940	16,255	42,714	34,911

Year.	Syracuse lock.	Geddes lock.	Lockport locks.	Black Rock, guard lock.	Junction lock, Champlain Canal.
1849....	19,355	9,888	17,609	46,852	36,918
1850....	18,382	8,984	24,056	51,422	38,444
1851....	19,907	10,054	26,838	56,799	40,396
1852....	20,178	8,086	29,104	57,368	41,572
1853....	19,940	8,566	25,390	53,826	42,967
1854....	16,258	10,626	19,903	46,787	35,981
1855....	14,622	6,115	17,582	38,319	30,873
1856....	12,408	10,742	22,804	46,044	31,223
1857....	7,494	5,454	15,826	28,774	22,182
1858....	11,412	5,824	16,138	33,374	23,474

Year.	Syracuse lock.	Geddes lock.	Lockport locks.	Black Rock, guard lock.	Junction lock, Champlain Canal.
1835....	22,258	18,280	10,925	11,206	11,969
1836....	21,692	17,038	13,808	11,246	11,248
1837....	18,181	15,207	10,041	11,173	.....
1838....	20,383	18,557	.....	.....	.....
1839....	.....	.....	.....	.....	.....
1840....	.....	.....	.....	.....	.....
1841....	.....	.....	.....	.....	.....
1842....	19,397	16,069	11,697	11,097	8,813
1843....	21,165	17,447	11,697	12,719	8,164
1844....	25,198	20,044	12,994	14,554	10,999
1845....	28,203	23,052	15,665	14,296	8,647
1846....	32,212	25,225	20,033	16,347	9,771
1847....	39,149	31,650	26,327	27,295	10,174
1848....	34,760	29,066	20,255	19,470	9,465
1849....	38,634	28,740	20,124	18,181	10,397
1850....	41,170	27,799	21,111	20,103	12,801
1851....	.....	29,555	25,094	20,515	13,861
1852....	38,933	29,952	25,164	20,830	13,478
1853....	35,559	29,332	20,839	19,476	13,313
1854....	32,813	29,088	23,152	18,632	14,693
1855....	29,365	28,858	20,752	18,245	13,528
1856....	28,547	20,788	18,538	15,894	15,873
1857....	25,699	16,337	16,374	12,503	9,291
1858....	27,054	16,957	15,117	13,050	8,912

Trade of this State and of Western States.

The following table shows for each of the preceding twenty-four years how much of the tolls received in each year of navigation was on "products from Western States," how much was on products of this State, and how much was on "merchandise going from tide-water."

Year.	Tolls on agricultural and other products.	From other States.	From this State.	Merchandise from tide-water.	Total on all canals.
1835..	\$153,063	\$884,049	\$510,997	\$1,548,109	
1836..	211,756	853,022	549,564	1,614,336	
1837..	160,116	723,756	408,751	1,292,623	
1838..	247,241	803,967	539,703	1,590,911	
1839..	310,072	756,723	549,587	1,616,382	
1840..	427,480	865,758	482,510	1,775,778	
1841..	500,630	924,326	609,927	2,034,883	
1842..	467,792	827,841	453,565	1,749,198	
1843..	623,297	892,151	566,142	2,081,590	
1844..	676,032	1,088,274	682,068	2,446,374	
1845..	677,922	1,240,678	727,582	2,646,182	
1846..	1,013,478	1,100,699	641,929	2,756,106	
1847..	1,583,500	1,213,761	837,943	3,635,204	
1848..	1,157,905	1,213,060	881,402	3,252,367	
1849..	1,101,860	1,261,229	905,137	3,268,226	
1850..	1,137,731	1,222,877	913,291	3,273,899	
1851..	1,251,390	1,027,124	1,051,213	3,329,727	
1852..	1,304,018	1,013,990	799,650	3,118,244	
1853..	1,383,422	945,968	875,328	3,204,718	
1854..	985,647	1,007,847	780,072	2,773,566	
1855..	1,148,098	857,359	799,620	2,805,077	
1856..	1,247,765	743,668	756,770	2,748,203	
1857..	899,380	674,057	472,204	2,045,641	
1858..	944,109	888,259	278,386	2,110,754	

The statement below gives the total tonnage arriving at tide-water, by way of the Erie canal for a series of twenty-three years, distinguishing between the tonnage from this State and the tonnage from western States.

Year.	From west'n States.	From this State.	Total tons.
1836.....	54,219	364,906	419,125
1837.....	56,255	331,251	387,506
1838.....	83,233	336,016	419,249
1839.....	121,671	264,596	386,267
1840.....	158,148	309,167	467,315
1841.....	224,176	308,344	532,520
1842.....	221,477	258,672	480,149
1843.....	256,376	378,969	635,345
1844.....	308,025	491,791	799,816
1845.....	304,551	655,039	959,590
1846.....	506,830	600,662	1,107,492
1847.....	812,840	618,412	1,431,252
1848.....	650,154	534,183	1,184,337
1849.....	768,659	498,068	1,266,724
1850.....	773,858	598,001	1,371,859
1851.....	966,993	541,684	1,508,677
1852.....	1,151,978	492,721	1,644,699
1853.....	1,213,690	637,748	1,851,438
1854.....	1,100,526	602,167	1,702,693
1855.....	1,092,876	327,839	1,420,715
1856.....	1,212,550	374,680	1,587,230
1857.....	919,998	197,201	1,117,199
1858.....	1,273,099	223,588	1,496,687

The following statement corroborates the two previous ones as to the diminution of the surplus production of our own State. The results in the second column are arrived at by assuming that all the flour and wheat from the Western States arrived at tide-water, and by deducting it from the total arrival at tide-water. In turning wheat into barrels the practice has been followed of calling five bushels a barrel. It is not strictly accurate, but as it is done for the whole series, it answers for the purpose of a comparison of years. The average price of flour each year at Albany is also given.

Year.	Barrels from Western St.	Barrels from this State.	Barrels arriving at tide-water.	Price.
1835....	268,259	868,561	1,136,778	\$6 50
1836....	317,108	775,979	1,093,087	8 75
1837....	284,902	747,676	1,032,578	9 50
1838....	552,283	637,036	1,189,319	8 50
1839....	683,509	425,544	1,109,053	6 50
1840....	1,066,615	1,080,084	2,146,699	4 84
1841....	1,232,987	596,657	1,829,644	6 00
1842....	1,146,292	543,064	1,776,051	5 18
1843....	1,568,645	670,532	2,239,177	4 56
1844....	1,727,714	746,939	2,474,653	4 50
1845....	1,553,740	1,288,416	2,842,156	5 57
1846....	2,723,474	929,330	3,652,804	5 05
1847....	3,989,232	791,106	4,780,338	6 84
1848....	2,983,688	770,114	3,753,802	5 58
1849....	2,842,821	886,938	3,729,759	5 00
1850....	3,084,959	905,277	3,990,236	5 00
1851....	3,495,734	495,467	3,991,201	4 00
1852....	3,937,366	877,731	4,815,097	4 53
1853....	3,992,289	957,984	4,950,273	5 77
1854....	1,586,961	367,252	1,954,213	9 25
1855....	2,596,780*	.....	2,375,415	9 75
1856....	3,209,741	276,034	3,485,775	7 60
1857....	2,227,092*	.....	1,988,226	6 53
1858....	3,778,069*	.....	3,563,901	5 50

The number and tonnage capacity of the boats built and registered in each year since 1843, has been as follows:

Year.	Boats.	Tons.	Av. of boat. Tons.
1844.....	378	24,360	64
1845.....	297	19,781	67
1846.....	477	34,630	73
1847.....	1,466	110,745	76
1848.....	457	33,815	74

* The arrival at tide-water in these years, being less than the quantity from Western States, is proof of one of two things—either that none of the surplus product of this State came by the canal in those years, or, that if it did, its place was supplied from the west.

Year.	Av. cargo of boat.	Day's time betw'n Buffalo and Albany.	Toll and freight on a barrel of flour.	Lockage at Alexander's lock.	Tons delivered at tide-water from Erie canal.
1841..	41	9	71 cts.	30,320	532,520
1844..	49	7 1/2	60 "	28,219	799,816
1847..	67	10 1/2	77 "	43,957	1,431,252
1848..	71	9	58 "	34,911	1,184,337
1849..	68	8 3/4	56 "	36,918	1,266,724
1850..	76	9	58 "	38,444	1,554,675
1851..	78	8 1/2	49 "	40,396	1,508,677
1852..	80	9	53 "	41,572	1,644,699
1853..	84	9	56 "	42,967	1,851,438
1854..	94	8 1/2	52 "	35,981	1,702,693
1855..	92	8 1/2	52 "	30,873	1,420,715
1856..	100	8 1/2	60 "	31,223	1,587,130
1857..	100	8 1/2	46 "	22,182	1,117,199
1858..	126	8 1/2	34 "	23,474	1,496,687

An interesting exhibit of the average tonnage of the boats, of the time necessary to make a passage, and the cost to bring a barrel of flour from Buffalo to Albany, of the lockages at Alexander's lock, and the total tons delivered at tide-water from the Erie canal, is as follows:

Year.	Av. cargo of boat.	Day's time betw'n Buffalo and Albany.	Toll and freight on a barrel of flour.	Lockage at Alexander's lock.	Tons delivered at tide-water from Erie canal.
1841..	41	9	71 cts.	30,320	532,520
1844..	49	7 1/2	60 "	28,219	799,816
1847..	67	10 1/2	77 "	43,957	1,431,252
1848..	71	9	58 "	34,911	1,184,337
1849..	68	8 3/4	56 "	36,918	1,266,724
1850..	76	9	58 "	38,444	1,554,675
1851..	78	8 1/2	49 "	40,396	1,508,677
1852..	80	9	53 "	41,572	1,644,699
1853..	84	9	56 "	42,967	1,851,438
1854..	94	8 1/2	52 "	35,981	1,702,693
1855..	92	8 1/2	52 "	30,873	1,420,715
1856..	100	8 1/2	60 "	31,223	1,587,130
1857..	100	8 1/2	46 "	22,182	1,117,199
1858..	126	8 1/2	34 "	23,474	1,496,687

Cost of Transportation from the Western States by Canal and Railroads.

The cost of transportation to and from the Atlantic market is a subject of great commercial importance, not only to our own State, but to those portions of the country with which we have, or expect to have, intimate business relations. We have had, for thirty years past, the great bulk of the carrying trade of the western and lake countries, and we can and may maintain that position, through the medium of our canals, if we choose to do so, without imposing onerous burthens upon trade, or taxing our people to support it.

A comparative statement of the difference in the cost of transportation by railroad and canal cannot fail to show that we need have no fears of a division of trade during the season of navigation, caused by high prices on freights at home, and that we should not entertain any frightful apprehensions as to the fate of our commercial emporium while our canal and river navigation is suspended.

It is understood that at a late convention of the railroad companies, extending from the Atlantic coast into the lake region, and embracing the four great lines, two of them terminating at New York, one at Philadelphia, and the other at Baltimore, a tariff on freight from Chicago to New York was agreed to by the parties. By this tariff the charge for transporting first class freight was fixed at \$31.10 per ton; second class, \$23.20; third class, \$20.00; and fourth class, \$15.20. The same rates are fixed upon all first, second and third class freights going west, and all barrel freight, except flour, can only be carried by actual weight. Taking the average of lake charges from Chicago to Buffalo in 1857, and the canal charges from Buffalo to New York in 1858, during the last season, the cost of transportation through by lake and canal from Chicago to New York was \$5.00 per ton for corn, and \$5.80 for wheat, including canal tolls.—On flour the charge per ton, from Buffalo to New York, has been \$3.98, also including tolls. It is understood that the canal and lake rates on up freights have not exceeded six dollars per ton to the upper lakes, including tolls. The charges by the Oswego route are assumed to be quite as favorable to trade as the Buffalo route.

If the railroads exact their published rates, and they have agreed with each other they will do so, except in cases where the rates by all rail shall be different from the rates partly by water and partly by rail, when full rates must be charged on the distance carried by rail, it is not perceived how there can be any chance for competition, unless parties choose to pay from two to five hundred per cent. more for rail freight than would be required on the canal. If parties can afford to pay these high charges for rail transportation, the difference of canal tolls on the transit through this State, with the advantages of water carriages at both terminations, would be no hindrance to trade over our rail lines, nor would it cause the least diversion from the easiest, cheapest and most safe and expeditious route to the Atlantic market.

The average cost of transporting fifty tons of freight through to Chicago by all rail, at published rates, would be \$1,116, while by river, canal and lake, that cost would be less than four hundred dollars. The average charge per ton per mile by rail, on the shortest or Cristline route to Chicago, is 2 45-100 cents, while by lake, canal and river the charge, according to the highest rates given, would not exceed 4 62-100 mills per ton a mile.

The following table of distance has been carefully compiled, and shows the miles by railroad from Baltimore, Philadelphia, New York and Portland, on the Atlantic, to Chicago, the grain mart of the West, and other competing points in the lake country. These rail distances are such as to dispel all apprehension of successful competition, at the rate charged, by any of the routes outside of this State, and by roads not connecting with the New York termination of the Western lakes. The water distance from Buffalo to Chicago is 916 miles, which at the highest lake rates, compared with rail rates, is only equal to about 112 miles of railroad distance in cost of transportation:

	Miles.
From New York to Chicago by the Pennsylvania Railroad, through Pittsburg, Cleveland and Toledo,.....	935
From New York to Chicago, by the New York and Erie, Lake Shore, and Michigan Southern railroads,.....	957
From New York to Chicago, by the New York Central, Great Western of Canada, and Michigan Central railroads,.....	957
From New York to Baltimore,.....	186
From Baltimore to Cincinnati, by the Baltimore and Ohio, and Central Ohio railroads,.....	632
From Cincinnati to Chicago,.....	310
	1,128
From New York to Philadelphia,.....	88
From Philadelphia to Pittsburg,.....	358
From Pittsburg, by Cristline, Fort Wayne, to Chicago—the new route..	465
	911
From Portland to Detroit, by Montreal, Toronto and Hamilton, Canada West.	851
Detroit to Chicago, via Michigan Central Railroad,.....	282
	1,133
From Detroit to Albany, by Great Western, Canada, and New York Central railroads,.....	533
From Albany to New York, by river or railroad,.....	150
	683

The water lines with the New York Central railroad make the rail distance to Chicago less than 450 miles, and in connection with the New York and Erie via Dunkirk, that distance is about 570 miles, in cost of transportation at established rates. Hence it costs no more to carry a ton of freight from New York to Chicago by river, canal and lake, 1,425 miles, at the rates above given, than the rail carriage on 270 miles will cost.

It was once the policy of the State to impose rates of toll upon the canals that looked mainly but not exclusively to revenue. It was never intended these great works should be a burthen upon the public, or that resort should be had to

permanent taxation for their construction and maintenance, either directly or collaterally. Nor was it ever expected or anticipated that trade would be so burthened in its transit through the canals as to produce diversion through other channels to other markets than our own, or to invite illegitimate and ruinous competition.

At the rail rates above given, it will cost \$20.16 per ton to transport property between Chicago and Philadelphia by the Cristline route—distance 823 miles; and \$23.07 per ton between Baltimore and Chicago by the Baltimore and Ohio and Central Ohio railroads—distance 942 miles; but by the water line from New York to Chicago, embracing river, canal and lake—distance 1,425 miles—the cost would be only \$7.12, at five mills per ton, which is a higher estimate per mile per ton than I have seen. If we make eight mills the basis of estimate, then the cost by the water-line would only be \$11.40 per ton, and \$8.66 less than the Cristline route, and \$12.67 under the route terminating at Baltimore.

The water-lines, river and lake, enables the New York rail-lines to compete successfully with the Baltimore and Philadelphia lines, and charge full rail rates.

The figures below show this difference in cost from Chicago to New York over our rail-lines:

	New York Central Railroad.	New York and Erie Railroad.
Lake in miles.....	916	916
Railroad in miles.....	300	446
River in miles.....	145	...
Lake rate in mills.	3	3
Railroad rates in cents and mills.....	2.45	2.45
River in mills.....	5	0
Total per ton.....	\$10 82	\$13 38

It will be seen in another part of this report that the New York Central in 1857 charged on its through tonnage very nearly the above rates, and in 1858 a few mills less, owing to canal and other competition. The Auditor has no means of stating the average charged by the New York and Erie road on through freight, as the report of that company does not distinguish the way from the through freight.

The foregoing statements are brought into a tabular form in order to present the same at one view to the reader.

Cost per ton from Baltimore to Chicago...	\$23 07
do Philadelphia to Chicago.	20 16
do New York to Chicago by N. Y. and Erie R. R....	13 38
do New York to Chicago by N. Y. Central R. R....	10 82
do New York to Chicago by New York canals, &c.	7 12

Col. R. R. Mason, consulting engineer, estimates the cost of the last item as low as \$5.47 per ton. My own statement is based on a high estimate.—The actual cost, according to the charges ascertained, varies but little from \$6.00 a ton.

It should not be supposed, nor can it be assumed, that the figures given will be found accurate to a fraction, but they are sufficiently certain for all practical purposes, whether of legislation or otherwise. I know it will be said that the rail charges are much lower than I have stated them. In particular instances, with some kinds of freight, and between certain points, this may be true to a limited extent. But these are exceptions, and not the rule, unless we concede that the railroad reports are fabulous and mere fictions. If the tonnage and freight receipts given in the railroad reports are truthful statements, then the averages which I have stated show the great bulk of freight carried has paid a much higher rate than the canal charges, cost of transportation, and canal tolls included. If our railroads have delivered freight at Cincinnati, from New York, at 40 and 45 cents per hundred, and at points on the upper lakes at 25 and 30 cents, we have a right to assume they carried at what they considered compensating rates to themselves, and if compensating, the charges being much below the published rates, or

what they hold out to the world they can afford to carry for, then we have fair grounds for urging the imposition of canal tolls upon railroad through freights, as a slight remuneration to our citizens for the burthens thrown upon them by such ruinous competition with the canals, and with each other.

The legitimate deductions from the premises set forth in this report are:

1st. That the present rate of toll on the canals are considerably below a fair revenue standard, and that a moderate increase of the present rates, and a fair distribution of them, would give an increased revenue.

2d. That any such increased rates would not cause a diversion of trade from the canals sufficient to counterbalance the benefits to be derived therefrom.

3d. That the cost of rail carriage from Chicago, or any other point on the western lakes, over the cost by lake, canal and river carriage, must be a clear guarantee that during the season of navigation there can be no danger of a diversion over other routes outside of this State.

4th. That by reason of the connection of the New York lines with the lakes and Hudson river, those lines are enabled, during seven months in the year, to carry freight to and from the upper lakes at about half the prices charged by the southern competing lines, and therefore the imposition of canal rates of toll on the New York lines of railroads, or from our own commercial metropolises.

5th. That the discrimination applied by the railroads to through and way freights operates onerously upon our own citizens, and it is highly injurious to the legitimate trade of the canals, inasmuch as the State has not, and will not, discriminate against its own citizens in the rates of toll imposed on freight transported on the canals.

6th. It is as much the duty of the State to protect its citizens against the unjust and arbitrary exactions of railroad corporations in transporting freight, as against any other oppression and onerous act, and the people of our own State ought not to be subjected to the burthen of making up the losses of railroad companies, incurred in carrying on an active competition between themselves and the canals in the transportations of through freight between New York and the western States.

7th. A healthful and legitimate trade will never require extraneous contributions, or the imposition of unequal burthens to foster or promote it, and it is not necessary, nor is it required, to reduce our canal revenues below a point that will yield an income sufficient to pay the interest on the canal debt of the State.

Respectfully submitted,
N. S. BENTON, Auditor.

Philadelphia, Wilmington and Baltimore Railroad.

The following is a statement of the receipts of this company, for the six months ending, February 28th.

From Philad. Wil. & Balt. R. R....	\$545,981 54
" New Castle and Del. "	10,064 59
	\$556,046 13

The expenses for the same time, were:

Phil. Wil. and Balt. R. R.	\$210,645 94
N. C. and Del. R. R.....	4,890 98
Taxes and bonus to the State.....	6,000 00
Interest 15 months.....	90,000 00
Renewal fund.....	30,000 00
	341,536 92
	214,509 21
Deduct loss on Delaware Railroad.	19,108 59

Leaving as the amount of net earnings..... \$195,400 62
The Company have declared a dividend of 3 per cent., payable April 1st.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares	NAME OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,923,911	545,792	150,224	6	---	Brunswick and Florida, Ga.	30	161,887	463,643	518,649	In progr.	---	---	---
Androscog. & Kennebec	58	467,909	1,835,304	2,210,947	159,513	83,368	none	---	South. Western	143	1,390,140	441,292	2,269,323	355,214	208,771	9	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	213,255	---	none	---	Tennessee and Alabama	30	309,754	626,889	679,906	53,776	29,406	---	---
Portland, Saco & Portsmouth	51	1,396,400	---	1,396,373	233,717	120,909	6	50	Tennessee and Mississippi	64	737,440	811,812	1,151,152	161,001	99,838	---	---
Boston, Concord & Montreal	93	1,104,594	2,844,977	3,949,571	337,767	174,025	18	---	Memphis and Charleston	247	2,228,177	3,496,288	5,672,470	642,022	334,504	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Mobile and Ohio	366	6,784,879	2,069,459	10,701,428	554,382	278,428	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Miss. Central	89	1,575,474	926,796	2,503,098	116,679	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	264,256	150,789	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	N.O. Opelousas & G.W.	80	2,800,000	750,000	3,570,000	284,178	127,450	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	N.O. Jackson & G.N.	206	4,035,970	1,816,610	7,142,561	189,003	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Vickburg, Shreveport & Tex.	21	853,776	108,285	992,051	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	East Tennessee and Ga.	111	1,192,974	1,735,689	2,703,429	227,363	104,992	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	East Tennessee and Va.	120	626,075	1,728,664	3,203,135	61,314	39,062	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Nash. and Chattanooga	159	2,263,905	1,532,797	3,896,703	641,582	219,256	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Covington & Lexington	98	1,344,550	3,095,917	4,091,604	426,408	220,906	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Lexington and Frankfort	29	430,055	156,899	658,255	95,807	45,711	6	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Lexington and Danville	13	694,444	71,000	765,500	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Louisville and Frankfort	65	744,039	625,210	1,502,095	245,750	109,059	6	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Louisville & Gt. Western	---	---	---	---	---	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Bellevue and Ind.	118	1,874,395	1,316,237	2,998,392	348,552	120,836	none	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Clev. Col. and Cin.	141	4,746,32	90,400	4,752,320	1,149,741	511,740	9 3/4	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Cleveland and Toledo	200	3,333,712	4,225,659	7,193,010	930,232	433,790	25	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Clev. and Mahoning	65	---	---	1,920,953	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Clev. and Pittsburgh	133	2,788,744	3,043,992	6,837,466	531,877	309,518	8	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Clev. P. & Ashland	95	3,000,000	1,495,548	4,040,978	1,251,539	581,454	15	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Cin. Hamilton & Dayton	69	2,155,800	1,526,092	3,130,315	437,421	260,763	53	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Cin. Wm. & Zanesville	131	2,421,176	3,782,400	5,094,210	232,506	30,288	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Columbus and Xenia	55	1,490,470	149,000	1,639,470	408,212	181,888	10	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Dayton, Xen. & Belpre	63	437,838	423,658	860,496	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Dayton and Michigan	140	1,076,602	585,011	1,355,826	---	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Dayton and Western	35	310,000	700,881	1,038,173	125,940	63,253	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Eaton and Hamilton	42	469,763	823,469	1,176,163	140,936	50,008	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Little Miami	65	2,981,252	1,264,000	3,925,157	775,442	290,123	10	88
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Sandusky, Dayton & Cin.	171	2,697,000	3,368,000	6,065,000	682,614	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Central Ohio	135	1,277,907	6,223,650	6,496,882	570,092	164,697	none	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Pitt. Ft. Wayne & Chicago	129	6,247,040	9,822,550	14,279,704	1,646,359	577,787	10	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Pittsburg, May's & Cin.	60	871,850	31,000	390,933	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Sand'y, Mans. & Newk.	127	1,550,600	2,206,357	3,652,387	328,955	164,479	none	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Scioto & Hocking Valley	60	403,775	599,056	888,858	164,479	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Spring, Mt. Vernon & P.	113	1,000,000	950,000	2,194,000	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Tol. Wash. & St. Louis	242	2,985,100	7,677,500	10,642,000	Recently opened.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Cin. Log. and Chicago	255	4,190,579	1,006,172	2,080,433	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Evansville & Crawfordsv.	109	989,001	1,707,872	2,168,713	249,888	134,140	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Ind. and Cincinnati	88	1,686,890	1,564,558	3,029,999	491,743	246,622	7	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Indiana Central	66	612,850	1,261,179	1,908,911	38,189	204,685	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Ind. Clev. & Pittsburg	83	835,791	1,07,694	1,826,435	253,19	85,248	none	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Jeffersonville	71	1,014,282	694,000	1,839,756	227,737	94,318	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Madison and Indianapolis	87	1,647,700	1,330,810	2,981,510	200,214	118,628	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	New Albany and Salem	238	2,635,121	8,281,948	7,029,491	645,827	871,402	none	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Pera and Indianapolis	73	---	---	2,000,000	150,000	90,000	none	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Terre Haute and Ind.	73	---	---	250,135	481,272	206,079	10	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Chicago and Rock Ind'y	182	1,361,450	1,734,318	6,028,272	1,894,196	850,393	58 1/2	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Chicago, Burl. and Quincy	210	4,631,540	3,852,970	8,042,424	1,508,167	81,767	45	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Chic. St. Paul & P'd du Lac	178	2,300,000	1,326,000	3,625,000	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Galena and Chicago	259	6,024,900	3,899,015	9,395,455	2,315,786	1,192,042	8	67
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Illinois Central	704	6,616,435	20,311,922	25,487,609	293,968	566,972	67	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Peoria and Oquawka	131	1,569,859	2,200,000	4,400,000	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Ohio & Miss. (Wat. Dr.)	147	1,750,295	2,292,408	4,870,686	Recently opened.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Terre Haute, Alt. & St. Louis	208	3,011,150	9,925,927	8,726,764	823,767	247,757	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Detroit and Milwaukee	185	838,000	1,126,964	1,996,968	Recently opened.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Mich. Central	232	6,067,840	3,666,630	12,947,238	2,248,758	764,916	51	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Mich. South. & N. Ind.	478	8,876,400	10,459,65	10,334,044	2,809,487	544,311	14	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Green Bay, Mi. & Ch.	40	1,000,000	780,000	1,780,000	In progr.	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Milwaukee and Miss.	238	3,440,673	4,610,553	8,061,255	892,118	372,691	8 1/2	---
Quebec	51	1,104,594	899,313	3,179,887	355,629	113,077	6	---	Milwaukee and Waterv'n	72	354,861	132,000	---	---	---	---	---
Quebec	51	1,104,594	899,313	3,179,887	355,629												

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	80	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	92 1/2	80
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	75	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1859		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	41	43
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	92 1/2
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	79	79 1/2
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Palmyra, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	99	100
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	67 1/2	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	60	67
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	30	50
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	0	50
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	89	90
Florida Free Land	1,500,000	Do. not convertible	7	March, Sept.	"	1891	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	94	95
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	81	82
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	April, 10 Oct.	"	1863	87 1/2	93
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		
Indiana Central	800,000	Do. convertible	7	May, Novemb.	"	1866		
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianap. & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	77	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	70	73
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1883	83 1/2	84
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Bost.	1860	95	97
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	92	93
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1867	8	Jan'y, July	N.Y.	1862		80
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863		77 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877		75
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		80
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	60	60
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	50	55
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	100 1/2	101 1/2
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August	N.Y.	1875		75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Stentonville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85	84
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	94	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95 1/2	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1859	84	85
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	72 1/2	73 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1880	55	53
Do. do.	4,000,000	Not conv. Sunk Fund, \$420,000	7	Feb'y, August	"	1876	36	36 1/2
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	33	35
Do. do.	8,500,000	Convertible	7	Jan'y, July	"	1862	34	40
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	102 1/2	102 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	93 1/2	94
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	70	76 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	90 1/2	91
Do. (Free Land)	3,000,000	M'g 345,000 acrs - priv. 7 shares	7	March, Sept.	"	1860	91	91 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	87	88
New York and Harlem	1,200,000	Do. do.	7	May, Novemb.	"	1861-72	13 1/2	94
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	96	99
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	83	84
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	73	74
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	9 1/2	92 1/2
Do. do.	3,000,000	o'm'g conv. from June 67-59	7	15 June, 15 Dec.	"	1864	102 1/2	102 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	115	
Do. 2d do.	1,470,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,300,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	82 1/2	83 1/2
Do. do.	3,469,000	Do. convertible	6	Jan'y, July	"	1870	73	73 1/2

CITY SECURITIES.			Int't payable.	On'd.	Ask	CITY SECURITIES			Int't payable.	On'd.	Ask
New York, 5 per ct.	1868-'60	{ May, August, and November, -	98	99		Milwaukee, 7 per ct coup.	X	Divers	45	70	
Do. 5 do.	1870-'75		92	92		New Orleans, 6 per ct. cp. R. R. X		Do.	72	77 1/2	
Do. 5 do.	1888		102	102 1/2		N. Orleans, 6 per ct. cp. municip. X		Jan'y, July	85	90	
Do. 5 do.	1890-'93		92	94		Philadelphia, 6 per ct.	1876-'98	Jan'y, July	99 1/2	99 1/2	
Albany, 6 per ct. coup.	1871-'81 X	Feb'y, August,	98	101		Pittsburgh, 6 per ct. coup.	X	Divers	45	51	
Allegheny, 6 per ct. coup.	1880	Jan'y, July	50	60		Quincy, 8 per ct. coup.	1868	X	Jan'y, July	67	75
Baltimore, 6 per ct.	1879-'90	Quarterly	99	100		Racine, 7 per ct. coup.	1873	X	10 Feb'y, Aug.	80	80
Boston, 6 per ct. coup.	X	April October	100	101		Rochester, 6 per cent. coup.	X	Divers	90	97 1/2	
Brooklyn, 6 per ct. coup.	Long X	Jan'y, July	101 1/2	102		St. Louis, 6 per ct. coup.	Long X	Do.	84	85 1/2	
Clev'Pd, 7 per ct. cp. W. W.	1879	Do. do.	100	103		Do. do. Municipal X	X	Do.	86	87 1/2	
Cincinnati, 6 per ct. coup.	X	Divers	92 1/2	95		Sacramento, 10 p. ct. cp.	1862-'74	X	Do.	37	45
Chicago, 6 per ct. coup.	1873-'77 X	Jan'y, July	85	87		S. Francisco, 7 p. ct. cp.	1865, pay. N. Y. X	May, Novemb.	60	70	
Do. 7 per ct. coup.	1880 X	Jan'y, August,	97 1/2	99 1/2		Do. 10 p. ct. cp.	1871 X	Do. do.	59	91	
Detroit, 7 per ct. cp. W. W.	1873-'78 X	Feb'y, August,	100	102		Do. 10 p. ct. pay. N. Y. X	X	Jan'y, July			
Dubuque, 8 per ct. cp.	Long X	March, Sept.		100		Do. 6 per ct. pay. N. Y.	1875 X	Do. do.	56	60	
Jersey City, 6 p. ct. cp. W. W.	1877 X	Jan'y, July	99	101		Wheeling, 6 per ct. coup.	X	Divers	50	50	
Little Miami, 6 per ct. cp.	1890-'83 X	Divers	71	72 1/2		Do. 6 p. ct. cp. Mun.	1874 X	March, Sept.	80	81 1/2	
Memphis, 6 per ct. coup.	1882 X	Jan'y July	64	67		Zanesville, 7 do.	X	April, October			

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending March 21, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	68	10
Covington and Lexington, 1st Mortgage	68	65
Do. do. 2d do.	7	60
Do. do. Income	10	10
Ohio & Miss., E. D., Construct. Co.	78	22
Cinc. Ham. and Dayton, 1st Mortgage	78	90
Do. do. 2d do.	78	80
Indianap. & Cincinnati, do. do.	78	80
STOCKS.		
Cincinnati, Hamilton & Dayton	87	
Columbus and Xenia	86	
Indianapolis & Cincinnati	88	
Little Miami	88	
Ohio and Mississippi (E. D.)	3	

Railroad Earnings.

The following is a statement of the earnings and expenses of the Pittsburg, Fort Wayne and Chicago Railroad Company for the month of February, viz:

EARNINGS.	
From freight	\$64,417 16
" passengers	50,500 04
" mail	7,825 00
" rent of road	5,500 00
" miscellaneous	250 00

Total	\$128,492 20
Earnings in same month last year	97,770 48

Increase (31.4 per cent.)	\$30,721 72
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EXPENSES.	
Conducting transportation	\$18,362 70
Motive power	38,273 34
Maintenance of cars	19,504 56
Maintenance of way	10,021 40
General expenses	4,319 76

Total	90,606 70
Expenses same month last year	61,358 50

Increase	\$29,248 20
Net earnings in February, 1859	\$37,885 50
Do. do. 1858	36,411 98

Increase	\$1,473 52
The earnings of the Macon and Western Railroad for February, were	\$28,315 84
February, 1858	23,888 45

Increase	\$4,932 39
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The following statement shows the business of the Reading Railroad for the month of February:

1859.	1858.
Received from coal	\$95,896 25
Do. merchandise	37,578 80
Do. travel, etc.	22,379 18

Total	\$155,327 23
Transportation, road-way, dumpage, renewal Fund, and all charges	96,258 19

Total	\$110,687 26
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Net profit for the month	\$59,069 04
Do. for previous 2 mos.	157,313 01

Total net profit for 3 months	\$216,382 05
Do. for previous 2 mos.	\$170,288 17

The increase this year is decided, and must be gratifying to the stockholders.	
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The receipts of the Grand Trunk Railway of Canada for the week ending March 5,

were	\$43,703 65
Week ending March 6, 1858	43,522 06

Increase	\$181 59
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Total traffic from July 1st.	\$1,524,092 62
Same period last year	1,612,852 21

Decrease	\$84,759 59
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The net receipts of the Pittsburg, Fort Wayne and Chicago Railroad Company, for the weeks

ending March 7 and 14 is as follows:

March 7th	\$28,327 06
" 14th	23,997 63

The net receipts of the Catawissa Railroad Company for February, 1859, were \$19,685
Do. do. 1858..... 16,762

Increase.....2,923

The earnings of the Michigan Central Railroad for the two first weeks in March were:

	1858.	1859.
First week.....	\$29,965 15	\$29,132 25
Second do.....	33,007 88	30,837 29
	\$62,973 03	\$59,969 54

American Railroad Journal.

Saturday, March 26, 1859.

The Late Buffalo Convention.

The real cause which broke up the Buffalo convention was undoubtedly a geographical one. We suppose that the New York Central felt itself sufficiently strong to take an independent stand, in which it was backed by the direct line from Suspension Bridge and Chicago, and by most of the roads radiating from that point. We have never believed that compacts in reference to rates of charges between a large number of companies could for any length of time be maintained, and that, consequently, it was useless to enter into them.

A convention is now being held at Columbus by the companies whose roads are in more immediate connection with the Pennsylvania and Baltimore & Ohio Roads, for the purpose of entering into agreements similar to those which were proposed and failed at Buffalo. We have not yet received the results of its action.

The great cause of misunderstanding is the small amount of business doing, which necessarily provokes competition. Before much improvement can be expected, another year must elapse. Should it prove a prosperous one for the North-West, our railroads will be relieved of the necessity of carrying at unremunerative rates. With a full traffic our companies will always be on good terms.

New York Canals.--Report of the Auditor.

We have given in the preceding and present numbers of the JOURNAL the late report of the Auditor of the Canal Department, on the tolls, trade and tonnage of the Canals. It is valuable rather for the historical matter it contains, than for the arguments which it vainly attempts to urge in favor of re-imposing tolls upon railroads. All this portion of the report is, in the highest degree, weak, puerile, and impotent. A better sentiment prevails in the State. The day in which to encumber commerce with useless clogs has gone by. If there be any force in the arguments of the Auditor, they tell with most effect against himself. If the canals cannot compete successfully with the railroads, it proves that we have found something better, and out of which the people of the State can make more money than by continuing an obsolete process. The Auditor is not capable, or does not choose, to meet the real points at issue. But we have at former times discussed these matters so fully, that any further discussion is needless, especially as the subject is properly appreciated by the people of the State, and there is, con-

sequently, no danger that they will take a backward step.

JOURNAL OF THE AMERICAN GEOGRAPHICAL AND STATISTICAL SOCIETY.

Two numbers of this new JOURNAL have already appeared, and judging from the character and treatment of the subjects to which it is devoted, it will prove a valuable publication. The Society under whose auspices it is issued, though only recently established, has been the means of bringing before the public much important information; and this JOURNAL will render its labors still more practical and useful. It will be seen, by the list of contents in our advertising columns, that the matters discussed are those of immediate interest to the American people. We believe that it will be conducted in such a way as to render it invaluable to all cultivated and intelligent persons who desire to keep up with the progress of geographical and statistical knowledge. It is issued monthly, at \$3.00 a year.

Minnesota Mining Company.

At the Annual meeting of the stockholders of this Company, recently held, the Directors reported the amount of Mineral produced the last year to be 1,834 tons, yielding 70-100 per cent. of refined copper, worth \$595,000; amount of working expenses, \$385,000; net earnings about \$210,000, and available surplus assets on general statement, \$240,000. A semi-annual dividend of five dollars per share has been declared, payable on the 2d of May next, leaving \$140,000 of available assets, applicable to the semi-annual dividend of November next.

Charlotte and South Carolina Railroad.

The earnings of this Company from operations of their road for the fiscal year ending Dec. 31, 1858, as given in their last annual report, were:

From up freights	\$77,980 29
" down "	95,210 08
" way passengers	80,701 95
" through "	9,155 81
" mails, etc.	11,700 00
" other sources	8,515 67
	\$283,263 80

And the expenses were:

For maintenance of way ..	\$46,083 51
" conducting transportation	31,460 08
" motive power	22,467 35
" machine shops	15,038 21
" maintenance of cars ..	4,620 40
" loss and damage	2,057 89
" extraordinary exp'ses ..	10,000 00
	131,727 44

Leaving for net income. \$151,536 36
—or 54½ per cent. of the gross; being equal to 13 per cent. upon the capital stock of the Company.

The above net income is chargeable with the interest on the bonds of the Company, due July 1858, and January 1859; the dividends declared and made payable at the same periods; and the sum of \$14,301 72 applied to the construction and property account, and the redemption of \$25,000 of bonds due Jan. 1, 1859, leaving a surplus in the treasury of \$84,949 35—or about one per cent. on the capital stock.

The gross income of the past is in excess of that of the present year, \$42,541 77. The net income shows an increase of \$29,981 73. The increase of operating expenses, consequent upon this in-

creased business, was only \$12,560 02. The number of bales of cotton transported during the year was 54,128, against 26,902 in 1857—showing an increase of 27,226 bales. The income account for the year is as follows:

RECEIPTS.

Balance from previous year	\$65,589 16
Earnings for 1858	274,748 13
Other sources	8,515 67
Six company's bonds	3,000 00
	\$351,852 96

EXPENDITURES.

Operating road	\$131,727 44
Dividends	63,215 25
Coupons on bonds	25,849 40
Construction	14,301 72
Due by agents	\$24,940 26
" P. O. Department ..	2,925 00
" other roads, etc.	4,394 54
	31,809 80
Cash in treasury	84,949 35
	\$351,852 96

President, WM. JOHNSTON.

Engineer and Superintendent, T. J. SUMNER.

Treasurer, C. BOUKNIGHT.

Henry Burden's Patent Machine for making Horse-Shoes.

An ingenious machine for this purpose has been erected at Chillington Iron works, in this town, by the inventor and proprietor, Mr. HENRY BURDEN, of Troy, in the State of New York, and the proprietor of an iron works in that town. Mr Burden is a native of Dumblance, in Scotland, and from his early youth showed considerable aptitude for mechanical pursuits. From an account published of his career in the *New American Cyclopaedia* it appears that he is the author of numerous valuable inventions, including a machine for making the double-headed spike used extensively on the American railways; and a self-acting machine for reducing puddlers' balls into blooms, which is being largely used in that country. As early as 1835 he took out a patent for a machine for making horse-shoes, which he improved upon in 1843, and this was turned to practical account by the production of a considerable number of horse-shoes. The present machine, however, which was patented in 1857, is entirely different from the former ones, and is a very remarkable piece of mechanism. In the previous machines the piece of iron bar of which the shoe was to be made was rolled into shape before being bent, and the pressure of the rollers being in the direction of its length, the bar, when it was pressed, was naturally rather extended in length than width, and the widening which is required at the crown of the shoe was not properly effected. By the present plan the bar, after being heated, enters the machine by a feeding apparatus, a piece of the required length is cut off and, by a stroke from a piece of steel, shaped like the inside of a horse-shoe, is bent, and falls upon a die on a wheel beneath, corresponding to one on a cylinder above, and thus acquires by pressure the desired shape, two lateral strikers at the same moment hitting the extremities, or heels of the shoe, and driving them inwards into the required shape. Thence it passes between another pair of dies, where it is stamped, and by an ingenious arrangement is flattened from the curled shape which the wheel gives it as it falls at the mouth of the machine. The shoes thus made are remarkable for their exactness in shape and in the position of the holes—a most important point with regard to the safety of horses' feet; and they can be produced, when the machine is in proper order, at the rate of 60 per minute, which is more than two men can forge in a day, and the superiority over shoes forged by hand is very striking. As the bar is bent before being pressed in the die, the pressure at the crown is in

the direction of the width, and hence the widening is readily effected. The machine is secured by patent in this country, and in most of the countries of Europe. It has been erected at Wolverhampton as a central and suitable place of inspection both for this country and for any persons on the continent who may desire to purchase it, the inventor desiring to sell his patent rights in Europe. The United States Government purchase the shoes thus made for the supply of the cavalry of the States.—*Wolverhampton Chronicle*.

Trade and Commerce of Buffalo for 1858.
Population of the City..... \$100,000
Value of real estate.....\$29,446,280
Value of personal property 6,067,720

Capital of the banks..... 2,726,700
Aggregate receipts of all grains, including flour reduced to wheat, bush. 28,219,855
Reported sales of—

Flour, bbls. 315,000
Wheat, bush. 5,893,000
Corn, do. 3,054,000
Oats, do. 1,214,000
Grains, do. 183,500

Grand total of reported sales, including flour reduced to wheat, bush. 11,921,500

Number entrances and clearances of vessels into and from the port..... 8,318
Number of tons of the same..... 3,329,246

Number of men employed to man the same 86,851

Storage capacity of elevators, bush. ... 1,895,000
Elevating capacity per hour, bush. ... 33,500

Tonnage of lake vessels owned in the city 90,852
Value of the same \$3,426,000

Shipments of all grain, including flour reduced to wheat, points west of Troy and Albany, bush. 5,066,179

Number tons property shipped by canal 766,496
Aggregate of tolls collected \$719,683

Number tons of property which arrived by canal 218,965

Estimated value of property which arrived by rail from the West.....\$20,000,000

Estimated value of property by railroad from the East 45,000,000

Average value of property received by Lake 41,144,065

Average value of property arrived by Canal..... 33,039,905

Total value of property which came to the city \$139,183,970

—*Buffalo Com. Adv.*

Commerce of Porto Rico.

Advices from this Island state that the Sugar crop will probably be one third less than last year. The following statement gives a comparative view of the exports of the Island for the last two years:

	1857.	1858.
Cotton, lbs.....	282,656	38,862
Sugar, lbs.....	86,391,546	121,319,374
Coffee, lbs.....	11,139,691	9,814,225
Hides, lbs.....	604,666	405,882
Molasses, gallons.....	2,745,675	3,729,511
Tobacco, lbs.....	4,028,491	4,908,444

Grants of Lands for Railroads.

The Secretary of the Interior has approved to the State of Iowa, under the act of May 15, 1856, selections of land to aid in the construction of railroads, as follows:

For the Dubuque and Pacific Railroad 1,152,139.32
Iowa Central Railroad 631,135.59
Mississippi and Missouri Railroad... 353,431.15

Total number of acres..... 2,132,076.06

Also, to the State of Alabama, for the Alabama and Florida Railroad Company, 394,522 acres.

Buffalo Railroad Convention.

We give below, from the *Buffalo Com. Advertiser*, a full, and we presume an impartial account of the Railroad Convention held at Buffalo on the 16th inst. The attendance was the largest yet observed at any similar meeting, and some fifty roads were represented by over two hundred delegates, embracing a large array of business talent and general intelligence, evidently much above that shown at mere political conventions.

The chief object in view was the agreement upon a general arrangement of time schedules of passenger trains between New York and the leading cities of the West to which the rival lines converge.

Beside this, however, a great interest was felt in the course to be pursued by the four lines in regard to the St. Nicholas compact, from which Mr. MORAN of the Erie had given notice of his withdrawal on the 20th inst. Messrs. CORNING, DEAN RICHMOND, CHEDDELL and others appeared for the Central, MORAN for Erie, CASS of Pittsburgh, for Pennsylvania, and GARRETT for Baltimore and Ohio roads. The Boston and Worcester, and Great Western lines, the Canadian and Cleveland and Chicago interests had full and able representatives. Judge Jewett of the Steubenville was the only prominent and active South-Western exponent from beyond the Ohio, while John Brough embodied the Bellefontaine interest.

Much diversity of opinion and action was evident from the first, but a general disposition to reconcile matters was shown, until it became evident that no thorough union could be effected. Among the causes for this were the introduction of the new line between New York and Chicago formed by the Pennsylvania and Fort Wayne roads, and the bold stand of the Baltimore road for moderate speed. The two Southern lines charged the New York Central with defeating the wishes of a majority of the interests represented, by its influence in preventing an agreement on a common starting time, and a moderate speed. The Committee of Twenty finally reported that it had agreed on 8 A.M. from New York, the Erie and both Southern roads uniting, but the Hudson River Road declared in convention that it would not regard it, and with the Central would start at 6, and allow no longer time to Chicago or Cincinnati, thus placing other lines at disadvantage. The result was that Mr. Garrett of Baltimore offered a call for a separate Convention of South-Western lines from New York, and their connections, to be held at Columbus, Ohio, on the 23rd inst. The call was signed by the officers of fifteen roads, and embraces new elements, in the New Jersey, Camden and Amboy, Allentown, Philadelphia and Baltimore, Marietta, and the Kentucky roads.

After this, a separate meeting of the Central and its leading connections to Chicago, etc., was held, and a schedule agreed on to suit themselves. The roads south and west of Columbus are not embraced in that arrangement, but await the action of the Columbus meeting. The time agreed on by the Central and Chicago is 37 hours, or one hour and forty minutes less than the quick time of last summer.

The debates in general public meeting were very able and animated; Cass, Jewett, Moran and Garrett on the one hand, and Brooks, Hammond, Brough and Bliss on the other, taking a leading part. Neither Corning, nor Richmond said much, but were active in consulting and advising their numerous friends in the Convention.

Mr. Cass, in the course of his speeches, called upon Mr. Moran to explain why the St. Nicholas agreement was dissolved. The latter was understood to say that the Central Agents had, early in March, secured all the North-West freight for the East by making contracts at ruinous sacrifices, in direct and wholesale violation of the compact. An immense trade has thus been taken in advance.

The rate for this is understood to have been put down to thirty cents per hundred pounds from Lake ports to New York, while the agreed rate was fifty or more—the object being to compete with the Canal as well as the Erie road.

Mr. Hammond of Chicago entered into a general defense of the Central policy, both regarding time-tables and St. Nicholas agreement. No wonder, said he, the Southern lines favor that arrangement, since it has proved so great an advantage to them. The agreement was broken because it was unfair to the North-West, and had worked to their injury. He declared that the Baltimore and Ohio, especially, had gained by the contract, and that Baltimore City had shared in this profit. The merchant of the West or North-West, who made his purchases in New York, had been obliged to pay from \$3 to \$6 per ton more for his freight from that city to destination, than from Baltimore, thus directly enhancing Baltimore interests to the disadvantage of those of New York. As to the time-tables, said Mr. H., the Baltimore road had wanted to fix a starting hour and speed by all lines to suit its own views and interests, although this was almost the first time it had been invited to a General Time Convention. The Hudson River Road was 150 miles long, yet it must not determine the hour of departure from New York, while the Camden and Amboy, about 90 miles only, could fix the hour as a connection of the Pennsylvania road. This was, he thought, both inconsistent and unfair.

Mr. Hammond spoke with earnestness and effect, and was replied to on the time points by Mr. Durand of Cincinnati, and by Mr. Garrett.

The leading views of the Southern lines were presented by Mr. Garrett of Baltimore, who made several speeches. The following is about the scope of his remarks, though not in the exact language, or in the order observed by the speaker:

What continues to be the position of the New York Central Company? It has according to the statement of the President of the New York and Erie—which I understand can be fully substantiated—recklessly and grossly violated the compact, by contracting for freights largely under the agreed rates; and now it presents its determination to force fast speed upon the Railroad interests of the country. What reason—what apology for this? A great progress in reform in Railroad management, and immense increase in the net results from Railroad property was inaugurated and has been secured, by reducing to a moderate speed the trains on the great lines. The valuable effects of this policy all know—as every party connected with working Railroads fully understands, that the combined action of weight and speed causes, in mathematical proportion to their increase, wear and tear, and consequent expenses for the maintenance and repairs. Have not these schedules been worked most successfully? Have connections ever been more regularly made? Have the lines ever been more free from accidents? Have the public ever been better served and satisfied? Who, therefore, desires fast speed? Surely not those whom we indirectly represent—our stockholders in the great lines—nor the public. Whence, then, this determined policy of the New York Central, in absolute opposition to the three other Atlantic lines, to force a speed to Chicago at 35 hours instead of the present schedule, 45? and to Cincinnati, 32½ hours instead of 36? A compromise could have been effected on 35 and 38 hours respectively, but it is practically rejected, and the New York Central insists upon and is responsible for the annihilation of the great conservative principles of the St. Nicholas agreement, and with unhesitating persistency again opens the Pandora's box of evils to arise from reckless and suicidal competition. Why, Mr. Chairman, does it adopt this course? Calmly observing its action uninfluenced by personal and local antagonisms, that appeared to govern its managers, I can perceive but one solution regarding their aims, and can foresee but one character of most serious results from their policy.

First: The extreme speed of passenger trains

is one of the elements by which it appears to have calculated to destroy the financial results and recuperative power of the New York and Erie road. Grant the New York Central full success in such a supposed design, what will be the consequence? The Erie road cannot be annihilated. It is an existing fact necessary alike for the important local interests it accommodates, for the necessities and advantages of the commerce of New York, and for the protection of the immense capital invested in its construction. Its stockholders' interest may be crushed to utter ruin. What follows? The New York and Erie will still exist, but upon a basis of capital of probably nineteen millions of dollars instead of thirty-eight millions, and thus become with profit to its owners, the most formidable and fearful adversary to the permanent interest of the stockholders of the New York Central road.

Second: The New York Central has contracted, in direct violation of the agreement for large quantities of eastward-bound freight at immense reductions in rates, avowedly for the purpose of preventing the Erie Canal from obtaining even a portion of this heavy business. To whom does the Canal belong? Will the State of New York, with the enormous capital it has invested in the Canal, permit its business to be thus illegitimately diverted? Lower tolls on the Canal, and a tonnage tax on the New York Central Road, loom up under the pursuit of such a policy in the early future, as imminent.

Such, is my view, irrespective of the instant effects of reduced earnings and the perils of the present action to the owners of the New York Central property. On behalf of the Baltimore and Ohio Company I have no favors to ask. No company on the continent presents more attractive features for business, both for passengers and freights. Its roads and machinery have been thoroughly maintained and improved, and are in the best and most effective condition. Its management have directed their energies and abilities to the development of its local trade and resources, and to the most rigid and careful economy of detail in its expenditures. The fruition indicates in a most gratifying degree, what can be accomplished by a judicious system, and further indicated the great value of the leading railroad properties of the country if their affairs be administered upon economical and proper conservative principles. During the five months from Sept. 30, 1858, to Feb. 28, 1859, the gross revenues of the Baltimore and Ohio road decreased, as compared with the corresponding months of the preceding year \$15,816.41, while the working expenses have been so reduced as to present, for that period, an increase of the net earnings of \$518,358.50.

A jealousy has been exhibited by the New York Central company of the comparative revenues, under the St. Nicholas compact, of the Southern roads. The Pennsylvania and Baltimore and Ohio companies yielded a portion of their annual advantages, in order to harmonize and arrange the contract. Their better revenues flow from a different cause. The main improvement to the Baltimore and Ohio has arisen from its local traffic, and is thus derived from sources which the New York lines cannot reach or affect.

Those astute gentlemen overlook, however, the origin of the relative prosperity of the Southern lines, as derived from other than local trade. Is it not a fact that for several consecutive years the crops of the North-west have failed, and that, combined with the small product of cereals, low prices have ruled, and consequently that entire region has little surplus and a much contracted trade?

The South and South-West, on the contrary, have for years enjoyed large crops, particularly of the leading staple, cotton, for which very remunerative prices have been obtained. Thus, that region is rich and prosperous, and its business extensive. The direct line from New York for this trade is by the Baltimore and Ohio road.

It is important to the commerce of that city to use this direct and reliable route to that section of the country, in connection with which New York is

now transacting its most lucrative business. It is true, Sir, that Baltimore does enjoy a most desirable location on the southwest line. Situated at the head of the noblest indentation of the Atlantic—the Chesapeake Bay—it commands, economical water carriage almost to the base of the Alleghenies, and thus reaches by a short line the most commanding point on the Ohio river. The merchants of New York and the South-West are aware of the triple routes, and their advantages, from that city to Baltimore, namely; a first-class railroad, a sea propeller, and a canal line. These will continue to be used, and no policy of the New York Central road can ignore nature and the geographical advantages of the Baltimore and Ohio road and the City of Baltimore. Our Company has water on the east and west, and perfectly equipped and efficiently worked railroad connections with all competing points. Being thus strong in position, and working the road economically and successfully, we have no apprehensions as to our perfect ability to maintain our position and command, relatively, an amount of business at least fully equal to that transacted under the contract.

The agreement has been useful, when the aggregate of the business has been so comparatively light, in protecting rates and insuring better remuneration for the service performed. If not acted upon with integrity it is undesirable. The Baltimore company has faithfully complied with its obligations, and has no responsibility in abrogating, by bad faith, and by violations of its provisions.

The attempt to maintain rates on freight, it is supposed, will amount to nothing, because the parties have no confidence that they can be kept up. Much interest now centers in the Columbus meeting on next Wednesday, although no new general compact is likely to be undertaken there.

Journal of Railroad Law.

THE RIGHTS OF RAILROAD COMPANIES IN RESPECT TO MORTGAGE SALES.

A suit against the Canandaigua and Niagara Falls Railroad Company, recently tried in the Supreme Court of this State, decides that a railroad company have a right to redeem their lands from the lien of a prior mortgage, by paying a rateable proportion of the mortgage debt; if necessary, to the full value of the property at the time of purchase, irrespective of subsequent improvements.

The following statement of facts and the opinion which we find in Howard's new volume just published, will make this more clear.

At Le Roy, in Genesee county, the railroad above mentioned approached a mill race upon a high embankment, and crossed the race at right angles upon a stone culvert. The embankment was some 100 feet in width at its base, and the culvert some 70 feet in length. This mill race led to a mill some distance north, which at the time of construction of the railroad was covered by a mortgage, which also embraced the mill race to its head. The railroad company entered upon the premises in 1852, under a contract of purchase from the owner of the fee of this mill property, race-way, etc., and constructed said embankment and culvert for their railroad; and have since occupied the same for the purpose of such road. The track of the Buffalo, Corning and New York Railroad Company also crossed this mill race, at another point. The plaintiffs commenced a suit in the Supreme Court to foreclose the said mortgage, making the two railroad owners and others parties, and obtained the usual decree of sale. The owners of both railroads appeared in the suit, but on the sale the agent and attorney of the owners of the Canandaigua and Niagara Falls railroad

failed to be present through an accident, and the premises were sold in parcels. The mill property, including all the rights and easements in relation to the mill race, for about \$7,000, leaving a deficiency for \$2,300, for which the strip of the Canandaigua and Niagara Falls road, consisting of the stone arch and a few feet of the embankment leading to it, excepting the mill race and the right and easement thereof for the use of the mill and the flow of the water thereto, was sold to Thomas Brown, who gave his note to the mortgagees therefor, payable in six months.

The motion was now made to set aside the sale, upon various allegations of mistake, unfairness, concealment, and surprise, and other grounds.

E. DARWIN SMITH, J.—This motion I deemed it proper to grant on the hearing for reasons then orally expressed; but the importance of the questions involved in the decision is such that I think it may be useful to put my reasons and views of the case in a more permanent form, as I am not aware that the points here decided have been before distinctly raised in this State.

The Canandaigua and Niagara Falls Railroad Company, are a corporation authorized to take lands for their railroad, and such lands are deemed taken for the public use. Such is the declaration of section eighteenth of the general railroad act. They entered upon and took the land in question upon purchase of the same from the owners in fee of the soil, and constructed their road thereon, with the knowledge of the plaintiffs and of such owners. They must doubtless be deemed to have constructive notice of the plaintiff's mortgage. At the time when they entered upon such premises, the value of the strip of land taken by them must have been quite trifling. As land separate from the mill race and the easement thereof, the plaintiffs could not have looked to it as constituting any appreciable portion of their security for the payment of their mortgage debt. The company omitted by mistake or from ignorance of the actual existence of this mortgage, to extinguish the lien thereof by release or otherwise upon the strip of land so taken by them, but proceeded at a large expense to construct the arch across the race and the approaches to it in question, and have used it ever since, and its use is indispensable for their railroad. The plaintiff's mortgage being unpaid they have come into this court as a court of equity, and sought its aid to obtain judgment by sale of the mortgaged property. Strictly speaking, their mortgage as a legal conveyance, covers all the lands embraced in it downward and upwardly, *cujus est solum ejus est usque ad calum*. But in equity they have put a lien as security for their debt. And when they come to a court of equity for its aid in enforcing their mortgage, must they not do equity like all other suitors in this court? What equity have they to extort a great disproportion in amount of their debt from these defendants? While a court of equity, should it aid them to appropriate to their own use the value of the erections and improvements put by the defendants upon the small strip of land covered by their mortgage? I think not. It seems to me that the fundamental principles and actions of this court forbid it.

The simple application of the maxim in equity, "he who seeks equity must do equity," seems to me conclusively to answer the whole question. It

is quite analogous to the case of partitions between tenants in common. When one tenant in common comes into equity for partition of the common property, this court makes a just partition and allows or makes a complainant allow, for improvements. This is a familiar doctrine in this court. This court will not grant partition without compelling the party applying to make due compensation for improvement. * * * *

The defendants, the said railroad companies, are entitled under section 21, of the general railroad act, to perfect their title to the strips of land taken and used for their said railroads, and this court is bound to protect their possession pending proceedings for that purpose. Due compensation for such lands would be the payment of their value at the time of the defendants' respective entry thereon with interest. But I do not think it is necessary for the defendants to go through the process of re-appraisal under the statute. This court can in this suit provide for the making of this compensation independently of the mode prescribed in this statute for a re-appraisal, and upon equitable principles upon the equity of the statute.

The provision of this statute gives an additional remedy to the defendants. It gives them an absolute right to the title and possession of the property on making due compensation for its value at the time when it was taken by the defendants with interest thereon. It gives them in effect a right to redeem their lands from the lien of this mortgage on the payment of a rateable proportion of the mortgage debt, which they must do to the full value of the property if need be, irrespective of the improvements put thereon by the defendants. The right to perfect their title on making such compensation in legal effect, is equivalent to an apportionment of the lien of the plaintiff's mortgage, and limits the amount thereof chargeable to the said defendants, to the amount of such due compensation. They are not left to the caprice of the mortgagees as perhaps might be the case with private persons.

The plaintiffs have no equity in this case, except to be paid their debt. They have no claim upon the defendants' crossing this mill race, except that they shall contribute to the payment of this debt, if the same is not paid by the sale in the inverse order of alienation of the other property covered by their mortgage in just proportion and in the order of their respective titles. Obviously, these corporations must contribute in the inverse order of their respective entries upon, or appropriation of the mortgaged property. All that the two railroad companies should be required to pay in satisfaction of the mortgage debt, is the full value of the respective parcels of the mortgaged property taken or appropriated by them at the times of the appropriations thereof for the use of their respective railroads, with interest thereon to the time of payment. This is the due compensation of the constitution. On the payment of such sums, the decree should be deemed satisfied and discharged as respects their respective parcels, and the plaintiffs restrained from doing any act to the prejudice of their respective titles to or possession of such parcels.

Apart from these views, this is a clear case for relief to the defendants who now move. Not only were they prevented by accident from being

present, but there were many things connected with the plaintiff's proceedings calculated to seriously mislead them. If, however, it was clear that the order of sale adopted was correct, and that the defendants were entitled to no relief because of their improvements, I should then make the resale conditional on their bidding, the amount of the deficiency as well as the payment of costs, etc.

With my views, however, with regard to their rights, it should be referred to a referee to ascertain and report the amount so to be paid by the said railroad companies upon these principles, and it is so ordered and the sale set aside on payment of all the costs since the decree, and \$10 costs of opposing this motion, to be paid by the moving defendants, to the purchaser and also to the plaintiffs.

Debt of Illinois.

The annexed is a copy of an important act passed by the late Legislature of Illinois, in relation to the public debt of that State:

An act in relation to the Payment of the Principal and Interest of the State Debt.

SECTION 1. Be it enacted by the people of the State of Illinois, represented in the General Assembly, that the Treasurer of the State shall give one month's notice, by publication in three of the public newspapers published in the City of New York, when and where, in the City of New York, he will pay the interest upon the public debt, and, at the expiration of thirty days after the time of such payment, he shall return the balance of the money remaining in his hands for the payment of interest to the State Treasury and the interest upon such bonds as shall not have been presented within the said thirty days shall be paid at the office of the Treasurer, at the seat of Government of this State.

SEC. 2. The Governor shall give one month's notice of the time and place, when and where he will pay the principal of such State bonds as he is authorized by law to pay, by publication of such notice in three public newspapers published in the City of New York, in which notice the bonds of which are to be then paid shall be designated.

SEC. 3. Whenever any State indebtedness becomes due, and the Governor cannot with the funds appropriated by law for that purpose, purchase said indebtedness without paying a premium for the same, he shall appropriate such funds to the payment of such bonds of the State as may be then due, after giving the notice required by the second section of this act, but the money for that purpose shall be drawn from the Treasury, in accordance with the law now in force, authorizing the purchase of State indebtedness.

SEC. 4. The interest upon such bonds as shall be designated by the Governor, in a notice to be given under and in pursuance of the second section of this act, shall cease from the time of payment specified in such notice.

SEC. 5. All laws now in force, authorizing an agency of the State for the transfer of bonds in the City of New York, are hereby repealed; and no such transfer agency shall be hereafter kept in said city, and the books of said transfer agency shall be deposited in the office of the Auditor of Public Accounts.

SEC. 6. An act, entitled an act to fund the arrears of interest accrued and unpaid on the public debt of the State of Illinois, approved Feb. 18, 1857, shall be and remain in force until the 1st day of January, 1860; at and after that date, its provisions shall cease and be of no effect. Any and all coupons, scrips, certificates, or other evidences, of arrears of interest, authorized to be funded by the act aforesaid, but have not been so funded by the said first day of January, 1860, may be paid for at par by the Governor, from such funds as are now authorized by law to be applied

to the payment of State indebtedness, but no interest shall be allowed or paid thereon. The Governor shall cause this section to be published at an early date, for at least one month in three newspapers, published in the City of New York.

SEC. 7. An act, entitled an act to authorize the refunding of the State Debt, approved Feb. 28, 1847; an act entitled an act to fund State Scrip approved February 22, 1847, and the second section of an act concerning the Public Debt, approved February 12, 1849, be, and the same is hereby repealed. The Governor shall appoint a Commissioner of Deeds, who shall perform all the duties now performed by Commissioners of Deeds for this State, and shall receive the same fees for such services as are allowed to other Commissioners of Deeds; and such Commissioner shall also be authorized to take acknowledgements of the assignment of Bonds of this State in the manner hereinafter provided, and shall be entitled to the same fees for taking such acknowledgments, as for the acknowledgments of Deeds. Any person being the owner of any bond of this State, which upon its face is made transferable in the City of New York may transfer the same, by an assignment in writing endorsed upon the back of said bond, and duly acknowledged before the Commissioner aforesaid, and said Commissioner shall keep a list of all bonds the assignment of which is acknowledged before him, and shall transmit the said list to the Governor once in every six months. The owner of any bond which might heretofore have been transferred in the City of New York, may surrender the same to the Governor of this State at the Seat of Government of this State, and receive in lieu thereof a coupon bond, payable to bearer, which bond shall be executed by the Governor, and countersigned by the Auditor and Treasurer of the State; but neither the Governor, Auditor or Treasurer shall execute any such new bonds or shall execute any such bond for the purposes of funding; any indebtedness of this State until they shall severally have inspected the bond which is offered to be transferred, or the evidences of the indebtedness which is sought to be funded; and shall have become severally satisfied of the genuineness of such bonds or evidences of indebtedness, and such bond, when so taken up by transfer, and such evidences of indebtedness, when so funded, shall immediately be canceled and deposited in the office of the Treasurer, and a perfect description list of all bonds issued shall be preserved in the office of the Auditor of Public Accounts.

SEC. 8. No new bond shall be issued of a less denomination than \$1,000, and the Governor may adopt such means as he may deem most expedient, not inconsistent with the provisions of this act, for procuring a speedy exchange of all the bonds that have heretofore been issued by the State that are not coupon bonds, for coupon bonds to be made transferable on delivery.

WM. R. MORRISON,
Speaker of the House of Representatives.
JOHN WOOD, Speaker of the Senate.
Approved Feb. 22, 1859. WM. H. BISSELL.

The Coalfields Railroad.

There was a meeting of the Board of the Charaw and Coalfields Railroad Company held at Carthage, N. C., on Thursday evening, the 3d inst. We mention among its proceedings, a resolution instructing the President to enter into negotiations with some competent engineer for a preliminary survey of the route, at as early a day as possible. The usual business arrangements, &c., were made. From the spirit manifested, we feel that we can assure the friends of the enterprise that no efforts on the part of the Board will be wanted to push the work forward—that all that can be done will be done by them.—*Charaw, S. C., Gazette.*

Mr. THOMAS GEORGE WALKER, junior partner of the late firm of THOMAS E. WALKER & SON, has gone into the Stock and Exchange business with Mr. DAVID TWEEDIE, under the style of WALKER & TWEEDIE.

Paducah Branch Railroad.

We learn that the Paducah branch of the Mobile and Ohio railroad is now all under contract with a large force at work on it. The unfinished portion is about thirty-five miles, of which nearly twenty-five miles are to be graded. Judge Crawford, the indefatigable President, reports that ample provisions have been made for funds to complete the work, and iron is already provided for. The road will be completed early in the autumn, when Paducah will be placed in direct railroad connection with Memphis, New Orleans, Mobile, Savannah, and Charleston. As soon as the road is completed a daily packet will be run between Paducah and this place, to connect with the roads at each place, making this one of the through routes from the Southwest to the Eastern cities.—*Beausville Journal.*

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BY virtue of a Deed in Trust, made and executed the thirtieth day of September A. D. 1857, by the San Antonio and Mexican Gulf Railroad Company, of the State of Texas, conveying to the undersigned as Trustees, the property and rights hereinafter described, to secure the payment of certain notes, in said Deed set forth, (amounting with interest, to about \$60,000), which notes have become due and remain unpaid—we shall, on the first Monday in April next, being the 4th day of said month, between the hours of 10 A. M. and 4 P. M., at the Railroad Depot, in the town of Lavaca in the State of Texas, proceed to sell, at public vendue, to the highest bidder, for cash, "All the iron rails, chairs, spikes, turn tables, locomotives, cars, road-bed, ties, and all other material pertaining to, or in any manner designed for the construction of the San Antonio and Mexican Gulf Railroad, now constructed or delivered, whether the same be laid down or not."

JOHN JAMES,
JOHN C. FRENCH, Trustees.

SAN ANTONIO, Texas, Feb. 1st, 1859.

The Trustees, for the information of purchasers, refer to the subjoined statement, furnished by the President and Directors, of the Franchise, Property, etc., of said road:

The rights and privileges of the purchaser or purchasers at this sale, are defined by an act of the Legislature of the State of Texas approved December 19th, 1857, entitled "An act supplementary to and amendatory of an act to regulate Railroad Companies, approved February 7, 1853."

Sec. 5. "The road-bed, track, franchises and chartered rights and privileges of any railroad company in this State, shall be subject to the payment of the debts and legal liabilities of said company, and may be sold in satisfaction of the same; but the said road-bed, track, franchise and chartered powers and privileges shall be deemed one entire thing and sold as such; and in case of the sale of the same, whether by virtue of an execution, order of sale, deed of trust, or any other power, the purchaser or purchasers at such sale, and their associates, shall be entitled to have and exercise all the powers, privileges, and franchises granted to said company by its charter, or by virtue of the general laws of this State; and the said purchaser or purchasers and their associates, shall be deemed and taken to be, the true owners of said charter, and corporations under the same, and vested with all the powers, rights, privileges and benefits thereof, in the same manner and to the same extent, as if they were the original corporations of said company; and shall have power to construct, complete, and work the road upon the terms, and under the same conditions and restrictions as are imposed by their charter and the general laws of the State."

DESCRIPTION OF THE PROPERTY.—A section of five miles and 1,034 feet complete, ready for and in actual use; twenty miles of the grading examined and approved by the State Engineer, and five miles of additional grading nearly completed; one twenty ton locomotive in good running order; and eight platform freight cars, and one hand car. About 10,000 cross-ties of the best quality, not laid down upon the road. One new turn-table which has not been put up.

THE FRANCHISE is regarded as very valuable, the charters granted to this company being among the most favorable of those granted to any Railroad Company by the Legislature of the State of Texas.

The original charter is dated September 5th, 1850, and invests said company "with the rights of locating, constructing, owning and maintaining a Railway, commencing at any suitable point on the Gulf between Galveston and Corpus Christi, and thence running by such course and to such point near the City of San Antonio, as said company shall deem most suitable;" and has been amended and continued in force by successive Legislatures, to the present time.

The act of November 14th, 1857, provides that "if twenty five miles of said road be not completed and equipped on or before the first day of January, 1860 their said charter shall become null and void, and said company shall forfeit all their rights and privileges."

By section 10, of the original charter, it is provided "that the said company shall have power to borrow money on their bonds or notes, at such rates as the directors shall deem expedient."

"Section 16. That said company shall have the right to

charge and receive such rates and prices for the transportation of passengers and freight, as shall not exceed eight cents per mile for passengers, and for freight not exceeding seventy-five cents per one hundred pounds, for every hundred miles the same may be carried."

By section 1, of the act of February 14th, 1852, it is provided, "that there shall be granted to the San Antonio and Mexican Gulf Railroad Company eight sections of land of 640 acres each, for every mile of railway actually completed by them and ready for use, upon the application of the President of the company, stating that any section of five miles or more of said railway has been completed and is ready for use" etc.

By section 1, of the act of February 13th, 1854, the San Antonio and Mexican Gulf Railroad Company is "invested with the power of continuing their road from the City of San Antonio, by the nearest practicable route, to intersect with the Mississippi and Pacific Railroad, west of the Red Fork of the Colorado River." And by Section 6, of said act "the franchise of said San Antonio and Mexican Gulf Railroad Company, in case they accept the benefits of this Supplemental Act, shall cease and determine at the end of ninety years."

By the act of November 14th, 1857, said company is entitled to the benefits of the act approved January 30, 1854, entitled "An act to encourage the construction of railroads in Texas by donations of lands," granting sixteen sections of land, of 640 acres each or 10,240 acres of land for each mile of railroad constructed, to be received when a section of 25 miles or more is completed. It is also provided by said act, that said company shall be entitled to all the benefits of an act, entitled "An act to provide for the investment of the Special School Fund, in the Bonds of Railroad Companies (previously) incorporated by the State, approved August 13th, 1856," whereby \$6,000 per mile is loaned to Railroad Companies, by the State, in United States five per cent. Bonds, on the completion of a section of twenty-five miles of railroad, and the grading of an additional section of twenty-five miles, ready for the cross-ties.

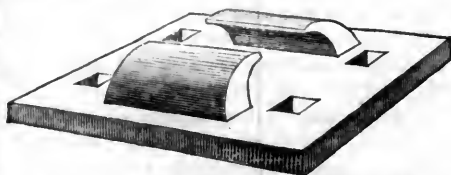
By the foregoing it will be seen that this company is entitled to receive sixteen sections, or 10,240 acres of land in all, for each mile of road on the completion of a section of twenty-five miles. This land may be received entirely under the provisions of the General Land Law, or half of it under that law, and the other half under the Supplemental Charter approved February 14th, 1852. By the former act the lands are required to be surveyed in "sections of 640 acres each, and in square blocks of not less than six miles, unless prevented by previous surveys or a navigable stream;" the State reserving the alternate sections of such blocks; but by the latter act the company may locate "upon any unappropriated domain of the State of Texas," and make its surveys to any extent that may be desirable, without being compelled to reserve alternate sections for the State. A privilege of very great value, whether the company locates the certificates or chooses to sell them.

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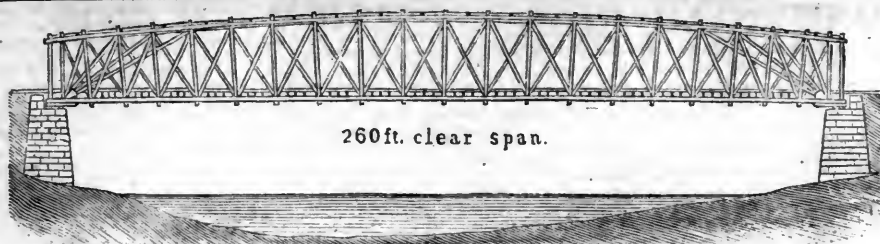
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CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES:—Messrs. Wm. and Jno. O'Brien, Thos. Denny & Co., Horace Greeley & Co., Cragin & Co., Todd & Co., J. & C. Berrian, Geo. F. Nesbitt & Co., Eugene Plunkett, Esq., (President Excelsior Ins. Co.), John G. Storm, Esq., (President Lenox Ins. Co.), L. G. Irving, Esq., (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Griscom, M.D., Rev. Edwin F. Hatfield, D. D., Rev. Theo. L. Cuyler, John Cameron, Esq., Benj. F. Munierre, Esq., New York; Otis Allen, Esq., Alban N. Y. Messrs. Gorham & Co., Providence, R. I.

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 Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by STEPHENS & JACKSON, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:—
 The "Tubular Rail" of 80 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater,
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 Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.
 The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.
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 THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of
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 The Subscribers, Agents for the Manufacturers, ARE PREPARED TO CONTRACT FOR THE DELIVERY OF RAILROAD IRON AT ANY PORT in the United States or Canada, or at a shipping port in Wales.
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 A stock of the above goods constantly on hand.

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 Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

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 Lap-Welded Boiler Flues, 1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.
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IRON AND STEEL
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Orders are now solicited
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 OFFER Rails of their own manufacture deliverable as may be desired by purchasers.
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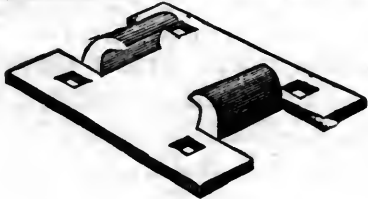
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The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

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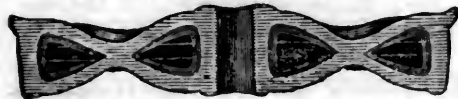
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They also furnish to order TYRES, DRIVING WHEELS
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Also, Stationary Engines, and the various Tools suitable for
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AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, April 2, 1859.

North Missouri Railroad.

The length of the completed portion of this road, from St. Louis to Hudson, the point of intersection with the Hannibal and St. Joseph railroad, is 168½ miles—thence to the Iowa State line, 68 miles—making a total length of 236½ miles.—A full statement of the affairs of the company to November 30, 1858, is given in their late report to the Board of Public Works of Missouri, from which we have condensed the following:

The total amount of subscriptions to the capital stock of the company was \$2,620,100—of which, \$2,290,750.23 had been collected; deducting from this, \$234,160.03, being amount of discount on \$1,750,000 of bonds received at par from the city and county of St. Louis, for their several subscriptions, and the net amount realized by the company in cash on the capital paid in is \$2,056,590.20.

The whole amount of State aid authorized was \$5,600,000—of which there had been issued to the company, \$4,350,000; these had been disposed of, (with the exception of \$21,000, then in the hands of the fiscal agent,) at a discount of \$645,798.38—leaving as the cash proceeds, \$3,683,201.62.

The counties of St. Charles and Randolph

claim a credit of \$77,400, on their corporate subscriptions—being the amount of private stock subscribed in those counties. The subscriptions of Adair and Schuyler counties, each for \$50,000 are applicable only to the construction of the road north of the crossing of the Hannibal and St. Joseph railroad.

The company is required to pay the interest, semi-annually, at the rate of 6 per cent. per annum, on the \$500,000 of bonds, issued to the company by the city of St. Louis, until the road is completed and in operation to the Northern boundary of Missouri; and on \$750,000 of the bonds issued by the county of St. Louis, at 7 per cent., averaging five years—making the amount of annual interest on city and county bonds, \$82,500. The annual interest on the State bonds then issued to the company was \$261,000—making the total annual interest on State, City and County bonds, \$343,500. The instalment of this interest, due January 1, 1859, the company failed to pay.

The liabilities of the company, other than stock, State credit, etc., (including \$137,250 State and city interest, due and unpaid) amount to \$217,637.75. To meet which, the company have:

\$329,349.77 due by stockholders,	
the estimated value of which is.....	\$229,949.77
21 State bonds, at par.....	21,000.00
Due by fiscal agents.....	14,802.50
Cash and cash items.....	15,143.03
	<hr/>
	280,895.30

Excess of assets.....\$63,257.55

The following is a statement of the cash receipts from operations of the road, and the expenditures attending the same, from the date of the first train, to November 1, 1858.

Expenditures.....	\$270,379.71
Receipts from freight.....	\$104,354.38
“ “ passengers.....	151,805.15
	<hr/>
	256,159.53

Excess of expenditures over receipts. \$20,220.18
Less estimated value of wood on hand 14,000.00

\$6,220.18

The total value of work done to November 1, 1858, was \$5,090,068.18; the estimated amount required to complete it to the junction, \$120,000—making the cost of opening the road to that point \$5,210,068.18. The engineer estimated the cost of

the road when finally completed to Hudson, at \$6,417,444.25; and the cash cost of the whole road, including rolling stock, at \$8,753,485.41 viz:

First division, St. Louis to the Missouri river, opposite St. Charles, 19 miles.....	\$909,590.01
Second division, St. Charles to Hudson, 168½ miles.....	4,652,895.40
Third division, Hudson, to Iowa State line, 68 miles.....	1,886,000.00
Machine shop and tools.....	135,600.00
Improvements on Missouri river.....	60,000.00
Engineering.....	240,000.00
Land damages and real estate.....	300,000.00
Equipment.....	569,400.00
	<hr/>
	\$8,753,485.41

CONDENSED BALANCE SHEET

Showing the Expenditures, Assets and Liabilities of the Company, to November 30, 1858.

Grading.....	\$2,005,234.49
Masonry.....	378,955.73
Fencing.....	61,301.70
Bridges.....	112,114.19
Superstructure.....	881,915.47
Real estate and Land damages.....	233,773.27
Discount on bonds.....	695,994.56
Interest and discount.....	566,055.39
Engineering.....	187,446.57
Locomotives.....	101,019.56
Cars of all kinds.....	184,975.35
Ballasting.....	50,730.80
Station buildings, Machine shops, Engine houses, etc.....	96,374.71
Miscellaneous.....	127,619.93
Due by stockholders.....	\$329,349.76
State bonds unsold.....	21,000.00
Cash and cash items.....	35,235.37
	<hr/>
	385,585.14

	\$6,018,106.86
Capital stock.....	\$2,620,100.00
State bonds.....	3,250,000.00
Due contractors and others.....	48,006.86
	<hr/>
	\$6,018,106.86

Between St. Louis and St. Charles, the maximum ascending grade each way is 45 feet to the mile. Between St. Charles and Hudson, the maximum grades ascending west and north are 50 feet; east and south 45 feet. The heaviest curve is 8°, or the least radius of curvature 1,910 feet. The total length of straight line is 146 miles; of curves, 22½. Of the whole distance therefore, 86.52 per cent. is straight lines. Upon the third di-

vision, the grades will not exceed 30 feet to the miles; the heaviest curve 1,910 feet radius.

An examination of this line has been made by J. B. Moulton, Esq., the State Engineer, on behalf of the Board of Public Works, as far as Mexico, in Audrain Co., 108 miles. The general features of the road are good; the characteristics being those of a first class road. The rails are all of approved weight and form; the chairs and spikes, especially those north of St. Charles, of good quality—their length and stiffness adding much to the rigidity of the road. The cross-ties are small, but the number used, 3,000 to the mile, gives a sufficient bearing surface for the rails. As a general feature, the masonry is substantial; in many instances even *beautiful*—bearing evidence of economy in the plans, and care in the execution of the work. In a few instances, however, first class arch stone work had been constructed, where work of a different character, at less cost, would have answered the purpose. With few exceptions, nothing defective was found in the masonry, worthy of note. All the grades were well adjusted, being uniform, as a maximum of inclination.

There are 12 bridges between St. Louis and Mexico, of these one has two spans of 150 each. Two single bridges have each a span of 150 feet, one bridge is 80 feet span; and the remainder from 40 to 80 feet—the total length of the 12 bridges is 850 feet. Three of these were considered as insufficient in strength, and mechanics were at work on their renewal. With these exceptions, the bridges deserve notice as being superior in strength and workmanship. The road bed, and the material used in the construction, with few exceptions, possess the necessary requisites of a first class road.

The officers of the company are,

THOMAS B. HUDSON, *President*.

MAJOR ROBERT WALKER, *Chief Engineer and Superintendent*.

J. C. HANDFORD, *Master of Transportation*.

Cairo and Fulton Railroad.

The following is a condensed statement of the affairs of this company, compiled from their report made to the Board of Public Works of Missouri, bearing date December 1, 1858.

The length of this road, as surveyed, from opposite the mouth of the Ohio to the Arkansas line, is 76.77 miles. The company also propose to construct a branch of about 8 miles in length, from the main line to Bloomfield, the county seat of Stoddard Co., or to so modify the line, as to touch that point. By this arrangement, a desirable business centre is reached. The company have also in view a connection at that point with the Iron Mountain railroad, when extended south. The estimated cost of the road is placed at \$1,650,000. This does not include the branch to, or the digression in favor of, Bloomfield. The capital stock of the company is \$1,500,000. The amount subscribed is \$1,261,775—of which, \$459,675 is held in Missouri; and \$802,100 by persons not citizens of that State. The amount of stock paid in cash is \$50,937.75. Interest at 6 per cent. is paid in stock, on all paid instalments until the completion of the road. The land resources of the company are placed at 570,507.93 acres—of which 514,500 were subscribed by the counties traversed by it—(100,000 of which by Stoddard Co., is in consideration of the branch above referred to,) and 56,-

007.93 donated by the Government. Of these, 400,000 acres are held in trust to secure the bonds of the company to the amount of \$1,600,000; and the remainder to provide an accumulating and fixed interest fund. Thus far, only \$500,000 have been issued—\$347,000 of which are hypothecated, or delivered on contracts, and \$153,000, at par value, are placed in the hands of agents for the use of the company. The whole amount of State bonds authorized for the road is \$650,000; the amount issued to the company is \$250,000—of which \$180,000 have been sold at a discount of \$32,172.50; the net avails being \$147,827.50; of this sum, \$121,277.50 have been expended—leaving \$26,550 for future disbursement. The annual interest on the amount issued to the company is \$15,000. The floating debt is stated at \$8,000.—The expenditures to December 1, are as follows:

Construction	\$281,645 30
Equipment	9,200 00
Sundry accounts	129,520 86

\$420,366 16

Less discount on bonds	32,172 50
------------------------------	-----------

Leaving	388,193 66
---------------	------------

Deduct avails of State bonds	121,277 50
------------------------------------	------------

Expended the sum of \$266,916 16 drawn from the resources of the company properly forming the basis for the issue of State bonds.

This sum is derived from the following sources:

Instalments on Stock	\$50,093 75
Cash from Mississippi Co.	400 00

Estimated cash value of \$136,000 bonds of the company paid for 3,000 tons of iron	112,980 22
--	------------

Cash advanced by directors, from loan, etc.	50,892 19
--	-----------

Materials and rolling stock purchased by hypothecation of \$191,000 company's bonds	52,550 00
---	-----------

\$266,916 16

This road extends in a southwest direction from the bank of the Mississippi, opposite Cairo, to the northern boundary line of the State of Arkansas. An examination of the line, as far as Charleston, in Mississippi county, a distance of 12½ miles, was made on the 20th of November last, by J. B. Moulton, Esq., State Engineer, who reported that the graduation to that point was at out nine tenths done, that a further distance of 13½ miles had been grubbed and cleared of timber, and that a large portion of the rails, chairs and spikes, and most of the cross-ties for the first 12½ miles were upon the ground, ready for use, but no track laid. No bridges are built on this portion of the line—the water-ways being spanned with filing and trestle work, which are also used in crossing cypress swamps and bayous. Of the former, there were built 3,176 feet, of the latter 544 feet. This work was well done. The value of work done and the materials furnished on the line of the road was estimated at \$207,126. At the date of the report made to the Board, 400 men were at work, rails were being laid, and locomotives, cars, etc., provided. The right of way had been secured on about 65 miles, by donation and purchase.

The lands of the company were being listed, examined and valued, preparatory to selling. Most of them were found to be first class, surpassing previous estimates, and are deemed quite sufficient to pay the entire cost of the work to which they are devoted.

The Officers of the Company are:

MASON BRAYMAN, *President*.

S. SEXTON, V. P., and *Superintendent of Construction*.

GEO. R. TEASDALE, *Secretary and Treasurer*.

Eastern Shore Railroad.

We learn from the *Wilmington Gazette* that this road, which, in connection with the Delaware road, will complete the seaboard line between Norfolk and Philadelphia, has been commenced. The directors have located a part of the road, by adopting the line of the old road commenced several years since. A meeting of the directors of the several companies interested in this project was recently held at Middletown, Del., to devise means for carrying it forward. The Delaware railroad company engages to supply the thirteen miles of road in Delaware, at a cost of \$130,000. The friends of the Delaware railroad will furnish subscriptions to the amount of \$55,000; and the Eastern Shore Road which has now a subscription of \$102,600, will increase it to \$150,000, which will make one-half the cost of the road; and parties will then agree to build it for the estimates, and take the other half in the company's bonds, at par. When done, the road can be stocked and operated on reasonable terms, and the business, at very moderate estimates, will, from the start, make it remunerative to all concerned.

Mr. Sewall's estimate of the business of the first year of this road after opening gives the following result:

From through passengers	\$37,500
" " freight	31,000

Total estimated through business ..	\$68,500
Add estimated income from local business ..	17,985

Total estimated income	\$86,485
Operating expenses and repairs, (49,000 miles, run,) at 63 cents per mile	31,850

Estimated net income, first year ..	\$54,635
—Being more than 13 per cent. on \$410,600—the cost of the road.	

Columbus Railroad Convention.

The convention, representing the Baltimore and Ohio and Pennsylvania Railroads, with the lines connecting with these roads, was held at Columbus, Ohio, on the 23d ult.

The following time table was adopted:

—Leave New York at 7 A. M. and 6 P. M., by Camden and Amboy, and New Jersey Roads, and reach Cincinnati at 8 A. M. and 11 30 P. M., and make about same time to New York.

The following resolution offered by the President of the Baltimore line, was adopted:

Whereas, Moderate speed passenger trains are admitted to contribute largely to economical working and consequent net results of railroad profits. And

Whereas, The extraordinary cost of high speed should command relative remuneration for passenger service. And

Whereas, Experienced managers of the railroad system of Europe have adopted this principle in their tariff of fares as the legitimate result of experience. Therefore, be it

Resolved, That in order to inaugurate this economical and valuable principle into the American system, that each through line to competing points may, at its option, charge one dollar less per passenger between New York and such competing points, on all trains using a schedule of not less than thirty-six hours between Cincinnati and New York, and forty hours between Chicago and New York.

Freight rates occupied but little attention, but the following was passed:

Resolved, That a committee, consisting of one representative from each of the Western Roads, be appointed by their respective roads to arrange rates of freight eastward bound, and that they be instructed to fix the differences between all rail and lake, rail and river—rail, lake and canal—and that this committee meet at the Phillips House, in Dayton, Thursday, the 31st of March, at 10 A.M., and that one representative from each four Atlantic lines be invited to be present.

Barnesville and Atlantic Railroad.

The line of this proposed road commences at Barnesville, in Pike Co. Georgia, and on its way to Brunswick, is to pass through Coloden, Knoxville, Fort Valley, Perry, and Hawkinsville, and thence through Irwin and other counties, to the junction of the Brunswick and Florida road with the Main Trunk, and thence to Brunswick by that road.—The whole length of the road will be about 210 miles. We understand that over \$280,000 has been subscribed in the Counties of Houston, Pulaski and Irwin. By means of this road it is proposed to connect Brunswick with the interior of Georgia, and the States of Alabama and Tennessee.

Finances of Cincinnati.

The following statement of the receipts and disbursements of Cincinnati for the fiscal year ending February 28th, 1859, is compiled from the Sixth Annual Report of the City Auditor; to which is added a statement of the revenue, expenditures, population and public debt for the past thirty years:

Receipts.	
General Fund	\$233,607 72
Watch Fund	118,080 93
Interest Fund	192,122 87
Superior Court Fund	14,358 01
Fire Department Fund	120,153 93
Light Fund	35,436 04
Floating Debt Fund	17,028 73
Workhouse Fund	18,343 63
Sinking Fund	153,812 62
McMicken Fund	2,869 31
Total	\$905,813 29

Disbursements.	
General Fund	\$176,835 57
Watch Fund	117,851 69
Interest Fund	186,230 92
Superior Court Fund	12,141 83
Fire Department Fund	120,046 87
Light Fund	33,390 69
McMicken Fund	2,738 89
Workhouse Fund	14,000 00
Total	663,236 46

Balance in Treasury March 1, 1859 .. \$242,576 83
COMMON SCHOOL FUND.

Annexed is a recapitulation of the Common School Fund:

Balance in Treasury, March 1, 1858 ..	\$51,098 31
Taxes in full for 1857	85,274 22
Taxes on account for 1858	96,886 41
Loans	30,000 00
Other sources	8,066 55
Total	\$271,325 49

Warrants redeemed this year 266,554 78 |

Balance in Treasury, March 1, 1859 .. \$4,770 71 |

COLORED SCHOOL FUND.	
Balance in Treasury, March 1, 1858 ..	\$2,849 48
Taxes in full for 1857	2,925 68
Taxes on account for 1858	2,689 57
Other sources	46 74
Total	\$8,511 47

Warrants redeemed this year 4,888 25 |

Balance in Treasury, March 1, 1859 .. \$3,623 22 |

TAX LEVY.

The total levy on the duplicate for the year 1858 for all the funds was 10.40 mills; the apportionment \$1,079,412 16; amount received into the Treasury for taxes \$365,500; amount due \$722,912 16.

DEBTS DUE TO AND OWING BY THE CITY.

The total of debts due to the city was \$1,524,966 85; and of debts owing by the city \$3,769,000 00. The total payment of interest paid by the city was \$2,150,000.

CITY PROPERTY.

We subjoin a recapitulation of the city property: Market houses and public landings, estimated value \$2,000,000 00 || School property | 616,846 00 |
Fire department property	346,142 92
City Property, Miscellaneous	908,358 30
City Water Works	1,000,000 00
Whitewater Canal stock	400,000 00
Debts due the city	1,525,057 26

Total city property \$6,796,404 48 |

SPECIAL TAXES.

The total amount of taxes for improving streets was \$112,122 29, on 133,118 feet.

The assessment for lighting streets from September 20, 1857, to September 20, 1858, was \$27,762 29, for 291,543 feet 7 inches, on which were 1,388 lamps.

REVENUE, EXPENDITURES, POPULATION AND PUBLIC DEBT OF THIRTY YEARS.

The following table shows the increase in the revenue, expenditure, population and public debt of the city for the last thirty years:

Year	Increase Revenue.	Increase Exptures.	Popu- lation.	Pub'c D'ts. of City.
1830.....			28,831	\$97,100
1831.....				35,231
1832.....	114,100 65	114,885 25		109,284
1833.....				119,908
1834.....				139,335
1835.....	52,168 40	32,927 24	31,000	148,658
1836.....	16,004 48	27,700 50		240,000
1837.....				240,000
1838.....	8,840 66	7,306 82		241,852
1839.....	Decrease.	13,714 32		305,673
1840.....	59,784 63	Decrease.	46,382	725,000
1841.....	Decrease.		51,020	865,000
1842.....	29,012 20	31,321 67	55,122	1,145,000
1843.....	11,347 03	Decrease.	61,734	1,167,857
1844.....	26,763 17	18,478 55	67,907	1,175,928
1845.....	3,294 44	38,300 43	74,699	1,280,149
1846.....	27,677 89	Decrease.	82,167	1,332,816
1847.....	7,440 28	33,633 29	90,384	1,340,378
1848.....	228,488 66	54,009 96	99,422	1,649,717
1849.....	Decrease.	14,847 11	109,314	1,666,866
1850.....	173,001 31	202,853 15	115,438	1,750,000
1851.....	112,242 98	16,457 17	132,330	1,840,000
1852.....	Decrease.		145,663	2,240,000
1853.....	247,873 35	29,822 02	165,000	2,520,000
1854.....	5,554 35	40,561 09	170,000	2,929,000
1855.....	158,816 53	113,625 24	190,000	3,181,000
1856.....			210,000	3,445,000
1857.....	Decrease.	4,734 48	215,000	3,719,000
1858.....	245,320 41	Decrease.	225,000	3,719,000
1859.....	161,214 65	167,966 48	230,000	3,869,000

St. Louis, Alton and Rock Island Railroad.

According to an act passed by the last legislature of Illinois, the title of the Rock Island and Alton railroad company has been changed as above. The Winchester Chronicle of 12th ult., says that the work on this road will now be pushed forward rapidly. There is a force of about two hundred hands at work in that county. The grading is all done from Beardstown to the Great Western, and the ties are on the spot ready to be laid down. The Engineers think that the road can be completed to the St. Louis, Alton and Chicago railroad by September or October next.

Railroads of New Hampshire.

We give herewith a statement of the railroads of New Hampshire, from the opening of the Concord railroad in 1842 to the present time. It presents a complete summary of the operation of all the railroads in the State, for a period of 16 years. The railroads running into this State but lying chiefly in other States are not included—an account of these more properly coming under a description of railroads of other States.

The total aggregate expenditure upon all the railroads in the State at the date of the annual report of the Railroad Commissioners in June last, adding together that for the several years, has been \$158,412,974. The total gross earnings have been, \$16,631,301; the current expenses, \$9,367,459; net earnings, \$7,263,842. Receipts from passengers, \$6,176,991; receipts from freight \$9,284,760; receipts from mails, etc. \$563,050.

The rate of gross earnings to cost has been about 11 per cent.; net, was nearly 5 per cent. A better result would have been shown, had the railroads lying partially in the State, such as the Nashua and Lowell, and Boston and Maine, been included. The reason why so few dividends have been paid, has been due to the embarrassed state of the finances of the companies, rather than to a lack of earnings.

RECAPITULATION

Showing the cost, earnings, etc., etc., of the New Hampshire Railroads, from the opening of the Concord Railroad to the present time.

Year.	Length.	Cost.	Gross Receipts.	Current Expenses.	Net Receipts.	Receipts from Passengers.	Receipts from Freight.	Do. Miscellaneous.
1843.....	35	\$725,030	\$70,912	\$27,184	\$43,728	\$18,034	\$21,808	\$1,068
1844.....	35	742,923	139,080	65,107	73,913	72,739	65,420	860
1845.....	35	766,444	181,812	82,939	98,913	90,515	90,099	1,196
1846.....	35	779,681	228,479	135,065	93,424	109,971	115,469	3,038
1847.....	35	1,042,718	293,028	176,453	118,775	133,616	141,117	15,668
1848.....	158	4,819,771	494,020	280,143	228,877	218,201	260,750	15,078
1849.....	171	6,704,402	776,382	316,104	416,738	331,200	428,759	39,980
1850.....	320	10,802,610	1,114,160	653,836	560,419	497,158	577,019	89,980
1851.....	333	12,463,732	1,307,123	656,476	650,647	502,227	655,252	49,154
1852.....	440 1/2	14,252,832	1,600,869	809,492	711,366	610,080	906,077	54,848
1853.....	487 1/2	16,242,119	1,873,140	969,584	827,114	677,129	1,082,915	60,181
1854.....	531 1/2	17,064,659	1,873,140	1,184,108	860,893	669,266	1,180,575	62,787
1855.....	531 1/2	17,894,792	2,044,716	1,184,108	860,893	669,266	1,180,575	62,787
1856.....	531 1/2	18,205,119	2,009,009	1,301,302	707,699	624,942	1,163,652	66,838
1857.....	539	18,444,634	1,717,474	1,070,776	637,699	624,942	990,588	54,718
1858.....	639	17,481,961	1,672,152	1,001,287	688,065	547,280	1,004,529	76,360
Total	4,825	\$158,412,974	\$16,631,301	\$9,367,459	\$7,263,842	\$6,176,991	\$9,284,760	\$563,050

In the statement for 1858, the cost of the Concord and Portsmouth railroad, shows a reduction from the previous year of nearly \$800,000. This road has been sold under a mortgage, and the sum given for 1858 represented the cost of the road

to the present owners. The reduced cost of the Ashuelot railroad is due to the appropriation of its earnings to the payment of its debts. As this road is leased to the Connecticut river railroad for an annual rent of \$30,000, this sum is used to express

the gross as well as the net earnings, of this road. A similar remark may be made in reference to the Wilton railroad, which is leased to the Nashua and Lowell.

Statement showing the cost, earnings, etc., etc., of all the Railroads of New Hampshire, from the opening of the first road to the present time.

Name of Road.	Length.	Cost.	Gross receipts.	Current expenses.	Net rec'pts.	Rec'd from pass'gers.	Rec'd from freight.	Do. miscel- laneous.	Dividend.
Concord, 1843.	35	\$725,050	\$70,912	\$27,184	\$43,728	\$48,034	\$21,808	\$1,068	5
" 1844.	35	742,223	139,080	65,167	73,913	72,799	65,420	860	9
" 1845.	35	756,444	181,842	82,929	98,913	90,545	90,099	1,196	13
" 1846.	35	779,581	228,479	135,065	93,424	109,971	115,469	3,038	10
" 1847.	35	1,042,718	290,228	176,453	113,775	133,545	141,117	15,568	10
1848.									
Cheshire	54	1,905,456	80,033	47,068	32,965	84,294	43,887	2,352	..
Concord	35	1,350,000	311,236	180,698	130,538	138,907	159,602	12,726	10
Northern	69	2,464,315	102,751	52,377	50,374	45,000	57,751	.....	..
Total	158	\$4,819,771	\$494,020	\$280,143	\$228,877	\$218,201	\$260,740	\$15,078	..
1849.									
Cheshire	54	\$2,618,069	\$172,106	\$61,030	\$111,076	\$72,863	\$92,240	\$7,002	2½
Concord	35	1,350,000	318,257	179,872	138,385	135,337	172,950	9,970	10
Northern	82	2,796,633	286,569	119,292	167,277	113,000	163,569	1,000	3½
Total	171	\$6,764,702	\$776,932	\$316,194	\$416,738	\$321,200	\$428,759	\$17,972	....
1850.									
Boston, Concord and Montreal.	51	\$1,282,945	\$118,805	\$62,159	\$56,646	\$60,000	\$58,802	.....	..
Cheshire	54	2,739,318	208,414	92,588	115,826	98,747	99,825	\$9,841	3
Concord	35	1,386,788	296,908	148,934	147,974	127,892	158,641	10,374	9
Contoocook Valley	14½	165,000	2,433	1,587	896	1,278	1,205	.....	..
Cocheco	17½	426,039	28,890	19,121	9,769	10,602	16,854	1,434	..
Manchester and Lawrence.	26½	812,728	81,836	55,210	26,628	43,285	32,527	6,024	7
Sullivan	24½	930,062	55,702	26,334	29,368	24,487	29,463	1,750	..
Great Falls and Conway	6½	133,520	6,178	6,365	.....	3,747	2,431	.....	..
Wilton	8½	130,837	32,636	20,706	11,930	16,318	16,318	.....	6
Northern	82	2,795,603	282,308	130,892	151,416	110,797	160,953	10,557	..
Total	320	\$10,802,640	\$1,114,160	\$563,896	\$550,449	\$497,153	\$577,019	\$39,980	....
1851.									
Boston, Concord and Montreal.	51	\$1,347,445	\$100,804	\$55,759	\$45,045	\$52,136	\$44,191	\$3,676	..
Cheshire	54	2,777,843	222,295	99,226	123,069	101,657	110,019	10,617	..
Concord	35	1,890,598	307,862	170,896	136,966	138,555	157,217	12,029	7
Cocheco	28	661,673	34,288	19,019	15,269	15,962	16,600	1,726	..
Contoocook Valley	14½	209,063	10,419	8,532	2,787	5,955	4,464	.....	..
Great Falls and Conway	12½	204,013	12,910	13,213	.....	5,921	6,989	.....	..
Manchester and Lawrence.	26½	816,726	Run by the Concord Railroad.	.....	.....	.....	.....	.....	7
Merrimack and Connecticut Rivers.	53	1,046,935	70,626	33,771	36,855	35,151	33,655	1,820	..
Northern	82	2,768,400	287,957	124,409	163,548	110,528	162,009	15,420	4
Sullivan	24½	1,071,801	52,434	25,603	26,831	26,591	22,767	3,086	..
Wilton	12	159,235	17,747	8,030	9,717	9,676	7,291	780	6
Total	393	\$12,453,732	\$1,117,342	\$558,463	\$562,074	\$502,227	\$565,252	\$49,154	....
1852.									
Ashuelot	24	\$496,947	\$30,000	.....	\$30,000	.....	.....	.....	..
Boston, Concord and Montreal.	71	1,930,533	141,204	\$68,850	72,324	\$60,000	\$81,204	.....	..
Cheshire	54	3,002,094	287,768	187,063	100,705	119,745	157,879	\$10,643	8
Concord	35	1,398,347	337,884	170,062	167,822	152,538	174,665	10,679	9
Cocheco	28	757,161	34,228	21,349	12,879	16,159	16,312	1,756	..
Contoocook Valley	14½	222,452	16,096	15,076	1,020	8,111	7,986	.....	..
Great Falls and Conway	12½	211,102	12,147	8,621	4,526	6,500	5,647	.....	..
Manchester and Lawrence.	26½	884,552	Run by the Concord Railroad.	.....	.....	.....	.....	.....	7
Merrimack and Connecticut Rivers.	53	1,164,993	72,687	37,754	34,934	31,128	36,052	5,507	..
Northern	82	2,768,400	292,762	138,768	153,993	105,770	176,588	10,403	5
Sullivan	24½	1,193,251	60,210	29,586	30,624	29,331	24,903	5,976	..
Wilton	15½	223,000	21,137	9,317	11,820	11,137	10,000	.....	6
Total	440½	\$14,252,832	\$1,307,123	\$656,476	\$620,545	\$539,920	\$690,746	\$44,964	....
1853.									
Ashuelot	24	\$499,581	\$30,000	.....	\$30,000	.....	.....	.....	..
Boston, Concord and Montreal.	71	2,540,217	150,538	\$70,879	79,659	\$60,538	\$90,000	.....	..
Cheshire	54	3,075,195	315,299	185,696	129,703	123,010	182,060	\$10,228	5
Concord	35	1,409,097	305,805	163,969	141,836	113,336	181,107	11,361	8
Contoocook Valley	14½	248,114	30,407	13,332	17,075	14,784	15,622	.....	..
Cocheco	28	767,330	46,626	23,328	23,298	18,370	25,016	8,240	..
Concord and Portsmouth	47	1,034,000	77,197	58,230	18,967	37,000	40,197	.....	..
Great Falls and Conway	12½	225,829	15,143	6,599	8,544	6,002	8,873	268	..
Manchester and Lawrence	26½	900,662	124,453	72,231	52,222	56,248	62,778	5,427	7
Merrimack and Connecticut Rivers.	53	1,248,575	97,440	55,777	41,663	24,498	56,336	6,206	..
Northern	82	2,768,400	328,782	165,706	163,076	102,673	211,753	14,355	2½
Sullivan	24½	1,275,654	63,570	44,307	19,268	29,901	30,814	2,855	..
Wilton	15½	229,435	25,599	9,539	16,060	13,670	11,521	408	6
Total	487½	\$16,242,119	\$1,600,859	\$869,492	\$741,366	\$610,030	\$906,077	\$54,348	....

1854.									
Ashuelot	24	\$505,309	\$30,000	.....	\$30,000	.....	.....	.....	..
Boston, Concord and Montreal	93½	2,672,438	238,234	\$112,400	120,834	\$93,234	\$140,000	.....	..
Cheshire	54	3,181,997	372,892	241,876	131,016	139,186	220,482	\$13,224	2
Concord	35	1,483,508	329,744	171,112	158,632	123,322	197,206	9,215	8
Contoocook Valley	14½	258,863	20,332	11,969	8,363	9,033	10,776	1,050	..
Cocheco	28	784,724	52,111	25,628	26,483	20,870	28,001	3,240	..
Concord and Portsmouth	47	1,039,757	101,658	60,263	41,395	45,992	51,657	4,336	..
Great Falls and Conway	12½	267,293	15,724	7,256	8,468	6,462	8,792	470	..
Manchester and Lawrence	26½	975,513	160,764	98,092	62,672	69,404	86,603	4,656	..
Merrimack and Connecticut Rivers	53	1,286,274	110,937	58,841	52,096	35,001	64,097	3,063	..
Northern	82	2,768,400	370,528	232,229	138,299	111,621	241,519	17,358	2½
Sullivan	24½	1,297,500	70,326	45,177	25,149	33,004	33,782	3,539	..
White Mountains	21	361,721	12,042	4,742	7,300	.....	.....	.....	..
Wilton	15½	231,362	16,408	.....	16,408	.....	.....	.....	6
Total	531	\$17,064,659	\$1,873,140	\$1,069,584	\$827,114	\$677,129	\$1,082,915	\$60,181	....

1855.									
Ashuelot	24	\$502,209	\$30,000	.....	\$30,000	.....	.....	.....	..
Boston, Concord and Montreal	93½	2,771,310	296,282	\$154,331	140,951	\$100,496	\$178,548	\$16,239	..
Cheshire	54	3,179,686	380,228	236,656	143,562	135,519	231,471	13,229	2
Concord	35	1,477,776	352,032	245,689	106,843	126,871	217,511	9,650	7
Contoocook Valley	14½	257,069	25,000	20,000	5,000	10,000	15,000	.....	..
Concord and Portsmouth	47	1,240,185	86,447	60,422	26,025	.....	.....	.....	..
Great Falls and Conway	14	309,272	18,348	8,727	9,621	8,009	9,936	402	..
Manchester and Lawrence	26½	1,003,997	188,174	104,991	83,183	72,533	108,225	5,414	7
Merrimack and Connecticut Rivers	53	1,286,274	78,932	43,266	35,666	26,843	50,863	1,220	..
Northern	82	3,068,400	422,100	221,212	200,888	123,084	289,579	10,136	..
Sullivan	24½	1,320,730	80,737	57,347	23,390	36,490	41,359	2,888	..
White Mountains	21	399,534	22,519	6,992	15,527	.....	.....	.....	..
Wilton	15½	228,181	13,196	.....	13,196	.....	.....	.....	6
Cocheco	28	820,175	52,018	24,475	27,543	20,416	28,023	3,579	..
Total	532½	\$17,884,792	\$2,044,716	\$1,184,108	\$860,893	\$660,266	\$1,180,575	\$62,787	....

1856.									
Ashuelot	24	\$504,309	\$30,000	.....	\$30,000	.....	.....	.....	..
Boston, Concord and Montreal	93½	2,770,860	286,950	\$163,378	123,572	\$94,094	\$183,629	\$9,226	..
Cheshire	54	3,180,702	355,629	242,550	113,079	118,341	224,644	12,623	2
Concord	35	1,477,736	335,948	224,501	111,447	120,787	207,404	7,758	6
Contoocook Valley	14½	257,069	32,887	32,488	399	9,636	21,925	1,325	..
Cocheco	28	847,139	52,018	24,475	27,543	20,416	28,023	3,579	..
Concord and Portsmouth	47	1,108,859	80,650	60,429	20,221	.....	.....	.....	..
Great Falls and Conway	20	387,900	29,106	19,364	9,732	11,077	16,734	595	..
Manchester and Lawrence	26½	1,000,000	189,789	110,303	79,486	75,191	108,641	5,956	4
Merrimack and Connecticut Rivers	53	1,286,681	80,977	59,411	21,566	27,457	46,966	6,566	..
Northern	82	3,423,136	417,583	285,207	132,376	114,252	287,247	16,095	2
Sullivan	24½	1,333,212	75,246	56,196	19,050	33,691	38,439	3,115	..
White Mountains	21	399,534	28,164	23,000	5,164	.....	.....	.....	..
Wilton	15½	227,979	14,065	.....	14,065	.....	.....	.....	5½
Total	538½	\$18,205,116	\$2,009,009	\$1,301,302	\$707,699	\$624,942	\$1,163,652	\$66,838	....

1857.									
Ashuelot	24	\$500,000	\$30,000	.....	\$30,000	.....	.....	.....	..
Boston, Concord and Montreal	93½	2,848,976	263,113	\$155,742	107,371	\$89,446	\$167,344	\$6,321	..
Cheshire	54	3,082,757	322,576	228,610	93,966	112,187	196,721	13,668	2
Concord	35	1,500,000	317,058	215,867	101,181	114,982	194,650	7,417	7
Contoocook Valley	14½	257,059	29,066	28,131	935	8,826	18,804	1,436	..
Cocheco	28	847,139	47,775	23,563	24,212	18,964	25,318	3,503	..
Concord and Portsmouth	47	1,108,859	80,650	60,429	20,221	.....	.....	.....	..
Great Falls and Conway	20	421,913	26,371	12,579	13,792	11,279	14,129	963	..
Manchester and Lawrence	26½	1,100,000	Run by the Concord R. R.	.....	.....	.....	.....	.....	7
Merrimack and Connecticut Rivers	53	1,281,504	76,259	54,105	22,154	27,532	43,000	5,727	..
Northern	82	3,531,136	418,032	228,602	189,430	109,985	295,448	12,599	4
Sullivan	25	1,368,037	70,105	52,148	17,957	32,348	34,671	3,084	..
White Mountains	21	371,037	21,951	20,000	1,951	.....	.....	.....	..
Wilton	15½	232,227	14,526	.....	14,526	.....	.....	.....	6
Total	539	\$18,444,634	\$1,717,474	\$1,079,776	\$637,696	\$524,749	\$990,583	\$54,718	....

1858.									
Ashuelot	24	\$395,518	\$30,000	.....	\$30,000	.....	.....	.....	..
Boston, Concord and Montreal	93½	2,787,082	235,805	\$134,737	101,068	\$74,219	\$150,385	\$11,197	..
Cheshire	54	3,080,831	297,332	188,815	108,527	97,237	185,806	14,298	..
Concord and Manchester and Lawrence	35	1,500,000	434,935	253,616	181,319	159,141	257,978	17,821	8
Contoocook Valley	14½	257,069	19,189	31,288	.....	6,037	12,248	804	..
Cocheco	28	847,139	47,775	23,563	24,212	18,964	25,318	3,503	..
Concord and Portsmouth	47	250,000	58,488	39,125	19,363	25,219	29,623	3,686	..
Great Falls and Conway	20	432,995	25,143	11,514	18,529	9,842	14,301	1,000	..
Manchester and Lawrence	26½	1,100,000	Run by the Concord R. R.	.....	.....	.....	.....	.....	8
Merrimack and Connecticut Rivers	53	1,281,504	58,510	44,378	14,132	21,115	32,953	5,661	..
Northern	82	8,642,259	365,859	206,688	159,171	100,718	252,661	12,499	4
Sullivan	25	1,250,000	61,951	47,767	14,184	23,395	30,215	3,341	..
White Mountains	21	371,337	20,931	19,647	1,284	6,393	18,041	1,550	..
Wilton	15½	232,227	16,278	.....	16,278	.....	.....	.....	6
Total	539	\$17,431,961	\$1,672,152	\$1,001,237	\$683,065	\$547,280	\$1,004,529	\$75,860	....

Railway Share List,

Compiled from the latest returns—corrected every Wednesday on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of share.	NAME OF COMPANY.	Length of Road	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of share.		
Atlantic & St. Lawrence	149	2,484,900	3,482,000	6,223,941	545,792	150,224	6	none	Brunswick and Florida, Ga.	30	151,887	463,648	538,640	In progr.	866,214	208,771	9	none	
Androscog. & Kennebec	55	457,909	1,835,304	2,210,947	159,518	83,368	none	none	South Western	143	1,899,100	441,292	2,280,323	866,214	208,771	9	none		
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	213,255	120,909	6	90	Tennessee and Alabama	30	309,750	626,889	679,906	53,775	29,405	99.83	9	none	
Port. Saco. & Portland	51	1,366,400	1,366,400	1,366,400	253,717	120,909	6	90	Tennessee and Mississippi	64	757,440	611,812	1,161,152	161,001	99.83	9	none		
Boston, Concord & Montreal	93	1,000,000	1,104,586	2,104,586	324,767	174,025	16	16	Memphis and Charleston	247	2,228,177	3,496,285	5,672,470	642,022	334,604	100	100	100	
Cheshire	54	4,950,125	909,313	3,179,687	355,629	113,077	6	6	Mobile and Ohio	305	6,784,849	2,068,450	10,701,429	564,382	278,428	100	100	100	
Concord	35	1,500,000	8,242	1,412,576	317,054	125,664	6	61%	Miss. Central	89	1,575,474	926,790	2,603,098	115,679	150,749	100	100	100	
Northern N. H.	82	3,068,400	406,285	3,068,400	365,880	185,996	4	47%	Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	204,255	150,749	100	100	100	
Concord & Passumpsic Riv.	90	1,000,000	800,000	1,784,146	177,588	78,401	none	none	N. O. Opelousas & G. W.	80	2,800,000	750,000	3,577,525	284,178	127,450	100	100	100	
Rutland & Burlington	117	2,238,376	4,168,765	4,584,008	332,216	41,688	none	none	N. O. Jackson & G. N.	206	4,035,000	1,516,610	7,142,564	189,003	189,003	100	100	100	
Vermont and Canada	47	1,350,000	1,350,000	1,350,000	127,389	171,382	6	93	Victrola, Shreveport & Tex.	21	883,768	108,285	992,051	227,363	104,992	100	100	100	
Vermont Central	122	5,000,000	5,276,299	8,402,064	705,833	305,507	6	99%	East Tennessee and Ga.	111	1,192,974	1,735,609	2,703,423	31,314	30,062	100	100	100	
Boston and Lowell	24	1,830,000	438,920	2,412,251	435,863	245,144	6	94%	East Tennessee and Va.	130	626,075	1,728,664	3,208,138	61,552	219,26	100	100	100	
Boston and Maine	74	4,076,974	239,740	3,534,458	594,179	385,513	6	95%	Nash. and Chattanooga	159	2,263,905	1,632,797	3,896,703	426,408	220,906	100	100	100	
Boston and Providence	43	3,160,000	599,974	4,544,779	1,019,149	30,899	3	69%	Ovington & Lexington	98	1,334,850	3,065,917	4,091,604	95,807	45,717	100	100	100	
Boston and Worcester	44	4,500,000	291,007	1,031,625	122,960	66,096	3	69%	Lexington and Frankfort	29	430,055	158,839	568,255	109,059	109,059	100	100	100	
Cape Cod	47	681,690	275,772	1,801,244	267,710	116,156	272,479	3	97%	Lexington and Danville	13	694,444	71,000	765,500	109,059	109,059	100	100	100
Connecticut River	50	1,591,110	2,441,373	6,082,607	61,156	272,479	3	97%	Louisville and Frankfort	65	744,039	625,218	1,502,095	109,059	109,059	100	100	100	
Eastern, Mass.	67	2,683,400	100,000	3,872,821	608,974	250,433	6	95%	Atlantic & Gt. Western	118	866,395	77,294	613,231	120,336	120,336	100	100	100	
Fitchburg	21	500,000	200,100	3,362,049	683,357	305,140	6	100%	Belleville and Ind.	118	1,874,395	1,315,237	2,998,392	511,740	511,740	100	100	100	
N. Bedford and Taunton	77	3,015,100	1,019,148	3,241,975	240,133	62,287	100%	100%	Clev., Col. and Cin.	141	4,746,2	90,400	4,752,390	438,790	438,790	100	100	100	
Old Colony and Fall River	69	2,232,541	1,019,148	3,241,975	240,133	62,287	100%	100%	Cleveland and Toledo	200	3,333,712	4,225,519	7,193,016	309,518	309,518	100	100	100	
Vermont and Mass.	156	5,150,000	5,339,080	10,495,080	2,117,982	899,763	8	106	Clev. and Mahoning	65	2,780,744	3,043,992	6,537,486	581,877	581,877	100	100	100	
Western, Mass.	46	1,141,000	206,665	1,351,271	216,838	82,720	4	66	Clev. P. & Ashtabula	95	3,000,000	1,495,548	4,040,978	251,539	251,539	100	100	100	
Worcester and Nashua	43	1,510,020	300,000	1,781,048	344,773	155,044	7	87	Cin. Hamilton & Dayton	90	2,158,800	1,636,092	3,130,316	487,421	487,421	100	100	100	
Providence and Worcester	72	2,350,000	944,000	3,329,602	709,065	340,835	10	104%	Cin. Wilm. & Zanesville	131	2,421,176	3,782,040	6,695,210	308,288	308,288	100	100	100	
Hartford and N. Haven	122	1,936,246	2,182,692	4,205,966	273,428	112,325	none	none	Columbus and Xenia	65	1,490,450	149,000	1,639,450	181,688	181,688	100	100	100	
Hartford, Prov. and Fishkill	74	2,000,000	424,665	2,424,665	318,475	109,344	none	none	Dayton, Xen. & Belpre	63	437,838	422,658	860,496	65,253	65,253	100	100	100	
Housatonic	57	1,031,800	524,244	1,556,044	237,419	114,237	3	45	Dayton and Michigan	140	1,076,602	893,011	1,185,826	50,008	50,008	100	100	100	
Naugatuck	62	2,980,836	2,323,240	5,304,076	1,157,055	254,699	3	45	Dayton and Western	35	310,000	700,481	1,035,173	126,940	126,940	100	100	100	
N. York and N. Haven	50	734,258	781,462	1,455,318	88,007	30,318	none	none	Eaton and Hamilton	42	469,762	832,669	1,176,163	90,008	90,008	100	100	100	
N. Haven and N. London	66	510,700	1,050,000	1,603,230	120,571	51,544	none	none	Little Miami	66	2,981,242	1,268,000	3,925,157	220,123	220,123	100	100	100	
N. London, W. & Palmer	66	2,122,300	724,183	2,598,671	265,417	44,547	31	31	Sandusky, Dayton & Cin.	171	2,697,090	3,368,000	6,065,090	67,842	67,842	100	100	100	
Norwich and Worcester	32	439,005	1,625,098	1,840,695	117,716	9,904	none	none	Central Ohio	138	1,427,907	6,622,550	14,759,704	164,977	164,977	100	100	100	
Albany Northern	35	643,330	317,354	974,323	In progr.	66,333	none	none	Pittsb. Ft. Wayne & Chicago	123	6,247,040	9,824,650	14,759,704	164,977	164,977	100	100	100	
Black River and Ulster	100	1,487,871	1,501,183	2,919,096	172,478	66,333	none	none	Pittsb. Mayfield & Cin.	60	371,350	81,000	390,933	164,479	164,479	100	100	100	
Buffalo, Corn. and N. Y.	92	798,349	2,697,849	3,401,868	288,292	31,896	none	none	Sand's, Mansf. & Newk.	127	1,350,000	2,206,337	3,552,337	328,958	328,958	100	100	100	
Buffalo and N. Y. City	69	1,300,000	1,040,000	2,494,364	679,760	358,763	10	104%	Scioto & Hocking Valley	66	403,975	509,050	888,858	100,000	100,000	100	100	100	
Buffalo and St. Line	47	434,111	922,393	1,276,706	174,089	90,506	none	none	Spring, Mt. Vernon & P.	113	1,000,000	950,000	2,194,000	100,000	100,000	100	100	100	
Canandaigua and Elmira	98	1,315,000	2,279,854	3,495,832	135,433	48,649	none	none	Tol. Wabash & St. Louis	242	2,965,100	7,577,500	10,542,600	124,140	124,140	100	100	100	
Canandaigua & Niagara Falls	36	687,000	506,699	1,187,562	135,433	48,649	none	none	Cin., Log. and Chicago	255	4,196,879	1,006,125	2,080,433	246,622	246,622	100	100	100	
Cayuga & Susquehanna	144	3,768,468	9,250,362	12,737,898	1,902,328	688,890	32%	32%	Evansville & Crawfordsv.	109	984,061	1,207,872	2,168,173	249,868	249,868	100	100	100	
Hudson River	95	3,000,000	647,193	2,555,986	325,150	66,186	10%	10%	Ind. and Cincinnati	88	1,686,809	1,504,584	3,029,989	491,743	491,743	100	100	100	
Long Island	556	24,182,400	14,402,635	30,782,518	5,525,413	3,041,120	8	74%	Indiana Central	66	612,350	1,261,179	1,909,911	223,737	223,737	100	100	100	
New York Central	404	11,000,000	28,091,468	34,469,324	5,742,607	1,454,032	10%	10%	Ind. Clev. & Pittsburg	83	835,791	1,071,894	1,826,426	255,248	255,248	100	100	100	
New York and Erie	138	6,717,100	4,822,496	8,758,203	1,040,393	324,891	12	12	Jeffersonville	71	1,014,262	694,000	1,839,676	94,318	94,318	100	100	100	
New York and Harlem	118	6,332,022	4,406,874	6,470,714	520,153	136,764	none	1	Madison and Indianapolis	71	1,647,700	1,338,816	2,941,516	118,628	118,628	100	100	100	
Northern, N. Y.	35	806,130	213,265	752,033	149,373	78,764	8	8	New Albany and Salem	238	2,535,121	5,281,949	7,029,494	371,402	371,402	100	100	100	
Oswego and Syracuse	29	467,200	294,189	749,683	In progr.	71,009	none	none	Peru and Indianapolis	73	858,314	2,000,000	150,000	90,000	90,000	100	100	100	
Potomac and Watertown	25	610,000	140,000	896,423	241,149	82,600	7	7	Terre Haute and Ind.	173	1,361,450	250,125	1,685,809	481,272	481,272	100	100	100	
Rensselaer & Saratoga	48	500,000	394,900	894,900	71,009	21,089	none	none	Chicago and Rock Is'd	182	6,248,000	1,734,318	6,928,272	1,884,196	1,884,196	100	100	100	
Saratoga and Whitehall	80	768,396	1,678,804	2,272,777	159,494	22,503	none	none	Chicago, Burl. and Quincy	210	4,631,540	3,852,970	8,042,428	1,505,167	1,505,167	100	100	100	
Syracuse & Binghamton	27	437,830	377,079	1,109,822	166,363	55,184	none	none	Cin., St. Paul & P'd du Lac	178	2,800,000	1,325,000	3,625,000	100,000	100,000	100	100	100	
Troy and Boston	97	1,500,000	700,979	2,200,500	440,290	162,037	3%	50	Galena and Chicago	259	6,024,800	3,809,015	9,936,455	2,136,798	2,136,798	100	100	100	
Watertown and Rome	64	1,000,000	1,619,000	2,619,000	243,993	114,633	none	120	Illinois Central	704	6,666,435	2,911,492	25,487,669	293,965	293,965	100	100	100	
Belvidere Delaware	94	3,000,000	11,407,200	7,994,096	1,604,787	594,114	12	120	Peoria and Okawaha	181	1,599,899	2,290,000	5,400,000	100,000	100,000	100	100	100	
Camden and Amboy	94	3,483,000	1,560,854	1,738,171	117,389	45,442	none	none	Ohio & Miss. (Wat. Div.)	147	1,780,296	2,292,403	4,870,586	Recently opened.	Recently opened.	100	100	100	
Camden and Atlantic	30	3,485,000	783,844	3,690,017	911,611	534,951	10	106	Terre Haute, Alt. & St. Louis	268	8,011,150	1,926,927	8,736,764	823,767	823,767	100	100	100	
New Jersey Central	63	2,000,000	2,892,828	8,921,8															

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	50	60
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	90	96
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	76	76
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	40	42
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	92½
Do. do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	79	79½
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	98	100
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	67½	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	60	67
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	30	50
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1867	60	65
Covington and Lexington	400,000	Do. do.	7	March, Sept.	"	1863	47	55
Do. do.	1,000,000	2d mortgage, convertible	7	April, October	"	1875	84½	91
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	March, Sept.	"	1861	77	78
Florida Freeland	1,500,000	Do. not convertible	7	Jan'y, July	"	1873		72½
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Feb'y, August	"	1863	92	94
Gaucha and Chicago	2,000,000	Do. inconvertible	7	May, Novemb.	"	1875	90½	91½
Do. do.	2,000,000	2d mortgage, do.	7	April, October	"	1868		
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, 10 Oc.	"	1863	87½	93
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	April, 10 Oc.	"	1873		
Jacksonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		86
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianapolis & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	83	87
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	8,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1866	71	73
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	83	88
Michigan Central	1,000,000	No mortgage, convertible	9	April, October	Bost.	1860	95	97
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	92	93
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862		80
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863		77½
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	67	72½
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1863-62		
Do. do.	2,325,000	Do. oth. sec. con. till 1868	8	May, Novemb.	"	1864-73		90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867		80
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	69	70
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	55	56
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	100½	101½
Racine and Mississippi	680,000	Do. do.	6	Feb'y, August	N.Y.	1875		75
Scioto and Hocking Valley	800,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	68	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85½	84½
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	10	10 Jan. 10 July	N.Y.	1870	94	94
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	96	97
Do. do.	4,000,000	2d mortgage convertible	7	March, Sept.	"	1869	83	84
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1868	72½	73
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1860	55	57
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	31	33
Do. do.	4,551,000	Convertible Inscription	7	Feb'y, August	"	1871	30	31
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	30	32
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	102	102½
Do. do.	2,000,000	2d do.	7	10 June, 16 Dec.	"	1860	94	94½
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	76½	77½
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	90½	91
Do. (Free Land)	3,000,000	Mortgage 345,000 acres priv. 7 shares	7	March, Sept.	"	1860	91	91½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	84	88
New York and Harlem	1,500,000	Do. do.	7	May, Novemb.	"	1861-72	94½	96
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	95	99
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	80	83
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1863	71½	72½
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	92½	93
Do. do.	3,000,000	Income conv. from June 57-59	7	16 June, 16 Dec.	"	1864	108½	104
Panama, 1st issue	900,000	Convertible till 1855	7	Jan'y, July	"	1866	118	
Do. 2d do.	1,470,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,500,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	84½	85
Do. do.	3,469,000	Do. convertible	6	Jan'y, July	"	1870	75	76

CITY SECURITIES.	Int't payable.	Off'd Ask	CITY SECURITIES	Int't payable.	Off'd Ask
New York, 5 per ct. 1858-60	98	99	Milwaukee, 7 per ct coup.	X	Divers 45 70
Do. 5 do. 1870-75	93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	75 80
Do. 6 do. 1883	103½	104	N. Orleans, 6 per ct. cp. municipal X	Jan'y, July	85 90
Do. 5 do. 1890-93	92	96	Philadelphia, 6 per ct. 1876-98	Jan'y, July	98½ 99
Albany, 6 per ct. coup. 1871-81 X	98	101	Pittsburgh, 6 per ct. coup.	X	Divers 45 50
Allegheny, 6 per ct. coup. X	Jan'y, July	60 60	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	67 75
Baltimore, 6 per ct. 1879-90	99	100	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	80
Boston, 5 per ct. coup. X	April, October	100 101	Rochester, 6 per cent. coup. X	Divers	90 97½
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	101½ 102	St. Louis, 6 per ct. coup. Long X	Do.	84 85½
Clev'd, 7 per ct. cp. W.W. 1879 X	Do. do.	100 103	Do. do. Municipal X	Do.	86 87½
Cincinnati, 6 per ct. coup. X	Divers	92½ 95	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	37 45
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	85 87	S. Francisco, 7 p. cp. 1865 pay. N.Y. X	May, Novemb.	60 70
Do. 7 per ct. coup. 1880 X	Jan'y, July	97½ 99½	Do. 10 p. ct. cp. 1871 X	Do. do.	69 70
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August	100 102	Do. 10 do. pay. N.Y. X	Jan'y, July	89 91
Dubuque, 8 per ct. cp. Long X	March, Sept.	100	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	56 61
Jersey City, 6 p. ct. cp. W.W. 1877 X	Jan'y, July	99 101	Whelsing, 6 per ct. coup. X	Divers	50 50
Louisville, 6 per ct. cp. 1880-83 X	Divers	71 72½	Do. 6 per ct. cp. Mun. 1874 X	March, Sept.	80 81½
Memphis, 6 per ct. coup. 1882 X	Jan'y, July	4 67	Zeroville, 7 do. X	April, October	

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending March 23, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	68	84
Covington and Lexington, 1st Mortgage	68	85
Do. do. 2d do.	7	80
Do. do. Income	10	12
Ohio & Miss., E. D., Construction	74	
Cinc. Ham. and Dayton, 1st Mortgage	78	90
Do. do. 2d do.	78	80
Indianap. & Cincinnati, 1st do.	78	80
STOCKS.		
Cincinnati, Hamilton & Dayton	67	
Columbus and Xenia	88	
Indianapolis & Cincinnati	67	
Little Miami	90	
Ohio and Mississippi (E. D.)	3	

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending March 12, were \$45,182 24

Week ending March 13, 1858 44,872 00

Increase \$310 24

Total traffic from July 1st. \$1,509 274 87

Same period last year 1,657,724 21

Decrease \$88,450 34

The following are the earnings of the Ohio and Mississippi Railroad for the month of February, 1859, compared with earnings of same month, in 1858:

	1859.	1858.
Passengers	\$50,568 34	\$42,945 92
Freights	44,578 82	34,285 71
Express	2,820 00	2,820 00
Mail	6,633 33	5,150 00

\$104,600 49 \$85,201 63

Increase \$19,398 86

Statistics of Ohio.

Ohio is fortunate in having for its Commissioner of Statistics, E. D. Mansfield Esq., of Cincinnati, who is, in all respects, admirably fitted for the duties of that office. He has a love for his work, joined to great industry and long experience, and his report, just in print, contains the proof, if any was wanting, that the right man has found the place, and the place the man. It also establishes the fact that no State in the Union of equal extent compares with Ohio in all the elements of prosperity and greatness.

The appraised value of towns and cities is \$153,102,815; of lands, \$437,183,132, and of chattel property, \$250,514,084, making an aggregate of \$840,800,031. Within the past seven years the aggregate value has nearly doubled. The State debt of Ohio is a little over sixteen millions, and a tax of two cents on the dollar would more than pay it off.

The exports of Ohio for 1858 (aside from manufactures) amounted to \$50,350,000.

Of this amount, Flour and Wheat, notwithstanding short crops, produced \$11,111,518

Pork, Hogs, Lard and Lard Oil 13,385,302

Horses 740,000

Sheep 400,000

Coal 870,000

Beef and Cattle 6,165,554

Grain—other than Wheat 1,750,000

Whiskey 5,109,953

Tobacco 2,197,125

Butter, Cheese and Tallow 1,734,382

Wool 2,649,466

Apples, Beans, Eggs, &c. 800,000

Manufactured articles from products of agriculture 3,000,000

Total \$50,350,000

The value of manufactured articles has not been ascertained, though it is estimated that those of Cincinnati alone exceed \$50,000,000. The Wheat crop has been increasing since 1854. The

crop of 1857 was 25,397,614 bushels, but that of 1858 was one-fourth less.

The corn crop of 1857 was 82,555,186 bushels of which some fifteen millions of bushels were turned into whiskey. The quality was not good, but the quantity was never exceeded save in 1855. Last year the crop was short, which accords with Mr. Mansfield's theory that it is heavy and light year by year in succession. This we find by the following:

Bushels.	Bushels.
In 1850.....56,619,608	In 1851.....61,171,282
In 1852.....18,165,517	In 1853.....73,436,090
In 1854.....51,171,551	In 1855.....87,587,434
In 1856.....57,802,515	In 1857.....82,555,186

Aggregate..224,759,191 Aggregate..304,749,992

The average yield in the light years was about 31 bushels, and in the heavy years 38 bushels to the acre. In the whole State in 1857, there was planted with corn 2,254,424 acres. In Butler Co., the crop averaged to the acre, 48 bushels; in Pickaway, 47 bushels; in Ross, 45, and in Fayette, 47.

Ross county had the largest number of acres in corn, viz: 74,114, and Pickaway, next, 72,188.

The crop of hay in 1857, was 1,701,245 tons, and of oats, 26,572,674 bushels.

Ohio has of canals, 849 miles; of railroads, 2,834, and of turnpikes, 2,900.

Car Springs and India Rubber.

AN IMPORTANT DECISION.

The discovery of a New Car Spring, by Mr. John J. Fields, conical in form, and pronounced by mechanics to fulfil all the requirements of a useful invention, was hailed with much satisfaction by the railroad companies throughout the country. Gutta Percha being the material used, doubts were expressed as to its efficiency: but as the New England Car Spring Company was supposed to have the exclusive right to use India Rubber for Springs, the invention was not considered as perfect as it would have been had the use of India Rubber been permitted.

About the same time, however, a friend of the inventor of the New Spring discovered as he supposed a new process for vulcanization of rubber, and on submitting it to Chemists of the highest character and his counsel, he was assured that such was the case. A patent was thereupon procured and the work of making springs after the new invention begun, when application was made for an injunction by the New England Car Spring Company vs. Goodyear, both in New York and New Jersey.

It was contended by the plaintiffs' that the process could not be carried on without the use of sulphur in its pure state and if it could, that the United States Court had decided that a product could be patented as well as a process. The case was argued on the 22d of March, a great array of counsel being employed—for the plaintiffs E. N. Dickerson and James T. Brady, Esqs. For the defendant, Daniel Lord, Joseph P. Bradley, J. Edwards, and Messrs Cummins, Alexander and Green.—Affidavits of Prof. Torrey, the U. S. Assayer, and Doremus, Professor of Chemistry, N. Y. Medical College, and the Court after mature deliberation refused to grant the injunction.

The new spring therefore has now the use of India Rubber, and the market will be supplied with India Rubber goods by two companies instead of one.

It was sworn to on the trial that the new rubber was free from the smell of sulphur, and would stand more heat and cold than Goodyear's process.

The *Courier and Enquirer* says truly in its report of the case, that "this is probably as important a decision as has been rendered for years in any of our Courts."

American Railroad Journal.

Saturday, April 2, 1859.

Railroads in Missouri.

There are six railroads in Missouri, each of which have received aid from the State, viz: the Pacific, (main line,) the South-West Branch, the St. Louis and Iron Mountain, the Hannibal and St. Joseph, the North Missouri, and the Cairo and Fulton. The aggregate length of these roads is 1,170 miles. The aggregate track laid about 614 miles. The maximum grade does not exceed 65 feet on any of them except the Hannibal and St. Joseph road, on which the higher grades range from 80 to 122 feet. The stock subscribed by counties, cities and individuals is \$12,400,875.—The amount of subscriptions paid in cash is \$7,084,337 10. Of this sum, \$6,630,808 82 have been paid by the Pacific, North Missouri, and St. Louis and Iron Mountain companies. The South West Branch, the Hannibal and St. Joseph, and the Cairo and Fulton companies depend mainly on their loans and State bonds for means with which to construct their roads. The whole amount of State bonds now authorized is \$24,950,000. The amount issued to the several companies is \$19,056,000. The aggregate discount on bonds sold is \$2,776,566 87. The proceeds of bonds sold by the companies amount to \$16,188,433 13. Bonds recently issued to the Cairo and Fulton company amounting to \$70,000, are not yet reported as sold; and \$21,000 are reported by the North Missouri company in the hands of their fiscal agent. The amounts due the several companies on the 1st day of March, 1859, were as follows:—To the Pacific (main line), \$220,000; to the South West Branch, guaranteed by the State, \$3,100,000; to the North Missouri, \$1,150,000; to the St. Louis and Iron Mountain, \$324,000; to the Cairo and Fulton, \$400,000; to the Platte county, \$700,000—making an aggregate of \$5,894,000. The annual interest to be paid on bonds issued prior to March 1st, was \$1,143,860. All the companies are understood to have applied State bonds, or their proceeds, in some degree, to the payment of interest on State bonds—their receipts go into a common fund and payments of interest, and other demands, are made from it indiscriminately. The St. Louis and Iron Mountain, and North Missouri companies both failed to pay the interest due the 1st of January last, on the State bonds issued to them for construction of their roads.

The report of the Board of Public Works of Missouri, from which the above statements are obtained, attributes much of the embarrassments which now surround the system, to inexperience, and erroneous ideas in regard to locations and contracts; this, together with the enormous amounts expended in discounts, commissions, exchange and interest, has absorbed probably sufficient to open several of the roads to the point where there are intended to terminate. The adoption of a wiser plan in the beginning, in regard to the management of State and other securities, would no doubt have saved much for the construction of the roads that has passed into these accounts.

We publish this week abstracts of the reports made to the Board by two of these companies, viz.: the Cairo and Fulton, and the North Missouri. By referring to the former, it will be observed that of the 650 bonds authorized to be issued, the Company have received 250; of these 180 have been sold, at a discount of \$32,172 50—netting only \$147,827 50. So, too, of the latter; out of 4,829 bonds sold, the Company realized only \$3,683,201 62—the discounts and commissions absorbing the sum of \$645,798 88. Of the 6,780 State bonds sold by the Pacific Company, but \$6,026,406 89 were received—the discounts and commissions absorbing \$753,593 11. In addition to this, \$181,332 50 were paid by this Company in discounts on the bonds of the county and city of St. Louis, taken at par in payment of subscriptions, and \$33,825 for commissions, etc. Of the bonds issued to the South-West Branch, 1,278 have been sold at a discount of \$192,677; in addition to which the Company have paid the further sum of \$115,572 as commissions—making the total discounts and commissions, \$308,249—netting to the Company only \$954,751. Of 8,445 bonds disposed of by the Hannibal and St. Joseph Company, only \$6,049,898 06 were realized—\$2,395,101 94 having gone into discount, commission and exchange account. The number of bonds issued to the St. Louis and Iron Mountain Co., is 3,276; the discount and commission attending their sale, \$598,547 16—the cash proceeds being \$2,677,452 84.

Interest and Dividends.

The following coupons are payable at the office of M. K. Jesup & Co., No. 44 Exchange Place, on and after April 1: Fort Wayne and Chicago R. R. Co. Real Estate Bonds; Fort Wayne and Chicago 10 per cent. S. F. Bonds; Ohio and Pennsylvania Income 10 per cent. S. F. Bonds; Ohio and Indiana 10 per cent. S. F. Bonds; Cairo and Fulton Railroad Co. of Missouri Land Grant Bonds.

Messrs. Winslow, Lanier & Co. will pay on the 1st April, coupons on the bonds of the Cleveland, Painesville and Ashtabula Road; Ross County, Ohio, Court-House Bonds; and Madison and Indianapolis 10 per cent. Sinking Fund Bonds.

The coupons of the Second Mortgage Bonds of the Williamsport and Elmira Railroad Company; due the 1st proximo, will be paid on and after that date; one-fifth on presentation, and the remainder in August and September. The coupons due in 1859 on the Chattel Mortgage Bonds of the Company will be paid at maturity. It is known that the Company's receipts are equal to the coupons on their Chattel Mortgage, but not equal to the full payment of the others.

The corporators of the Great Western Railroad Company (Illinois) are prepared to issue stock to all parties entitled to it under the compromise arrangement adopted at the meeting of creditors and bondholders, held September 19, 1857. All claims and coupons for which stock is to be issued should be presented at the office, No. 54 Wall street, on or before the 1st of May next. The Company will also redeem at maturity, at the same place, the interest coupons, due April 1 and Aug. 1, 1859, upon all bonds of the former Great Western Company, the back coupons of which shall have been surrendered and stock accepted therefor, in accordance with the compromise and Act of Incorporation of this Company. This Company

starts with a bonded debt on the road of \$2,391,000, and stock about \$1,600,000, free of all floating debt. At this cost very moderate earnings will suffice to pay interest and a dividend on its stock, the road being 179 miles long, and stock and bonds together showing a cost of only \$22,300 per mile. The earnings during 1858 were \$475,000.

The Reading Railroad gives notice to the holders of coupons of the Company, due on the 1st April, to have them at their office in Philadelphia, on or before the 31st March, when receipts will be given, and checks will be ready for delivery on the 1st, in exchange for such receipts.

The coupons due on the 1st inst. on the 7 per cent. first mortgage bonds of Sanbury and Erie Railroad Company will be paid, on presentation, at the office of the Company on that day.

The interest on the second mortgage bonds of the La Crosse Road will be paid at the Ocean Bank on April 4th.

The New Jersey Central Railroad Company have declared a dividend of 10 per cent., payable in full stock on and after April 2. This is the first dividend since the Company ceased to pay six per cent. per annum interest on the stock, while the work was in progress.

Illinois Central Railroad.—Locomotive Performances for January, 1859.

We give below a summary of the monthly statement showing the performance of locomotives on the Illinois Central Railroad for the month ending January 31st, 1859. The length of road is as follows:—Chicago Branch, 252 miles; South Division, 230 miles; North Division, 224 miles: total, 706 miles. Whole number of engines, 112. Number of miles run by passenger trains, 76,827; do. freight trains, 50,660; do. construction trains, 8,279; do. wood trains, 2,162; switching do., 12,886: total, 150,814. Pounds waste used, 2,217; gallons oil, 1,331½; cords wood, 2,939¼; tons coal, 790.85. The wages of engineers and firemen amounted to \$6,018.60. Cost of repairs, \$8,168.82. Value of waste, tallow and oil, \$1,293.38. Value of wood and coal, \$13,362.42. Cleaning engines, \$1,070.58—making the total cost, \$29,905.60.

The following will show the various items distributed among the three Divisions of the road:—

	Passenger Trains.	Freight Trains.	Construct'n Trains.	Wood Trns.	Total.
Chic. Br.	29,391	22,434	1,792	7,268	60,885
South Div.	23,973	15,342	3,694	4,470	47,479
North Div.	23,463	12,884	2,793	3,310	42,450

	Lbs. Waste.	Gallons Oil.	C'ds Wood.	Tons Coal.	Wages, Engin'm'n & Firemen.	Total.
Chic. Br.	1,032½	520½	987½	396.85	\$2,372.70	
South D.	552	438½	1,198	.....	1,902.20	
North D.	632½	372½	753½	394.00	1,735.70	

	Repairs.	Value Waste, Oil, etc.	Value Wood and Coal.	Cleaning En-gines.	Total Cost.
Chic. B.	\$3,354.36	524.59	4,755.60	428.58	11,432.83
S'th D.	1,870.94	405.51	4,792.00	238.05	9,208.70
N'th D.	2,943.88	868.28	8,814.82	406.95	9,264.07

	Oil, Waste, etc.	Wood & Coal.	Wages Eng'r & Firemen.	Repairs.	Cleaning En-gines.	Total.
Whole Road..	.86	8.86	3.98	5.41	.70	19.82
Chicago Br...	.86	7.81	3.89	5.50	.69	18.77
South Division	.86	10.10	4.01	3.91	.50	19.39
North Division	.85	8.98	4.09	6.93	.96	21.81

The above oil includes that used in head lights, and in lamps of engineers. Wood is rated at \$4.00 per cord; coal, \$2.03 per ton, loaded on tenders. Re-building, superintending, teaming, and all other expenditures appertaining to repairs, are included in the above cost of running locomotives.

The Ohio Canals—Their Influence on the Prosperity of the State.

On the 6th of January a meeting was held at Columbus to take action against the policy of sale of Canals. At that meeting a committee was appointed to address the people of the State upon the subject, and in accordance with that action KENT JARVIS, as Chairman and A. H. LEWIS, as Secretary, have issued an elaborate address the facts and figures in which should close the mouth of every advocate for the sale of the canals.

Our canals measure about 830 miles, connecting the Lake and River by three lines, to wit: Cleveland to Portsmouth—Cleveland to Beaver—Toledo to Cincinnati, with several side cuts, feeders and the Hocking Valley Canal,

According to the Auditor of the State there are fifty-five counties not upon or adjacent to the canals, and thirty-three canal counties. To show the effect of the canal upon the State, elaborate tables are made.

The increase of value in real estate in the fifty-five counties from 1826 to 1858 was \$245,791,315; the increase of value in the thirty-three canal counties for same period was \$268,061,794. The increase for same period on personal property in all the counties of the State was \$209,630,731.

The committee estimate the proportionate amount of increase or deficit between the non-canal counties and the canal counties, by which it appears that the thirty-three canal counties have of this increase on real estate, over their natural proportion, \$75,366,878, and on the increase in personal property the same thirty-three counties have over their natural proportion \$26,654,986. The deficit in proportion in the fifty-five on real and personal property is \$102,021,862. The thirty-three canal counties being in excess the same amount.

The valuation in the thirty three canal counties in 1853 on real and personal property was \$407,031,033. The valuation in 1853, on the fifty-five non-canal counties was \$381,783,945; therefore the thirty-three canal counties have paid taxes since 1853, more than all others, on property valued at \$25,247,188.

The increased value of real and personal property from 1836 to 1858 was \$775,468,940. Of this increased value the thirty-three counties have over their proportion \$99,344,482. The averaged annual increase in the thirty-three canal counties is \$3,104,515 over their ratio and upon that increased ratio have those canal counties paid taxes from 1826 to 1858.

The grand duplicate in the State in 1858 amounts to \$840,800,031. The thirty-three canal counties have an excess over their ratio of \$108,548,046; this shows the important difference in the increase of property on the grand duplicate by the thirty-three canal counties.

The committee also figure up the population in the canal and non-canal counties, and then show that the thirty-three canal counties are in advance of the fifty-five non-canal counties as follows:

1st. An increase of Real estate on the grand duplicate from 1826 to 1853—excess	\$22,270,479
2d. Excess over proportion of increase of Real Estate from 1826 to 1853	75,866,878
3d. Excess over proportion of personalty same period	26,654,984

Excess of Real and Personal Property

4th. Excess on duplicate in 1853	\$25,247,188
5th. Excess on proportion of increase on the duplicate from 1826 to 1858	99,344,483

5th. Excess over proportion on duplicate 1858	\$108,548,046
7th. Excess in Population, 55,306.	

The fifty-five other counties being deficit in like amount in all these particulars.

The committee then add eleven counties near the canals to the 33 on the canals and calling them all canal counties, show that the 44 canal counties have a total excess of valuation over the 44 non canal counties of \$218,260,021. The committee says:

Upon the assumption, however, that the 44 canal counties had an equal valuation on the duplicates of 1826 with the other counties, we find the excess of increase in the canal counties to 1858, as before stated, to be the sum of \$186,293,102; being an averaged annual increase of \$5,821,658. This being true, does it not follow that the canal counties have paid Taxes on this annually accruing increased sum from 1827 to 1858, inclusive? a computation of which will be found to reach the sum of \$10,988,280.

With these facts it is easy to ascertain whether the canals are an absolute charge upon the 44 counties which are not situated upon them. The average of the annual levy for State tax, from 1826 to 1858, is found to be about 3¼ mills on the dollar.

The above excess of \$219,160,021, on the duplicate in the canal counties gives an annual tax of	\$22,225
Average annual proceeds of Public Lands, from 1826 to 1858	56,758
Average annual proceeds of tolls from 1826 to 1858	187,142

Annual income	\$1,065,940
Interest on cost of canals, \$14,627,550, at 6 per cent.	877,658

Net annual proceeds

From this statement it will be seen that the taxes paid for the 44 canal counties—with the proceeds of tolls and of public lands—not only liquidates all charges upon the canals, but pays into the State Treasury an additional sum equal to the taxes on \$50,200,000 valuation of property. These facts form the basis of the following statement:

Excess of increase in valuation on the grand duplicate—over and above paying all charges upon the canals	\$50,200,000
Excess of taxes paid by the forty-four canal counties more than their ratio per Auditor's statement from 1826 to 1858	4,223,020
Net earnings of the canals from 1826 to 1858	5,801,426
Net proceeds of public lands	1,753,783
Less cost of canals	\$14,627,550
" Int. paid to 1859	14,042,447
Balance in favor of canals	\$33,308,232

Thus demonstrating most clearly that the direct proceeds of the canals and the public lands have paid for their construction fourfold, and not one dollar has, in reality, been drawn from the forty-four counties "not on the canals" for their construction or support; and it is equally true that

the canal counties are becoming enriched by them. Nor are these all the benefits accruing from the canals; the non-canal counties are reaping direct benefit from ready markets and better communications or outlets. * * *

Surely when this question is understood, there can be no diversity of opinions, as there is none of interest. The canal counties *do* pay a proportion of taxes to which they would not be subjected but for the canals. They can afford it. In like manner and proportion the non-canal counties are relieved from the burthen, not merely for State debt, but for all schools, State and general purposes.—They are not directly enriched by the public works, nor are they taxed one dime in fact for their support. On the contrary they reap indirect benefits, not merely in a lightened taxation for general purposes, but in their own markets, from which, by these works, the surplus produce which would otherwise compete with them, is diverted.

Railroad in India.

The length of railway lines sanctioned in India is 4,847 miles; the length in course of construction 3,038 miles; and the length opened for traffic is 559 miles. In the course of the year, there will be 747 additional miles opened; in 1860, 270 miles more; in 1861, 296 miles more. Within three years from the present time, more than 8,100 miles of railway will be open. The total capital guaranteed for these railways is about \$200,000,000, one-half of which has already been paid up. The cost of construction is about \$56,000 per mile, one-third the English average. When the lines are completed, there will be four great arterial railways opening up the whole of India.

Southwestern (Ga.) Railroad.

At Smithville, on the line of this road, 83 miles southwest of Macon, and 23 miles above Albany, its present terminus, commences what is known as the Cuthbert extension, running via that place to Fort Gaines, on the Chattahoochee river, near the Alabama State line. We learn from the Savannah *Republican* that the cars of this company are now running upon this extension as far as Ward's Station; and that it is expected the road will be completed to Cuthbert by the 1st of July next.

St. John's and Indian River Canal.

We have learned through Mr. McCrea, engineer for the above work, that the survey of three lines have been run and completed. Mr. McCrea arrived a few days ago in our city from the seat of his operations, and is now making his estimate of the most practicable route, and the cost of constructing it, which in a very short time will be reported to the proper functionaries. He thinks the work entirely practicable and supposes that the cut will be about twelve miles long. He speaks in high terms of the good character and value of the lands in that section. We hope to see this work soon progressing, for its benefits cannot well be estimated.—*Jacksonville (Fla.) Standard.*

Cotton Statistics.

We learn from the last Patent Office Report, that the total imports of cotton into the United Kingdom, and the annual average from all countries, for the period or thirty-five years, is as follows:—From the United States, 369,085,411 pounds; from the East Indies, 59,597,462; from the West Indies, 2,716,539; from the Brazils, 22,815,501; from all other countries, 13,774,070; total 467,988,951 pounds. From 1851 to 1855, from the United States, 3,421,502,072: total value for that period \$491,169,517, at 9.58 cents per pound. The export of cotton last year was to the value of \$131,386,561. That sum will be considerably surpassed the present year. The crop is estimated by many as high as 3,600,000 bales; which, at an average of ten cents a pound, or \$50 per bale of five hundred pounds weight, would make the United States crop of raw cotton worth one hundred and ninety millions of dollars.

Sea Island cotton, which commands the highest price, at the period referred to produced 54,687,909 pounds; its estimated value \$491,169,517; its annual average for thirty-five years 9,175,489 pounds, and \$52,283,992.

Insurance Law.

PREMIUMS FALLING DUE ON SUNDAY MAY BE PAID ON MONDAY.

An important question in the Law of Insurance, has lately come up for adjudication in the New York Superior Court; viz. when the last day for paying a premium falls on Sunday, may the assured claim the right to pay on Monday, or must he pay on Saturday to save his policy.

The suit was brought by Jane Campbell, Executrix of Daniel Campbell, against the International Life Insurance Society. The principal facts were as follows.

Daniel Campbell, during his life time, insured his life with the defendants, by a policy, dated the 29th of May, 1850, paying a certain premium annually. This premium was by the terms of the policy, payable on the 28th of May. By a notice sent to the insured by the authorized agents of the company, and which was considered by the Court as being conclusive upon the company, the twenty-ninth day of May, 1857, was named as the day on which the premium for that year would become due. The case was therefore treated in all respects as if the twenty-ninth day of May had been the day named in the policy, for the payment of the annual premium.

By one of the conditions of the policy, it was provided that the policy should not be considered in force if the premium remain unpaid beyond 30 days after becoming due.

In the year 1857, thirty days from the twenty-ninth of May fell on Sunday, June twenty eighth. On Monday the twenty-ninth Mr. Campbell tendered the money, but the defendants refused to receive it on the ground it was "too late."

About two months afterwards Campbell died. His Executrix then commenced this suit to recover on the policy.

By THE COURT HOFFMAN J; (after disposing of some preliminary questions leading the Court to the result that under all the facts the last day for the payment of the premium fell on Sunday, June 28th.) Then arises the important question as the last day after the thirty days was Sunday, could the tender of the premium be made on Monday.

The argument which is used to prove that it cannot be is substantially this. Whatever may be lawfully done on any other day of the week may be done on Sunday, except so far as positive statutory regulations have prohibited a particular act. And next, what is so permitted to be done on Sunday must be done on that day whenever under a contract the day for fulfillment falls upon it; or else it must be done before that day. I state this to be the substance of the argument as a general proposition; not that it is contended that such a rule is absolutely exceptionless.

These important and interesting propositions may well warrant a careful investigation. (His honor then proceeded to an elaborate and learned review of ancient edicts and laws and modern statutes and adjudications on the subject of the observance of Sunday: and finally gave the following statement of the result to which the majority of the Court were led.)

Yielding to the force of what has been actually

decided, we cannot but notice a marked line of distinction between what is suffered because not positively prohibited and what is permitted to be omitted and deferred because at variance with the scripture; because as much within the object of the statute "of the observance of Sunday," as anything expressly prohibited; and because in some cases it is clear and in other cases may be inferred that contracts are made into which the law imparts the qualification, and the parties are treated as agreeing with it in view, that if the day of performance is Sunday it may be done on some other day. We shall endeavor to see if such a principle applicable to the present case can be drawn from the authorities. It is a settled doctrine of Mercantile law, that a promissory note or bill, must be demanded on the third day of grace, unless that falls on Sunday. (*Bussard vs. Levering 6, Wheaton 102, Gordon vs. Richards 2, Caines 342, Johnson vs. Mathews 13, John's 470.*) But if a check or note is without grace, and it falls due on Sunday, the party has Monday to make payment. (*Salter vs. Burt 20, Wendell 205.*)

The usage in regard to the days of grace is as old as the time of lord Holt. (2d Caines 344.) The contract, by such usage, so established as to be part of it, it is to be fulfilled on a given day, which falls on Sunday. The law interposes and says, that it cannot be, or at least need not be performed on that day. It shortens the time of performance, and not merely requires payment on Saturday but sustains notice of protest given on Monday. (2 Caines 344, Cuyler vs. Stevens 4, Wendell 566.) By general or universal custom Sunday is not a day of business, (see also Howard vs. Iver 1, Hill 268.)

For a long time Courts held, and finally embodied the decision in general rules or orders, that in all matters of practice, when a time was fixed for performance of an act, or the giving of a notice, and the time expired on Sunday, it could be done on the ensuing Monday, (*Cook vs. Bunce 6, John Rep., 326, Browne vs. Withington 1, Land S. A. Rep., 664, B. J. Letts Bissell 11, Barb Rep. 96.*)

The rule was stated in unqualified language, by Justice Brown in *Salter vs. Burt* (20 Wendell 205) I agree to the doctrine laid down by Gould Justice "in *Avery vs. Stewart 2, Conn. Rep. 69,* that Sunday cannot for the purpose of performing a contract, be regarded as a day in law, and it should for that purpose be considered as struck from the calendar. In computing the time mentioned in a contract for doing an act, intervening Sundays are to be counted but when the day of performance falls on Sunday, it is not to be taken into the computations.

In (*Avery vs. Stewart 2 Conn. Rep. 69*) the court (six Judges to three) held that when a contract was to be performed on a particular day of a month in future, and that happened to be Sunday it was to be performed in the following day. The action was on a note not negotiable payable in sixty days from date in cotton yarn to be delivered at a certain place. It was dated the 6th of December and fell due the fourth of February, which was Sunday, on Monday what was equivalent to a tender of the yarn was made. The debtor could not be required to pay, nor the creditor to accept payment, before the time appointed.—The case of *Leonds vs. Leyon* (18 Conn. Rep. 18) is an authority which covers the point in this in-

stance fully and decisively. A testator devised lands to his son on condition that he should pay A, \$100 in one year after his decease. He died on the 2d day of October 1841. The 2d day of October 1842 fell on Sunday. A tender on the ensuing Monday was held good. The day of the death was to be excluded from the computation. By doing so, the day of the expiration of the year would be Sunday. The defendant had a full year allowed him for paying the money, and was not bound to pay it on the Saturday preceding the day on which the year expired.

It appears to me from this review of the law, that the Court is warranted in saying, that when from accident or mutual error, the day of fulfilling an agreement falls upon Sunday there is enough of principle and authority to justify the party in deferring his performance to the Monday ensuing without impairing a right, or incurring a forfeiture.

The judgment must be for the plaintiff.

The New York Canals.

We give below from the Albany Evening Journal some interesting historical notices of the progress of trade on the Erie Canal, and of the influence of this work on the internal commerce of the country.

The total amount of tolls received by the State from all its canals since 1817 is, in round numbers, \$70,000,000; from interest on deposits and premiums on loans \$5,500,000, making a grand total of \$75,500,000. By referring to the Red Book for 1859, it will be found that the total tonnage of the New York canals from 1836 to 1858 inclusive, is 59,647,746 tons. What are the sources from which these millions of tonnage have been derived that have paid so many millions of revenue to the State?

The following statement will show the States from which this enormous tonnage came, the number of square miles and the population in each State by the Census of 1850, and the per centage of square miles in each State as compared with the whole number of square miles in all the organized States and Territories in the United States in 1850, with the number of bushels of grain of all kinds produced in each State during that year:

Names of States.	No. square miles.	Per cent'e of square miles.	Population, 1850.	No. bushels grain produced in 1850.	No. inhabitants to 1 square mile.
New York	47,000	1.60	3,097,394	65,389,953	67.3
Ohio	39,964	1.36	1,980,929	87,818,864	49.5
Michigan	63,924	1.84	808,391	9,980,727	6.6
Wisconsin	66,243	1.91	897,654	13,614,485	7.1
Illinois	59,914	1.73	1,992,214	11,766,784	3.8
Indiana	65,406	1.89	851,470	77,332,969	15.4
Minnesota	38,809	1.15	988,416	64,958,110	29.2
Missouri	166,035	5.35	6,077	4,388,690	10.5
Kentucky	67,380	2.29	682,044	4,388,690	10.5
Total	608,344	20.70	9,483,394	444,603,642	26.1

From an examination of the above statement, it will be found that the ten States mentioned therein have 608,344 square miles, being 20.7 per cent. of all the square miles in all the organized States and Territories of the United States in 1850; and that those States produced in that year 444,000 bushels of grain, saying nothing of the products of animals or the products of the forest.

It will also be seen that the States of Wisconsin, Iowa, Illinois and Michigan, all of which are large grain producing States, had, in 1850, a sparse population to the square mile. If we add to these States the square miles of the prospective new States of Kansas and Nebraska, and the cordon of new States that will soon be formed on the Missouri river and its tributaries, which have over 4,000 miles of navigable waters, and take into account the increase in population and the consequent increase in productions in the States bordering on the Lakes, and in the States tributary to the commerce of the Lakes, it may safely be assumed that if the Erie and Oswego canals are made of sufficient capacity to make them cheaper routes than any and all others between the West and the seaboard, that in the next thirty years 300,000,000 of tons will be transported upon the canals of the State of New York. In this calculation nothing has been said about the large and increasing trade of Canada West or of the coal trade from Pennsylvania.

If an examination be made comparing the vessel tonnage on the Lakes and the exports of grain from the Lake regions twenty years since, with the vessel tonnage and the exports of grain in 1858, it will go very far to confirm and strengthen the faith of the Legislature and of the people of the State of New York in the ultimate success of the canals of the State, and to show also that 300,000,000 of tonnage in the next succeeding thirty years, is not a wild or extravagant estimate of what will be carried on the canals. As early as the year 1819, the steamboat Walk-in-the-Water, (built and first went on Lake Erie in the month of August, 1818,) the only steamboat on these Lakes, made a trip to Mackinac to carry up the American Fur Company's goods. The waters of Lake Michigan were first plowed by steam in 1826 or 1827—a boat having that year made an excursion with a pleasure party to Green Bay. In 1832 the whole vessel tonnage on the Lakes was less than 7,000 tons.

STATEMENT NO. II.

Showing the number and kind of vessels engaged in the commerce of the Lakes, with the tonnage of the same for 1845, 1848 and 1858:

American.

Total American
& Canadian.

1858.

	1845.	1848.	1858.	Total American & Canadian.
	No.	Tonn.	No.	Tonn.
Steamers.....	62	20,500	103	36,506
Propellers.....	8	2,500	35	11,453
Tugs .....	.....	.....	69	6,366
Barques & Brigs.....	50	11,000	86	19,673
Schooners.....	270	42,000	495	62,802
Total.....	380	76,000	719	130,434
			1,213	331,163
				912
				193,780
<i>Canadian.</i>				
Steamers.....	57	.....	67	.....
Propellers.....	13	.....	14	.....
Tugs .....	.....	.....	.....	.....
Barques & Brigs.....	2	.....	2	.....
Schooners.....	94	.....	110	.....
Total.....	166	66,380	193	63,346
			836	73,148
				1,548
				404,301

The first shipment of wheat by lake from Chicago was made on the 8th of October, 1839, and consisted only of a small cargo of 1,678 bushels, which was consigned to Kingman & Durfee, Black Rock Mills. The first shipments of corn were made from Chicago in 1847, and the whole

amount shipped during that year was only 67,315 bushels.

STATEMENT NO. III.

Showing the export of Flour, Wheat and other Grain, from Lake Michigan ports in 1858:

	Wheat and Flour,* bush.	Corn, bush.	Oats, bush.
Chicago	10,909,243	7,493,212	1,498,184
Milwaukee	5,283,481	33,177	645,283
Racine	924,376	9,686	59,426
Kenosha & other ports	600,000	.....	75,000

Total.....17,717,100 7,526,075 2,277,843

* Flour reduced to wheat, calling each barrel of flour five bushels of wheat.

	Barley and other grains, bush.	Total, bush.
Chicago	134,577	20,035,166
Milwaukee	45,426	6,007,367
Racine	51,378	1,044,856
Kenosha and other ports	50,000	725,000

Total.....281,381 27,812,389

From Statement III. it will be seen how rapidly the commerce of Lake Michigan has increased in the last few years. In 1839, 1,678 bushels of wheat were exported from Chicago, while in 1858 the exports are nearly 11,000,000 bushels of wheat from that port alone. In 1847 the first shipments of corn were made from Chicago, while in 1858 the exports of corn from that city are nearly 7,500,000 bushels. The total movement of grain from all Lake Michigan ports in 1858 has reached the enormously large sum of nearly 28,000,000 bush.

STATEMENT NO. IV.

Showing the quantities of Flour and Grain sent eastward from the lake regions, comprising Ohio, Indiana, Michigan, Illinois, Wisconsin, Iowa, Missouri, Kentucky and Canada West, in 1858:

	Flour, bbls.	Wheat, bush.	Corn, bush.	Other grain, bush.
Western Territory	682,314	.....	.....	.....
Do. Pennsylvania	450,000	.....	.....	.....
Do. Central R. R.	331,007	186,499	94,945	21,965
Do. Dunkirk	1,551,590	10,497,285	6,616,188	2,599,254
Do. Suspension Bridge*	350,000	150,000	.....	.....
Do. Oswego	95,720	6,572,432	2,918,618	1,272,424
Do. Ogdensburg	881,624	790,118	720,236	44,126
Do. Cape Vincent	72,633	410,391	40,000	156,681
Do. Montreal	664,275	1,769,482	105,097	136,637
Do. Rochester	7,110	276,575	.....	9,865
Total movement	4,686,273	20,652,782	10,490,074	4,844,673
* Estimated from receipts for 1857, at those places.	.....	.....	.....	.....
Total movement in 1858	4,586,273	.....	.....	.....
Do. 1857	3,897,964	.....	.....	.....
Increase	1,188,310	.....	.....	.....
Flour, bbls.	35,987,529	.....	.....	.....
Grain, bush.	27,800,061	.....	.....	.....
Total	6,187,468	.....	.....	.....

Direct Trade with Europe.

In the year 1856 the schooner "Dean Richmond" of 379 tons, was built by Quayle & Martin of this city for C. J. Kershaw of Chicago. This vessel was loaded with wheat, and under the command of Capt. D. C. Pierce, sailed from Chicago to Liverpool. She arrived in good time, having made a quick passage, and astonished the English people by her rig, and from the fact of her having come from the inland Lakes of America to Europe.—The schooner was sold in Liverpool, and her new owners changed her name to the "Belina." She is now engaged in the trade between Liverpool and Brazil, on which route she has made quick and successful trips.

In 1857 the same builders turned out the barque "C. J. Kershaw" of 389 tons burthen, having built her for Capt. D. C. Pierce, who was the pioneer Captain in the trade. The "Kershaw" was loaded with staves, cedar posts and black walnut lumber. In the fall she started on her return with a load of crockery and iron, but was twice driven back by terrific gales and had to go into dock for repairs. This brought her into St. Lawrence river so late, that she was frozen in the Lachine Canal. Early in 1858 she arrived here with her cargo in excellent order and to the perfect satisfaction of the consignees.

About the time that the "Kershaw" was launched, a small British schooner, the "Madeira Pet," of 123 tons, came from Liverpool through the rivers and lakes to Chicago, with a cargo of hardware, cutlery, glass, &c., on speculation. The enterprise was not successful, and no more attempts were made to establish a direct trade between Chicago and European ports.

During the Spring and Summer of 1858, several of the leading business men of Cleveland entered with vigor into the trade, and a respectable fleet of vessels were dispatched to European ports. A new barque, the "D. C. Pierce," was built by Messrs. Pierce & Barney, and sent to Liverpool with a cargo of staves and black walnut lumber. The same parties sent the "C. J. Kershaw" to London with a similar cargo, and the "Chieftain" and "Black Hawk" with the same kind of freight.—Mr. T. P. Handy sent the "R. H. Harmon" with staves and black walnut lumber to Liverpool, the "D. B. Sexton" with a similar cargo to London, and the "J. F. Warner" with a cargo of the same kind to Glasgow. Mr. H. E. Howe sent the new barque "H. E. Howe" to London with a cargo of staves and lumber. Col. N. M. Standart sent the "Correspondent" to Liverpool with a load of wheat, and Mr. C. Reis freighted the "Harvest" to Hamburg with a cargo of lumber, staves and fancy woods. This made a fleet of ten vessels, owned and freighted by Cleveland merchants, with a tonnage of about 3,600 tons. Two vessels were sent out from Detroit with similar cargoes, but the enterprise is pre-eminently a Cleveland one.

All of the Cleveland fleet disposed of their cargoes to good advantage. Six of them returned with cargoes of crockery, bar iron, pig iron, or salt. This part of the trip also proved successful. It was the intention of the owners to sell some of the vessels in England, but the shipping interests were so prostrated that it was impossible to dispose of the ships at anything like a fair price.—They therefore still remain in the hands of Cleveland owners, but four of them have not returned to the Lakes. The "D. B. Sexton" now runs between Cleveland and the Mediterranean; the "H. E. Howe" went on a voyage to South America, the "Harvest" is gone to the West Indies and the "C. J. Kershaw" is employed, we believe, in the Mediterranean trade. Wherever any of the Cleveland vessels have been they have called forth complimentary remarks by their fleetness and steadiness in heavy weather.

The cost of the round trip is estimated to be between three and four thousand dollars. One great portion of the expense arises in the passage through the canals and rivers between Lake Erie and the Atlantic. With the widening and deepening of the Welland Canal, and some further improvements in the river and canal navigation, large

er vessels can be employed in the trade, and the rate of expense per ton be thereby greatly lessened. At first there was great difficulty in procuring policies of insurance on the bottoms or cargoes on this route, as the Eastern Companies were doubtful of the practicability of the enterprise. This difficulty has been pretty much got over, and reliable Companies are now willing to underwrite at fair rates.

We learn that the enterprise so well begun by Cleveland money and energy, is not to be abandoned. Two vessels are already arranged for, to start early in the Spring for Europe. May this important movement go on and prosper!—*Cleveland Herald.*

Heavy Contracts for Cuba.

It is well known that for some time past Messrs. Bollman & Tegmeyer, bridge builders and machinists, have had a considerable force of men at work in the construction of an iron railroad depot and a large number of railroad bridges for the Havana railroad, and the senior partner, Mr. Bollman, left some weeks since with about twenty superior workmen, for the purpose of erecting the depot building.—This structure, which cannot fail to prove a perfect curiosity in its peculiar line of architecture, is of the following dimensions: 250 feet in length, 60 feet in width, and of a corresponding height. The interior arrangements are such as to combine every accommodation which is required in the best conducted roads, and contains, among other apartments, a public hall, baggage rooms, ticket offices, ladies' rooms, rooms for the officers, etc., whilst near the centre, which is two stories in height, are the rooms for the accommodation of the Superintendent and his family, numbering in all about twelve different apartments. The entire building consists of sections, which have been cast here, so that they have only to be connected together to form a complete structure. Two vessels laden with a portion of the work have already been despatched; the latter carrying out 80,000 bricks and about forty or fifty tons of iron work. A third vessel will also be despatched as soon as the remainder of the work will be ready for shipment. The number of bridges in hand and in course of erection is ten. They are of various sizes, measuring from 90 to 150 feet in length. All these are of the celebrated Bollman patent, which have proven so durable in standing the heavy travel of the Baltimore and Ohio and other railroads.

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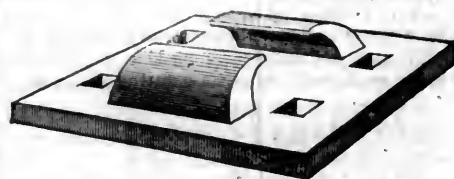
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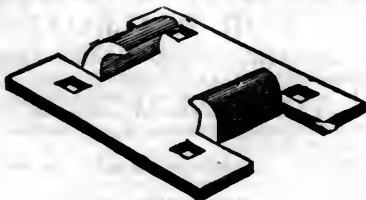
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AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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SATURDAY, APRIL 9, 1859.

[WHOLE No. 1,199, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, April 9, 1859.

The Cumberland Coal Company Case.

This case is of much importance, in view of the decision rendered by the Supreme Court therein, and we think a brief history of the suit will be acceptable to our readers.

The question is, whether the purchase of corporate property by a director intrusted with the duty or responsibility of making the sale, is invalid, as being contrary to public policy.

The suit was brought by the Cumberland Coal and Iron Company, a mining company in Maryland, against Sherman, Dean and Postley. By the complaint it appears that early in the history of the company Sherman was elected a Director, and was subsequently appointed one of the Executive committee. In 1855, he offered a resolution at a meeting of the directors for the appointment of a committee to report what part of the Company's mining lands could be sold without disadvantage. The resolution was passed, and Sherman himself appointed chairman of the committee. They in due time reported, recommending a sale of 1,548½ acres. At a subsequent meeting, a resolution was passed authorizing the President and Secretary to sell and convey a part of these lands; and thereupon a deed was executed of 1,215 acres to Sherman and Dean, for \$140,000. A contract was at

the same time executed with Sherman and Dean, securing to them important advantages in transportation over the company's road. The action of the President and Secretary in this matter was formally approved by the Board.

The complaint also averred in addition to the foregoing facts, that the price at which the lands were sold was grossly inadequate; and the rates permitted in the transportation contract above mentioned were so low as to afford no compensation to the company, and that the President made a false and fraudulent report of these dealings to the stockholders at their meeting.

Sherman and Dean, it is further alleged, in connection with Postley and others, organized the Hoffman Coal Company. They conveyed the lands and assigned the transportation contract to that company; and Sherman and Dean between them took 4,990 shares out of 5,000 shares into which the stock was divided.

The complaint prayed that the deed and contracts might be declared void and canceled. The plaintiffs now moved for an injunction pending the suit.

The affidavits to oppose the motion denied all charges of fraud, but did not deny the sale and conveyance and the making of the transportation contract, or that the price was inadequate. They alleged that the stockholders at their meeting in June 1857, ratified the dealings in question, but did not deny the President made the representation to the meeting charged in the complaint. They alleged that several of the stockholders had solicited Sherman to make the purchase, and that the lands could not have been sold if he had not been willing to do so.

The motion was brought before Hon. Justice DAVIES, who rendered an elaborate and lengthy opinion, which sets forth in detail various circumstances of the case, additional to those stated above, apparently indicating a fraudulent design on the part of the defendants; but which it will be unnecessary to repeat, as he arrives at a decision without considering the question of fraud. The opinion concludes as follows:

"The cases in reference to the dealings of an agent or trustee with the property, in reference to which his agency or trust exists, may be arranged into two classes.

First—Cases in which a trustee buys or contracts with himself or with several trustees, of which he is one, or a board of trustees of which he is one; and it will be seen by reference to the authorities hereinafter cited, that the incapacity to purchase applies to all these cases.

Second—Cases in which a trustee buys of or contracts with his *cestui que trust*, who is *sui juris*, and incompetent to deal independently of the trustee in respect to the fund estate.

As to the first class of cases, the purchase is virtually at the option of the *cestui que trust*, without reference to the fairness or unfairness of the purchases or contracts. For the reasons before given the disqualification of the party purchasing or contracting is a conclusion of law and is absolute."

[His Honor here proceeds to an elaborate and searching review of the authorities both in English and American jurisprudence, and under the civil law, in support of the rule above stated, which he re-states as follows:]

It is thus seen that the rule by which agents or trustees are prohibited and rendered incapable of purchasing or dealing with property of their *cestui que trusts*, is one of universal application, fortified by a current of theory and high authorities, and is adhered to with stern and inflexible integrity; and the consequence of such dealing and purchasing is, that the agent or trustee is liable at any time, on the application of the *cestui que trust*, and as a matter of course, and without reference to the fairness or unfairness of the transaction, the adequacy or inadequacy of the price paid, or any other equities of the agent or trustee, to have the sale set aside. Such has been the uniform administration of the law in England and where the civil law prevails, and in this country. No reason is suggested why rules thus founded on the soundest morals, which have been maintained with such uniformity and steadiness, should never be relaxed. On the contrary, it is seen that every consideration arising from circumstances surrounding us, and the unparalleled multiplicity of corporations, who can act by trustee or agents, and the very large proportion of the wealth of the country invested in them, and placed under the control and management of agents and trustees, forcibly demands of courts of justice a firm adherence to these principles, and a stern application of them to every case coming within the sphere of their action. Nay, the rule, as applicable to managers or corporations, should in no particular be relaxed. Those who assume the position of directors and trustees assume also the obligations which the law imposes on such a relation. The stockholders confide to their integrity, to their faithfulness, watchfulness, the protection of their interests.

This duty they have assumed, this the law imposes on them, and this those for whom they act have a right to expect. They are not permitted to watch over their own interests; they cannot speak in their own behalf; they must trust to the fidelity of their agents. If they discharge these important duties and trusts faithfully, the law interposes its shield for their protection and defence: if they depart from the line of their duty, and waste or take themselves, instead of protecting, the property and interests confided to them, the law, on the application of those thus wronged or despoiled, promptly steps in to apply the correction, and return to the injured what has been lost by the unfaithfulness of the agents.

This right of the *cestui que trust* to have the sale vacated and set aside, when his trustee is the purchaser, is not impaired or defeated by the circumstances that the trustee purchased for another. [Citing *ex parte Bennet*, 10 Ves. 386.] It follows, therefore, that if defendant Sherman was incapacitated to purchase for himself, he was equally incapacitated to act for the defendant Dean; and if Dean were sole purchaser, the purchase would be set aside.

Neither are the duties or obligations of a director or trustee altered from the circumstance that he is one of a number of directors or trustees, and that this circumstance diminishes his responsibility, or relieves him from any incapacity to deal with the property of his *cestui que trust*. The same principles apply to him as one of a number as if he were acting as a sole trustee.

[His Honor next proceeds to decide that the action of the stockholders at the meeting of June, 1857, in ratifying the dealings with Sherman and Dean, was not such a ratification as prevents the company from maintaining their suit; for the general reason that they had not knowledge of all facts. He then states the final conclusion to which he arrives.]

I have arrived at the conclusion, entirely clear to my own mind, that this deed and contract cannot be sustained.

I have arrived at the result without considering the question of fraud raised in the complaint and denied by the affidavits. I have chosen to place my decision on higher and more satisfactory grounds. For the reasons I have stated, the plaintiffs having established a *prima facie* right to have the deed and contract case called and the lands sold reconveyed to them, it is my duty to restrain the defendants until the hearing of this cause, as asked for in the complaints and supplemental complaints.

The plaintiffs have the right to their real estate, or anything into which it has been transmuted.—It is, therefore, proposed to restrain the defendants from transferring the stock owned by them in the Hoffman Coal Company, which but represents the real estate of the plaintiffs, and the privileges and advantages secured by the transportation contracts.

The motion for injunction is therefore granted.

Pacific Railroad.

At the meeting of this company held in St. Louis on the 28th ult., the following gentlemen were elected Directors, viz: J. P. H. Gray, H. L. Patterson, James E. Yeatman, A. Meier, Geo. R. Taylor, Joseph Charless, Robert Campbell, Thomas Allen, Daniel R. Garrison, John M. Wimer, B. W. Glover, Robert Barth.

The report of the company made to the stockholders states that on the 4th of May last, there were 25 miles of new road opened from Jefferson City to California, in Moniteau county; and on the 25th of July following, 12½ miles additional of track was opened; making 37½ miles of new track added to the Pacific road during the year. In addition to this, 19 miles of track on the Southwest Branch, from Franklin to St. Clair station, has been opened. A length of six additional miles on the Southwest Branch is ready for the

rails, and will be opened in a few weeks. It is expected also that by the first of October next, the road will be opened to Jamestown, a distance of 104 miles from St. Louis.

The receipts of Transportation Department from opening of road to March 1, 1859, were.....\$2,006,824 02
Total expenses of Transportation Department to same date.....1,270,273 54

Cash balance.....\$736,550 48

—which sum has been applied to the payment of interest on State bonds, and has reduced the interest account on the books of the company to that amount.

It is estimated that it will require \$3,250,000 to complete the road to Kansas City.

TREATISE ON THE PRINCIPLES of CIVIL ENGINEERING AS APPLIED TO THE CONSTRUCTION of WOODEN BRIDGES.

By S. S. Post, Civil Engineer,
And late Chief Engineer of the N. Y. & Erie R. R.

§ 1. Force is an agency which, applied to a load, tends to impart motion to it, or to retard it, or to bring it to a state of rest.

§ 2. When two or more forces acting upon a body neutralize each other, the result is an equilibrium, called pressure.

§ 3. Two weights or pressures are equal when one may be substituted for another with similar results.

§ 4. If two or more forces act upon the same point, their united effect is called the resultant of these forces.

§ 5. The several forces, whose combined effect is equivalent to a single force are called the components of that force.

§ 6. The resultant is mechanically equal to its components, and can be substituted therefor; or, the components for the resultant, without change of condition.

This proposition may be illustrated as follows:

Fig. 1.



a. Let a fine line be passed over two pulleys (a and b) fixed against a vertical plane or wall, and let known weights (A and B) be attached to the ends of the line. At some point (D) in this line, between the pulleys, knot another line with a third weight (C) attached. If the weight C be less than the sum of the other weights (A and B) the knot will assume a certain position (D), and it will be found to return to the same point as often as the experiment shall be tried, unless some one or more of the weights be changed.

According to the foregoing definitions the weights (A, B and C) are in equilibrium. A and B, as components, act upon the point D, with the same effect as their resultant C. But, the force A is equally the resultant of B and C, as components: and B may, also, be considered the resultant of A and C.

Fig. 2.



b. If a rod be fixed vertically between the point D and the ceiling—or some other immovable object (G), then by removing the weight C the point D remains in the same position as before.

The pressure upon the rod will be equal to the weight C removed, and is the resultant of the weights A and B.

Fig. 3.



c. The point D, instead of being supported by weights, acting in the direction Da and Db, may be sustained by rods or struts (DF and DH,) pressing against it. The same weight (C) being suspended from the point D, the rod DF will sustain a force equal to that which was in the former case exerted by the weight B in the direction Db; and DH a force equal to that which was exerted by the weight A in the direction Da.

§ 7. If three forces act upon one point, and keep it at rest, then those three forces are proportional to the three sides of a triangle, to which sides, also, the directions in which they act are parallel.

Fig. 4.



§ 15. A piece of timber exposed to compression, yields to the force differently, according to the proportion between its length and sectional area. If a cylinder have its length more than eight or ten times its diameter, a sufficient force of compression acting in the direction of its length will bend and break it near the middle of its length.

When the length is less, in proportion to the diameter, the piece will split in several places, and bulge out in the middle; or, if the length be very short in proportion to the diameter, the piece will be crushed.

§ 16. The resistance to compression under the various circumstances cannot be ascertained, accurately, without an expensive apparatus, and not many reliable experiments of this kind appear to have been made. A few, however, which seem to be well authenticated give the following results.

TABLE II.

Kind of Material.	Length in feet.	Breadth in inches.	Thickness in do.	Weight applied.	Result.
Elm.....	1	1	1	10,331	Crushed.
American Pine.....	1	1	1	5,400	do.
English Oak.....	1	1	1	3,860	do.
Do. do.....	1	1	1	5,147	do.
African do.....	6	3	3	60,480	do.
Oak seasoned.....	2	2	2	7,856	Prod.deflect'n.
Do.	2	2	2	15,631	Broke.
Do.	4	2	2	6,298	Prod.deflect'n.
Do.	4	2	2	11,844	Broke.
Do.	6	2	2	3,277	Prod.deflect'n.
Do.	6	2	2	7,244	Broke.
Do.	8	6.22	4	26,381	Prod.deflect'n.
Do.	8	5.15	4.17	50,448	Broke.
Ash.....	1	1	1	9,368	Crushed.
Beech.....	1	1	1	9,363	do.
Birch.....	1	1	1	11,663	do.
Cedar.....	1	1	1	5,768	do.
Mahog.Spanish.....	1	1	1	8,198	do.
Oak Quebec.....	1	1	1	5,982	do.
Poplar.....	1	1	1	5,124	do.
Spruce.....	1	1	1	6,844	do.
Sycamore.....	1	1	1	7,082	do.
Walnut.....	1	1	1	6,645	do.
Yellow Pine.....	1	1	1	5,375	do.

§ 17. When a force acts upon a material transversely to its length, either perpendicularly or obliquely, it is said to act *laterally*, or to produce a *transverse strain*.

The material, when supported horizontally, and acted upon vertically, is usually denominated a *Beam*.

§ 18. The *transverse strength* of a beam, is its power to resist fracture when laid horizontally upon supports at its extremities, and loaded with a weight, or weights, at some point or points between its bearings. The simplest case is when a weight is placed upon, or suspended from, the middle of the beam.

§ 19. The *strength of beams* subjected to transverse strains, will depend, not only upon the absolute strength of the timber, but, also, upon the *length, breadth and depth*.

By numerous experiments, the true relations existing between the dimensions and the strength of beams, have been discovered.

§ 20. The strength of a beam is increased when the breadth or depth is increased, and the proportion is said to be *direct*; but if the length of the beam be increased, the strength will be diminish-

ed, and the proportion between them is then said to be *inverse*.

§ 21. The strength of a beam supported at both ends and loaded in the middle, is *inversely as its length*.

Consequently the products of length into breaking weight, will be the same for all beams of the same breadth, depth and kind of material.

1. If a weight of 9,570 lbs., resting upon the middle of a white pine beam 10 feet long and 6

Fig. 10.



inches square, produce fracture; then one-half the weight, or 4,785 lbs., will break a beam 20 feet long, the other dimensions and the material being the same; for $10 \times 9,570 = 20 \times 4,785$.

§ 22. The strength of a beam, supported at both ends and loaded in the middle, is in *direct proportion to its breadth*.

It follows then, that the quotients, arising from the division of the breaking weight by the

Fig. 11.



breadth, will be equal in all cases of beams of the same length, depth and kind of material.

j. A white oak beam 10 feet long, 6 inches deep and 3 inches in breadth, broke with a weight of 7,668 lbs. on the middle. Had the same beam been 6 inches in breadth, the weight sustained would have been double, or 15,336 lbs.:

for 3 inches : 6 inches :: 7,668 lbs. : 15,336 lbs.
and $\frac{7,668}{3} = \frac{15,336}{6}$.

§ 23. The strength of a beam supported at the ends and loaded in the middle, is *inversely as its length*, and *directly as its breadth*. Therefore, the product of length into the breaking weight divided by the breadth, gives a quotient which will be the same for all beams of the same depth and material.

k. A white oak beam 10 feet long, 6 inches deep and 4 inches in breadth, broke with 10,224

Fig. 12.



lbs. A beam of the same depth and material, 15 feet long and 6 inches in breadth, will break under the same weight:

$$\text{for } \frac{10 \times 10,224}{4} = \frac{15 \times 10,224}{6}$$

§ 24. The strength of a beam of a given length, and breadth, is *as the square of its depth*.

The quotients, arising from the division of the breaking weights by the square of the depth, will then be the same in all cases where the lengths, breadths and material are the same.

The length of a beam is usually expressed in *feet*,—the breadth and depth in *inches*. The square of the depth is, then, the depth in inches multiplied by itself.

l. A beam of spruce 12 feet long, 8 inches broad and 6 inches deep, broke with 4,338 lbs.

A beam 9 inches deep,—the other dimensions and the material being the same—will break with 9,760 lbs.

If 12 inches deep, it will break with 17,352 lbs.; or if 15 inches deep, with 27,112½ lbs. weight: for

$$\frac{4,338}{6 \times 6} = \frac{9,760}{9 \times 9} = \frac{17,352}{12 \times 12} = \frac{27,112}{15 \times 15}$$

§ 25. The strength of one beam is to the

Fig. 13.



strength of another, of equal length and of the same material, as the product of the breadth into the square of the depth of the former, is to the product of the breadth into the square of the depth of the latter.

Consequently, dividing the breaking weight, by

the product of the breadth into the square of the depth, gives a quotient which will be the same for all beams of the same length and material.

m. A beam of Elm 15 feet long, 5 inches wide and 10 inches deep, broke with 18,000 lbs.

Another beam of the same timber, and of the

Fig. 14.



same length,—4 inches wide and 12 inches deep, will break with 20,736 lbs: for

$$5 \times 10 \times 10 : 4 \times 12 \times 12 :: 18,000 : 20,736, \text{ and} \\ \frac{18,000}{5 \times 10 \times 10} = \frac{20,736}{4 \times 12 \times 12}$$

§ 26. The strength of beams, supported at both ends and loaded in the middle, is *inversely as their lengths, and directly as their breadths*

and *the squares of their depths*: or, in other words, the strength of one beam, is to the strength of another, as *the product of the breadth into the square of the depth divided by the length* of one to the same product of the other.

It follows also, that if the products of the length into the breaking weight, be divided by the product of the breadth into the square of the

Fig. 15.



depth, the quotient will be the same, for all beams of the same material.

n. A beam of Southern Pine 16 feet long, 9 inches deep and 4 inches in breadth, broke with 15,957 lbs.

Another beam of the same timber, 20 feet long, 15 inches deep and 10 inches in breadth will break with 88,650 lbs.: for

$$\frac{4 \times 9 \times 9}{16} : \frac{10 \times 15 \times 15}{20} :: 15,957 : 88,650, \\ \text{and} \quad \frac{16 \times 15,957}{4 \times 9 \times 9} = \frac{20 \times 88,650}{10 \times 15 \times 15}$$

§ 27. When the whole load is applied at any point of a beam, between its supports, the weight producing fracture will be *inversely as the products of the two segments* of the beam:—that is, of the distances from the weights to the two points of support of the beam.

o. A stick of chestnut 12 feet long, 6 inches in breadth and 8 inches deep, broke with 14,400 lbs. applied at the centre.

Required the breaking weight if applied at one foot from the centre. Then

$$7 \times 5 : 6 \times 6 :: 14,400 : 14,811 \text{ lbs.}$$

Required the breaking weight, if applied at two feet from the centre,

$$8 \times 4 : 6 \times 6 :: 14,400 : 16,200 \text{ lbs.}$$

If applied at 3 feet from the centre,

$$9 \times 3 : 6 \times 6 :: 14,400 : 19,200 \text{ lbs.}$$

§ 28. The lateral strength of a beam when uniformly loaded throughout its length, will be twice as great as when loaded in the middle.

§ 29. When both ends of a beam are firmly fixed, as in a solid wall, the lateral strength will be to that of a beam with its ends only supported, as 3 to 2.

§ 30. The lateral strength of a beam with its narrow face upward, is to its strength with its broadest face upward, as the breadth of the broadest face, to the breadth of the narrow face.

§ 31. The lateral strength of square beams, of the same length and material, are as the cubes of one side—that of round beams or cylinders, as the cubes of their diameters.

(To be continued.)

Coal Burning on the Baltimore and Ohio Railroad.

We give below an extract from the report of the Master of Machinery on the Baltimore and Ohio railroad, accompanying the Report of the company, on the use of Coal on Locomotive Engines.

"The introduction of Coke as a fuel for our passenger engines, has been attended with entire success, resulting in very economical and efficient operations of these machines. A series of experiments has been made with raw coal upon the passenger engines, with results of a satisfactory character; showing that our passenger trains, containing five cars, can be drawn over the 1st divisions of the road, overcoming grades of 83 feet per mile, with a consumption of 26 lbs. of coal per mile run—costing, including all transportation charges on the coal, three and six-tenths cents per mile."

The experiments with fuel have all been made with the same engine, No. 233. Their results were as follows:

"Cost per mile on the Mail and Express trains, 5 cars:

With Wood,	7 8-10 cents.
" Coke,	5 6-10 "
" Coal,	3 6-10 "

According to this calculation, the cost of running a train as above, for fuel alone, to Harper's Ferry from Baltimore, 81 miles,

With Wood, would be	6.81
" Coke, " "	4.53
" Coal, " "	2.91
To Wheeling, 379 miles,	
With Wood, would be	29.56
" Coke, " "	21.22
" Coal, " "	13.64

A saving between coal and wood of about 55 per cent. A very important item, and must command the attention of the railroad interest all over the United States, at an early day. It must be borne in mind, also, that this is putting down wood at its cost along the line of the Baltimore and Ohio road, about \$2 per cord. The Eastern roads, where wood is scarce, are paying three times this price. The result finally must be to greatly increase the demand for coal, from the Cumberland regions particularly, as companies are now endeavoring to reduce their expenses. If the fuel expense can be reduced 55 per cent. here is a heavy item of saving."

The Master of Machinery says, further:

"Fourteen of the Passenger engines are now consuming mineral fuel; others will be altered as soon as the large accumulation of wood on the Western division is sufficiently reduced to render it advisable."

Railroads in Egypt.

The railway to Suez being now completed, Egypt possesses the following lines:—From Alexandria to Cairo, 131 miles; to Mariouth, 17; to Meks, 6; to Rassateen, 8. From Tanta to Samanud there is a rail for 21 miles; from Cairo to Suez 91; to Barragod 15; to Beni Suef 76—in all, 360 miles. Besides these there are smaller branches, from Cairo to the citadel and Kasr Nin. From Samanud to Mansoura and Damietta, from Damanhour to Afta, which last extends to Rosetta. The exact mileage of these minor, but still important lines is not yet accurately known. The bridge of Kasr Zayat across the Nile is a splendid work, and must be finished by June, 1860. It bids fair to be one of the wonders of the world. When the railway system is properly developed there will be a saving of 20,000l. per annum in the expense of forwarding the Indian mail.—*Lowest Herald*.

Fig. 16.



Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Divid end for do.	Price of share.	NAME OF COMPANY.	Length of Road	Capital paid in.	Debt	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Divid end for do.	Price of share.
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,925,941	645,762	160,224	6	---	Brunswick and Florida, Ga.	80	161,387	463,649	633,649	In progr.	208,771	9	---
Androscog. & Kennebec	58	457,909	1,835,308	2,210,947	159,518	83,368	---	---	South. Western	143	1,390,100	441,292	2,269,323	868,214	208,771	9	---
Kennebec & Portland	72	1,107,526	1,768,738	2,871,264	213,255	---	---	---	Tennessee and Alabama	80	899,754	628,880	679,906	53,778	29,408	---	---
Port., Saco, & Portsmouth	51	1,396,400	---	1,358,373	253,717	190,900	60	90	Tennessee and Mississ.	64	757,440	811,812	1,161,152	161,001	99,883	---	---
Boston, Concord, & Montreal	93	---	1,104,584	2,848,977	329,787	174,026	16	---	Memphis and Charleston	287	2,228,177	3,466,399	6,572,470	642,022	834,604	---	---
Oneshaire	64	---	899,318	3,179,687	355,629	113,077	---	---	Mobile and Ohio	305	6,784,370	2,068,459	10,701,428	561,382	278,428	---	---
Onondago	36	1,600,000	8,242	1,412,576	317,056	126,604	6	52	Miss. Central	89	1,575,474	928,790	2,503,098	115,679	---	---	---
Northern N. H.	32	3,068,400	406,288	3,068,400	365,890	156,906	4	47 1/2	Southern (Miss.)	82	1,004,000	1,400,000	2,400,000	264,215	160,798	---	---
Conn't & Passumps. Riv.	90	1,000,000	800,000	1,784,146	177,588	73,401	---	---	N.O. Opelousas & G.W.	90	2,800,000	750,000	3,477,526	284,178	127,450	---	---
Portland & Burlington	117	2,233,576	4,168,705	4,684,008	332,216	41,686	---	---	N.O. Jackson & G.N.	206	4,035,000	1,615,610	7,142,561	189,008	---	---	---
Vermont and Canada	47	1,350,000	---	1,380,695	Less: 200,000	117,389	---	---	Vicksburg, Shreveport & Tex.	21	853,760	108,285	962,051	In progr.	---	---	---
Vermont Central	122	5,000,000	5,276,299	4,402,065	705,381	127,389	---	---	East Tennessee and Va.	111	1,192,074	1,735,069	2,703,429	227,363	104,992	---	---
Boston and Lowell	25	1,830,000	438,920	2,412,251	435,863	171,383	6	93	East Tennessee and Va.	180	626,075	1,728,064	3,203,138	61,314	39,062	---	---
Boston and Maine	74	4,076,974	---	4,229,281	770,802	306,507	6	90 1/2	Nash. and Chattanooga	159	2,263,906	1,626,992	3,890,703	641,552	219,268	---	---
Boston and Providence	43	3,100,000	239,720	3,584,458	694,176	254,194	6	95 1/2	Covington & Lexington	98	1,834,850	8,055,917	4,091,004	426,408	220,906	---	---
Boston and Worcester	44	4,600,000	699,974	4,848,779	1,019,149	388,513	6	96 1/2	Lexington and Frankfort	29	430,065	158,899	658,235	96,807	46,717	---	---
Cape Cod	47	681,690	291,007	1,031,626	122,660	89,899	---	---	Lexington and Danville	13	694,444	71,000	766,500	---	---	---	---
Connecticut River	50	1,891,110	275,772	1,801,244	267,710	66,006	3	69 1/2	Louisville and Frankfort	65	741,059	625,210	1,502,098	246,750	109,069	---	---
Eastern, Mass.	60	2,583,400	2,441,373	6,082,607	616,156	272,479	---	---	Atlantic & Gt. Western	---	866,939	77,294	613,231	In progr.	---	---	---
Fitchburg	67	3,540,000	100,000	3,872,821	668,974	250,838	6	47 1/2	Bellefontaine and Ind.	118	1,874,395	1,316,237	2,998,327	348,562	120,886	---	---
N. Bedford and Taunton	21	600,000	---	541,586	186,925	27,827	6	101 1/2	Clev., Col. and Cin.	141	4,746,212	90,409	4,762,320	149,741	611,740	9	28 1/2
Old Coffey and Fall River	69	2,016,100	260,100	3,382,949	685,357	305,140	6	101 1/2	Cleveland and Toledo	200	3,333,712	4,225,565	7,193,016	980,232	433,790	---	---
Vermont and Fall River	69	2,232,541	1,019,149	3,241,975	240,133	52,267	---	---	Clev. and Mahoning	65	---	---	1,920,953	---	---	---	---
Western, Mass.	185	5,180,000	6,539,090	10,496,905	2,117,982	899,763	8	106 1/2	Clev. and Pittsburg	138	2,780,744	3,043,992	6,537,466	681,877	309,518	---	---
Worcester and Nashua	46	1,141,000	205,565	1,361,271	218,889	82,720	4	66	Clev. P. & Ashtabula	96	3,000,000	1,495,514	4,040,978	1,251,539	581,454	15	---
Providence and Worcester	43	1,610,920	300,000	1,781,048	344,778	155,404	7	57	Cin., Hamlin & Dayton	90	2,155,800	1,626,092	3,130,316	487,421	260,763	---	---
Hartford and N. Haven	72	2,350,000	944,000	3,329,602	769,065	340,835	10	110 1/2	Cin., Wilm. & Zanesville	131	2,421,176	3,782,040	6,696,210	223,600	30,288	---	---
Hartford, Prov. and Fishkill	122	1,936,246	2,182,692	4,205,938	273,428	112,325	---	---	Columbus and Xenia	55	1,490,450	149,000	1,582,475	403,212	181,688	10	---
Housatonic	74	2,000,000	423,635	2,423,647	318,476	109,344	---	---	Dayton, Xen. & Belpre	63	437,838	422,658	860,496	In progr.	---	---	---
Hugabuck	57	1,031,800	624,244	1,580,723	327,416	114,237	---	---	Dayton and Michigan	140	1,076,602	895,011	1,188,326	In progr.	---	---	---
N. York and N. Haven	62	2,960,836	2,323,210	5,284,046	98,007	30,813	---	---	Dayton and Western	35	610,000	700,481	1,308,173	126,490	65,253	---	---
N. Haven and N. London	66	738,268	761,462	1,450,318	120,571	51,444	---	---	Baton and Hamilton	66	489,781	332,658	826,157	77,442	290,124	10	58
N. London, W. & Palmer	66	1,060,000	1,060,000	1,603,230	265,417	44,847	---	---	Little Miami	66	2,081,332	1,266,000	3,265,157	77,442	290,124	10	58
Norwich and Worcester	32	1,222,300	724,183	2,598,671	117,716	9,904	---	---	Sandusky Dayton & Cin.	171	2,697,000	3,368,000	6,066,000	682,614	164,697	---	---
Albany Northern	35	439,000	1,625,998	1,840,696	In progr.	---	---	---	Central Ohio	181	1,277,807	6,227,666	10,806,821	770,092	164,697	---	---
Black River and Utica	100	643,330	317,565	974,523	172,476	60,333	---	---	Pittab. Ft. Wayne & Chicago	123	6,247,940	9,822,550	14,279,704	1,548,359	677,787	---	---
Buffalo, Conn. and N. Y.	92	1,487,874	1,601,183	2,819,096	172,476	60,333	---	---	Pittab. Ft. Wayne & Cin.	60	871,550	31,000	906,553	In progr.	---	---	---
Buffalo and N. Y. City	69	1,800,000	2,637,849	3,401,868	288,392	31,898	---	---	Sandys, Mans. & Newk.	127	1,360,000	2,065,357	3,632,357	828,366	164,479	---	---
Buffalo and St. Line	47	1,800,000	1,040,000	2,840,000	679,750	365,763	10	---	Society & Hocking Valley	66	405,976	508,060	988,868	In progr.	---	---	---
Canandaigua and Elmira	98	1,315,000	922,393	1,275,796	174,089	99,506	---	---	Spring Mt. Vernon & F.	113	1,000,000	950,000	2,194,000	In progr.	---	---	---
Canandaigua & Niagara F.	36	857,000	2,279,854	3,495,832	136,433	49,649	---	---	Tol. Wabash & St. Louis	242	2,065,106	7,677,500	10,442,600	Recenty	Opened.	---	---
Cayuga & Susquehanna	144	3,755,486	9,250,362	13,737,596	1,902,838	688,380	---	---	Col., Log. and Chicago	255	4,195,078	1,006,128	2,080,633	249,868	124,140	---	---
Hudson River	96	3,000,000	647,193	2,555,986	325,111	56,186	10 1/2	---	Kavanaugh & Crawford	100	988,061	1,770,872	2,168,713	249,868	124,140	---	---
Long Island	564	24,182,400	14,602,633	30,735,118	5,543,413	3,041,120	8	76 1/2	Ind. and Cincinnati	66	1,686,809	1,564,584	3,029,969	481,743	245,622	7	---
New York Central	656	11,000,000	28,081,466	34,468,324	7,942,907	1,464,932	---	---	Ind., Clev. & Pittsburg	88	612,850	1,021,179	1,909,911	368,189	204,686	---	---
New York and Erie	138	5,717,100	4,822,498	7,568,208	1,040,393	324,891	---	---	Ind., Clev. & Pittsburg	78	1,014,262	694,000	1,539,578	222,737	94,318	---	---
New York and Harlem	118	1,633,022	4,406,874	5,470,714	149,373	78,764	---	---	Madison and Indianapolis	87	1,647,700	1,536,616	2,931,616	200,214	118,628	---	---
Northern, N. Y.	85	304,130	1,213,025	751,033	120,163	136,764	---	---	New Albany and Salem	288	2,536,121	5,281,948	7,020,494	645,827	371,402	---	---
Oswego and Syracuse	29	467,200	249,199	749,683	241,149	82,600	---	---	Perru and Indianapolis	73	---	558,314	2,000,000	150,000	80,000	---	---
Pottsdam and Watertown	27	1,600,000	700,979	2,300,600	171,909	21,089	---	---	Terre Haute and Ind.	73	1,861,450	250,125	1,585,209	481,272	206,079	10	---
Rensselaer & Saratoga	64	1,000,000	1,619,000	2,644,000	440,290	163,067	3 1/2	50	Chicago and Rock Is.	182	2,448,000	1,734,318	6,028,272	1,886,196	850,039	---	---
Saratoga and Whitehall	48	610,000	194,000	896,423	159,484	22,505	---	---	Chicago, Burl. and Quincy	219	4,431,840	3,852,970	8,042,426	1,605,167	81,767	---	---
Syracuse & Binghamton	60	768,369	1,678,804	2,274,777	159,484	22,505	---	---	Chicago, St. Paul & Ft. de Lac.	178	2,800,000	1,325,000	3,625,000	In progr.	---	---	---
Troy and Boston	27	437,830	737,079	1,109,922	440,290	163,067	---	---	Galena and Chicago	259	6,023,800	3,899,018	9,395,455	2,315,788	1,192,042	8	67 1/2
Watertown and Rome	57	1,600,000	700,979	2,300,600	171,909	21,089	---	---	Illinois Central	704	6,666,438	20,311,262	47,237,669	2,993,966	666,972	---	---
Wardens Delaware	64	1,000,000	1,619,000	2,644,000	440,290	163,067	---	---	Keokuk and Oquawka	181	1,569,889	2,000,000	3,400,000	In progr.	---	---	---
Camden and Amboy	64	3,000,000	11,407,200	8,791,096	1,640,787	594,114	12	120	Ohio & Miss. (W. & V.)	147	1,780,296	3,292,043	4,870,586	Recenty	Opened.	---	---
Camden and Atlantic	60	3,485,000	1,650,854	1,738,171	911,617	334,861	---	---	Port. Haute, Alt. & St. Louis	208	3,011,150	9,928,927	8,724,784	823,767	247,767	---	---
New Jersey	30	2,000,000	3,692,828	5,621,829	682,940	237,195	10 1/2	---	Detroit and Milwaukee	165	838,000	1,128,964	1,968,099	Recenty	Opened.	---	---
New Jersey Central	63	1,167,908	3,404,000	1,984,127	85,000	45,000	3 1/2	---	Mich. Central	292	6,067,840	3,868,639	12,347,238	2,483,768	704,936	8	50 1/2
Morris and Essex	44	1,570,000	909,046	1,700,000	219,265	52,650	---	---	Mich. South & N. Ind.	478	8,876,400	10,469,618	19,338,044	2,309,487	544,311	13 1/2	---
Albany Valley	63	1,700,000	1,490,000	3,640,000	134,483	77,92	---	---	Green Bay, M. & Ch.	40	1,000,000	780,000	1,780,000	In progr.	---	---	---
Outaw, W. & Erie	170	3,294,772	6,104,561	8,013,761	618,768	41,129	6	45	Milwaukee and Miss.	234	3,440,873	4,610,533	8,051,238	882,818	372,691	---	---
Gumbarland Valley	62	1,018,900	213,609	1,228,675	---	---	---	---	Milwaukee & Waterv.	72	354,881	132,000	514,				

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$833,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	50	50
Buffalo and State Line	500,000	Do. Inconvertible	7	April, October	"	1866	90	90
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1864	75	75
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858		
Do. do.	200,000	Income, guar. Cl. Col. & Cla.	7	Feb'y, August	"	1860		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	40	42
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	92 1/2
Do. do.	485,000	2d do.	7	May, Novemb.	"	1880	79	79 1/2
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,800,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	98	100
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	67 1/2	75
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	50	67
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	1,200,000	Do. conv. till 1857	7	April, October	"	1862-72	30	50
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	30	50
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	89 1/2	91
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1891	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		72 1/2
Gaens and Chicago	2,000,000	Do. inconvertible	7	May, August	"	1863	92	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90 1/2	91 1/2
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	87 1/2	93
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1872		85
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	70	80
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	83	87
Indianapolis & Ohio (for Lawd. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	76	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	71	72
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1866	83	86
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1883	95	97
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	92	93
Do. do.	800,000	Do. do.	8	March, Sept.	"	1869		80
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862		77 1/2
Do. do.	850,000	Do. 2d do. 1858	8	April, October	"	1863	67	72 1/2
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877		90
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-72		90
Do. do.	2,325,000	Do. oth. sec. con. till 1868	8	May, Novemb.	"	1864-75		90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	69	80
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	69	70
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	55	56
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880	100 1/2	101 1/2
Racine and Mississippi	680,000	Do. conv. sink's f'd	8	Feb'y, August	N.Y.	1876		75
Soloto and Hocking Valley	300,000	Do. 1st sec. conv	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August	"	1862-72	68	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85 1/2	86 1/2
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	84	95
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	83	84
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	72 1/2	73
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1880	58	57
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	81	83
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	30	31
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	30	32
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	102	102 1/2
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec	"	1860	94	94 1/2
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	76 1/2	77 1/2
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	90 1/2	91
Do. (Free Land)	8,000,000	M'ge 345,000 acrs-priv. 7 shares	7	March, Sept.	"	1860	91	91 1/2
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	84 1/2	88
New York and Harlem	1,200,000	Do. do.	7	May, Novemb.	"	1861-72	94 1/2	95
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	96	98
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1861	80	83
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	71 1/2	72 1/2
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	92 1/2	93
Do. do.	8,000,000	Do. mort. conv. from June 57-59	7	15 June, 15 Dec	"	1864	108 1/2	104
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	118	
Do. 2d do	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,300,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	3,469,000	Do. convertible	6	Jan'y, July	"	1870	84 1/2	85
Do. do.		Do. inconvertible	6	April, October	"	1886	75	76

CITY SECURITIES.	Int't payable.	Off'd	Ask	CITY SECURITIES.	Int't payable.	Off'd	Ask
New York, 5 per ct. 1868-60	{ May, 98 August, and 93 November, 92	98	99	Milwaukee, 7 per ct. coup. X	Divers	45	70
Do. 5 do. 1870-76		93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	75	80
Do. 6 do. 1883		103 1/2	104	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	85	90
Do. 6 do. 1890-98		92	95	Philadelphia, 6 per ct. 1870-79	Jan'y, July	98 1/2	99
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August, 98	101	Pittsburgh, 6 per ct. coup. X	Divers	45	50	
Alleghany, 6 per ct. coup. X	Jan'y, July	50	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	67	75	
Baltimore, 6 per ct. 1879-90	Quarterly	49	100	Racine, 7 per ct. coup. 1873 X	10 Feb'y, Aug	80	80
Boston, 5 per ct. coup. X	April October	100	101	Rochester, 6 per cent. coup. X	Divers	90	97 1/2
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	101 1/2	102	St. Louis, 6 per ct. coup. Long X	Do.	84	85 1/2
Cle'fd, 7 per ct. cp. W.W. 1875 X	Do. do	100	103	Do. do. Municipal X	Do.	66	87 1/2
Cincinnati, 6 per ct. coup. X	Jan'y, July	92 1/2	95	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	37	45
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	85	87	S. Francisco, 7 p. a. cp. 1866, pay. N.Y. X	May, Novemb.	60	70
Do. 7 per ct. coup. 1880 X	Feb'y, July	97 1/2	99 1/2	Do. 10 p. a. cp. 1871 X	Do. do.	59	91
Detroit, 7 per ct. cp. W.V. 1873-78 X	Feb'y, August, 100	102		Do. 10 p. a. cp. pay. N.Y. X	Jan'y, July		
Delaware, 6 per ct. cp. W.V. 1873 X	March, Sept.	99	100	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	66	61
Forney City, 6 per ct. cp. W.V. 1873 X	Jan'y, July	99	101	Wheeling, 6 per ct. coup. X	Divers	80	80
Louisville, 6 per ct. 1880-83 X	Divers	71	72 1/2	Do. 6 per ct. Mem. 1874 X	March, Sept.	80	81 1/2
Memp'is, 6 per ct. coup. 1883 X	Jan'y, July, 71	67		Worcester, 7 do. X	April, October		

Cincinnati Stock Sales.
By KIRK & CHEEVER.

For the week ending April 4, 1859.

BOARDS.	Per cent.
Little Miami, 1st Mort.	6 1/2
Covington and Lexington, 1st Mortgage ..	6 1/2
Do. do. 2d do.	7 1/2
Do. do. Income	10 1/2
Ohio & Miss., E. D. Construction ..	7 1/2
Cinc., Ham. and Dayton, 1st Mortgage ..	7 1/2
Do. do. 2d do.	7 1/2
Indianap. & Cincinnati, do. do.	7 1/2

STOCKS.	Per cent.
Cincinnati, Hamilton & Dayton ..	86
Columbus and Xenia ..	88
Indianapolis & Cincinnati ..	87
Little Miami ..	80
Ohio and Mississippi (E. D.) ..	8

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending March 19, were.....\$47,665 51
Week ending March 20, 1858 45,711 88

Increase\$1,853 63
Total traffic from July 1st.\$1,616,840 88
Same period last year 1,703,436 10

Decrease\$86,595 72
The earnings of the Hudson River railroad in March, were.....\$175,773 23
March 1858..... 179,423 33

Decrease.....\$3,650 15
The receipts of the Brooklyn City railroad company in March, were.....\$35,822 65
March 1858..... 26,508 47

Increase\$9,314 18
The earnings of the Chicago, Burlington and Quincy railroad proper, and the Galesburg branch, for March, were as follows:

	Chicago and Burlington. (210 miles.)	Quincy and Chicago. (100 miles.)
Freight.....	\$47,392 01	\$12,947 99
Passengers.....	40,921 47	15,587 06
Mails etc.....	1,750 33	872 33

Total.....\$90,063 81 \$29,407 38
Receipts per mile..... 428 87 294 07

The earnings of the Buffalo, New York and Erie railroad from Buffalo to Corning, 142 miles, for March, were:

Passengers.....	\$11,174 09
Freight.....	35,949 88
Other sources.....	1,540 17

Total.....\$48,664 14

The earnings of the Michigan Southern railroad for March, were:

	1858	1859.
Passengers.....	\$81,878 73	\$71,896 99
Freight.....	61,966 08	60,600 73
Express and Miscell'a.	12,132 91	5,372 91
Mail	4,635 14	4,583 41

Total.....\$160,612 86 \$142,454 07
Decrease in 1859.....\$18,158 79

Inauguration of the Tehuantepec Railroad.

On the 5th ultimo, Mr. W. H. Slidell, Chief Engineer of the Louisiana Tehuantepec company, accompanied by the Governor or *Gefe Politico* of the district, Don Porfirio Diaz, the District Judge, Don Nicolas Garrido, the *cura* of Tehuantepec, Father Mauricio Lopez, the ex-city Judge, Don Juan Avendano, the United States Consul, C. R. Webster, Esq., and a party of attaches of the company, and invited guests, celebrated the inauguration of the Tehuantepec railroad, at Huilopec, on the Tehuantepec river. Mr. Slidell, Father Lopez and Gov. Diaz made speeches on the occasion, and the work was commenced amid the vivas of the soldiers, citizens and native laborers and the hurrahs of the Americans. The very best

feeling seems to have prevailed on the occasion.

American Railroad Journal.

Saturday, April 9, 1859.

WOODEN BRIDGES.

We commence with this number the publication of a TREATISE on the construction of *wooden bridges*, by S. S. Post, Esq., Civil Engineer and late Chief Engineer of the New York and Erie railroad. The treatise commences with a statement of elementary principles, which are carried forward by regular and necessary inductions to their application to every kind of structure. There is probably no work of the kind, which comprises in so small a compass, full working details, with the principles on which they are based. It has been highly approved by such of our engineers as have had an opportunity to examine it, and we think we can commend it, to engineers and to railroad companies, as eminently worthy of their attentive study. It has the advantage of having all its terms and propositions stated in such a manner, as to be easily understood by any intelligent mechanic. Mr. Post is well known to be one of our most ingenious and best informed engineers, and has given particular attention to the subject on which he has written.

The La Mothe Patent Car.

The great strength and elasticity of riveted strips of thin iron as combined in the basket-like frame of the car patented by Dr. La Mothe, have been several times commented on in our columns. Iron which has been worked down into thin strips is universally sounder and stronger than the same metal in larger masses and the interweaving or alternation of the strips at the points where the bands intersect, and the riveting through at those points, gives a kind of mutual bracing to the work which is not paralleled in any other engineering construction, but is quite nearly approached to in some of the refined forms of bridges.

Recently, the management of several of the principal railroads connecting at Boston, have combined to test by practice, a car of full size, built according to this plan, and the construction will in a few weeks be completed and ready for trial. We have paid a visit to the shop of Mr. Cundell, at Paterson, where it is being finished, and the appearance of the work under the few tests of strength and stiffness to which it has been yet subjected argue very strongly for a complete revolution in this branch of business and the adoption of this system universally as very far preferable to any form of wooden car yet proposed.

The running parts will be those of the ordinary kind and of the ordinary weight, although they might evidently be made a little lighter, by reason of the difference in load they are to carry.—The body will weigh 9,000 lbs., which is only from one-half to two-thirds the weight of modern ones of the same size. It is intended to give a very great surplus of strength to this car, as the first on this principle of such size. There is little doubt that the weight of every car can be reduced two tons by adopting this system of construction, and secure a greater degree of strength and safety than at present. The effect of such light cars in reducing the expenses for motive power, repairs of track, etc., and increasing the capacity for use-

ful, paying load, it is difficult to fully appreciate. We are rejoiced to find that the initiative step is being taken.

Interest and Dividends.

The interest coupons on the Schuyler county (Ill.) bonds, due April 1, will be paid on presentation by Mills & Ray, No. 318 Broadway.

The interest coupons of the bonds issued by Shelby county, Ohio, to the Bellefontaine and Indiana railroad company, not presented on the 1st inst., at the American Exchange Bank, will have to be presented at the Treasurer's office, in Sidney, Ohio. The coupons on the Syracuse, Binghamton and New York railroad company's bonds, due 1st of April, are paid on presentation, at the Continental Bank.

Pacific Railroad of Missouri.

The total length of the main line of this road is 282 miles, extending from St. Louis, in a nearly due west direction, to Kansas City. We have before us the report of the officers of this company, made to the Board of Public Works, bearing date December 24, 1858. Up to that time, 163 miles of the road, from St. Louis to Tipton, had been completed, leaving 119 miles unfinished, of which 12 miles continuously west of Tipton, and a few difficult sections in Johnson county, were in progress. The grades between St. Louis and Jefferson City do not exceed 45 feet per mile; beyond that, 60 feet grades are encountered. With a single exception, there are no curves of a less radius than 1,432 feet on the entire road. The road is represented as being in very good condition between St. Louis and Jefferson City. West of that point it is new, and some portions of it had not been put in thorough order. The masonry and bridging on the road were regarded as substantial and safe, and the operations of the transportation department were being satisfactorily conducted. The earnings of the road for the year ending November 30th, 1858, were:—

From passengers.....	\$320,791 44
" freight.....	296,580 70
" mails.....	19,139 60

Total earnings.....\$636,511 74

The receipts from earnings of the road from the commencement of operations, to November 30, 1858, were:

From passengers.....	\$1,060,282 70
" freight.....	754,031 78
" mails.....	45,878 16

Total receipts.....\$1,859,692 64

The transportation expenses during that period were...\$1,147,027 65

Expenses of Gasconade disaster.....21,757 76

Cars destroyed and rebuilt.....7,874 94

1,176,160 85

Net earnings to November 30, 1858. \$683,532 29

The interest charged to transportation department during the same time was.....834,455 87

Showing a deficiency in 1858, of....\$150,923 58

In 1857, the deficiency was.....179,600 08

In 1856, " " ".....89,667 50

In 1855, " " ".....44,348 51

The total amount subscribed to the capital stock of the main line is \$3,804,400. The amount collected \$3,146,170 25. The net proceeds of which, (after deducting \$189,882 50 for discounts and commissions on St. Louis city and county

bonds, received in payment therefor, and \$83,825 for commissions for collecting subscriptions west of Jefferson City,) is \$2,923,012 70. The amount of State bonds authorized for the main line is \$7,000,000; the amount issued to the company, \$6,780,000; the discounts and commissions, \$753,593 11. The net proceeds, \$6,026,406 89. The amount due the company the first of March was \$220,000.

The cost of the road to Jefferson City, exclusive of rolling stock and general expenses, is stated at \$5,974,953 75; the gross cost of the road to that point is \$7,542,353 73; the total amount expended on the main line, including discounts, commissions, etc., is \$10,033,823 05. The estimated cost of the road from Jefferson City to Kansas City is \$4,514,000; the additional means required for that purpose the board estimated at not less than \$3,500,000. The gross cost of the work done west of Jefferson is \$1,717,051 70. The gross cost of the rolling stock is \$774,417 60. The whole amount of debt due and to become due by the company, on the main line, exclusive of bonds, is put down at \$478,232 29. The whole amount due and to become due to the company, exclusive of unpaid instalments on stock is \$406,576 26—of this sum, \$68,045 11 is in litigation. The value of the remainder the board has no means of estimating.—The amount of interest to be paid by the company on State bonds and free land bonds on the main line, is \$408,410. The annual interest on the State bonds now issued is \$406,800—on the whole amount authorized, \$420,000.

The following statement of the estimated cost and progress of the work upon the main line from Jefferson City west, is extracted from a report made by the Chief Engineer to the Board of Directors in October last. The estimates are full and include graduation, masonry, bridging, superstructure, ballasting, fencing, buildings, etc.,:

	Work done.	Remaining to be done.	Total cost.
To Tipton.....	\$1,181,918	\$93,082	\$1,275,000
" Ottumwa.....	121,369	292,631	414,000
" Sedalia.....	10,260	259,740	270,000
" Knob Noster.....	6,727	419,273	426,000
" Warrensburg.....	20,037	332,963	353,000
" Kingsville.....		506,000	506,000
" Pleasant Hill.....		298,000	298,000
" Independence.....		642,000	642,000
" Kansas City.....		330,000	330,000

\$1,340,311 \$3,173,689 \$4,514,000

The following is a brief statement of the quantity, condition, value, etc., of the lands donated to the State, for this company, by act of Congress passed June 10, 1852:

For main line—1st division.....127,000 acres.

" South West Branch.....1,040,000 "

Total.....1,167,000 "

The former are *free lands*—not being subject to the mortgage to the State under the act of the General Assembly of December 10, 1855. These lands are situated in St. Louis, St. Charles, Jefferson, Washington, Franklin and Crawford counties; and embrace a large quantity of fair agricultural lands, a portion of the Pine lands of Washington county, and overlay one of the most varied, extensive, and richest mineral regions in the State—lead, copper and iron all being found upon them in large quantities. Of these lands, 1,225 acres have been sold—the greater portion of which was

purchased under pre-emption rights at \$2.50 per acre. The value of the remainder is put down in the report of the company's land agent at \$5—equal to \$628,875. On these lands there has been created a mortgage to secure the payment of \$600,000 of "Free land bonds." Of these bonds, \$373,000 have been used by the company; \$250,000 are hypothecated to secure the payment of \$136,000 for iron purchased in 1856; \$23,000 were sold to private individuals; and the remainder, \$227,000 are still in the possession of the company—the total incumbrance upon the free lands is therefore \$159,000. These lands have been recently examined, and are now being classified preparatory to being sold.

The portion applicable to the South West Branch are valued at \$10,425,000, and consists of agricultural, pastoral, timbered and mineral lands—extending the entire length of the branch. Upon them are large bodies of prairies, interspersed with abundant timber, and well watered; also, forests of pine, and the most extensive and richest deposits of mineral that have ever been worked. These lands have been mortgaged to secure the payment of bonds, to the amount of \$10,000,000; to be issued under it. Of these bonds \$4,500,000 have been guaranteed by the State; and \$132,000 of the guaranteed bonds, together with \$1,268,000 of direct bonds of the State (in lieu of guaranteed bonds) issued to the company—making the whole amount of direct and guaranteed bonds received by the company for the use of the South West Branch \$1,400,000, and leaving to be drawn \$3,100,000.

The total amount of stock subscribed is \$356,000—of which \$66,973 has been collected.

The discounts, commissions and interest amount to \$308,249 27. The interest on State bonds now issued is \$76,080; on guaranteed bonds at 7 per cent., \$9,240.

The length of the South West Branch of the Pacific railroad is 283 miles; 19 miles are completed and in use, and 43 more in progress of construction. The maximum grade, is 65 feet. The minimum radius of curvature at one point is 882 feet, upon a level grade. With this exception, the minimum radius, is 955 feet. The Chief Engineer is of opinion that a good road, with superstructure and buildings, can be obtained at the contract price, viz: \$7,621,680. The total expenditures on the branch to November 30, 1858, were \$1,442,710 36—the amount of debt due on the same, \$84,281 86.

CONDENSED BALANCE SHEET, Nov. 30, 1858.

DR.

Capital stock—main line.....	\$3,263,684 65
Capital stock—South West Branch.....	66,973 33
	\$3,330,657 98
Bonded debt—main line.....	\$6,803,000 00
Bonded debt—South West Branch.....	1,400,000 00
	\$8,203,000 00
Premium received on bonds.....	71,594 30
Land grant sales and rents.....	6,498 23
Floating debt, main line.....	476,850 89
Floating debt, South West Branch.....	84,281 86
Due R. Benson & Co.	1,381 40
	562,514 15
	\$12,174,264 66

Construction St. Louis to Jefferson.	\$5,974,953 75
" West of Jefferson....	1,360,217 16
" South West Branch...	1,104,010 89
Equipment.....	613,357 60
Interest, discount and commission, main line.....	1,961,400 09
Interest, discount and commission South West Branch.....	308,249 27
Office expenses, stationery, etc....	123,894 45
Land grant, including Geographical survey, South West Branch.....	30,450 20
Undistributed balances.....	54,835 18
Int. charged to transp. \$334,455 87	
Less net earnings.....	683,532 29
	150,923 58
Steamboat line balance of accounts.	51 04
Bills receivable.....	\$162,445 18
State bonds issued for South West Branch.	127,000 00
Sundry accounts.....	152,229 86
Bonds of town of Hermann.....	500 00
Cash.....	49,746 41
	491,921 45
	\$12,174,264 66

The officers of the company are:
JOHN M. WIMER, *President*.
EDWARD MILLER, *Chief Engineer*.
T. McKISOCK, *General Superintendent*.

Car Springs and India Rubber.

In the last issue of the JOURNAL, we published an article under the above head, purporting to give the result of a suit in favor of the New England Car Spring Company, against Hiram P. Dunbar, et al. for an alleged violation of the rights of the former, in the manufacture of India Rubber Springs.

We have since seen the report of the Judge's (Grier) opinion, which gives an entirely different aspect to the case from that stated in the article referred to. The case was an application for a temporary injunction to restrain the defendants from the manufacture of Rubber Springs. The Judge, without intimating an opinion as to the merits of the case at issue, refused the injunction, but ordered the defendants to keep an account of all car springs made, and sold by them, as a basis for damages, in case of a final decision against them—no suggestion being made that they were insolvent, or that the plaintiffs were in danger of loss from not granting the injunction.

Houston and Texas Central Railroad.

We learn that this company has entered into a contract with Mr. Henry P. Adams, of this city, to construct eighty-two and a half miles of the road, commencing a few miles north of the Navisota, and extending to six miles west of Springfield, in Limestone county. Fifty miles are to be completed by the 1st of June, 1860, and the remainder by the 1st of November following. The contract price is \$21,000 per mile, of which \$3,000 is to be paid in stock, \$14,500 in thirty year bonds, and the remainder in cash and its equivalent.

Railroads in Maine.

We give herewith a statement of the railroads of Maine similar to that of the railroads of New Hampshire, presented last week. The roads described embrace all the lines of the State, with the exception of the Buckfield Branch, 13 miles, the Great Falls and South Berwick, 3½ miles, and the Franklin railroad, 9 miles. The first two are not in operation. The former is owned by one person, and may, we presume, be considered as abandoned as a public highway. It has been in use only a portion of the time since it was

opened, and no statistics are obtainable in reference to it. The Great Falls and South Berwick railroad has, we believe, never been in operation, and will very probably be abandoned. The Franklin railroad belongs to a manufacturing company and is used in the transportation of lumber, and cannot be regarded as a public highway.

The aggregate result of the operation of the railroads of the State since the opening of the first road in 1837, may be stated as follows:—Total cost, (that of the several years being added together)—\$129,151,337. Gross earnings \$10,795,861; current expenses, \$6,073,643; net earnings, \$4,722,218.

The general result is not a favorable one. The per centage of gross earnings to capital invested, has been at the rate of 8½ per cent.—net, do, at the rate of 3½ per cent. The large addition, from earnings, to construction, by some of the roads, particularly by the Atlantic and St. Lawrence is one reason for the comparatively small ratio of net earnings.

All the railroads of Maine, with the exception of the Atlantic and St. Lawrence, have a very light traffic in freight, owing to the almost unrivalled facilities for communication by water, which the State possesses.

RECAPITULATION

Showing the cost, earnings, etc., etc., of the Maine Railroads, from the opening of the Bangor, Oldtown and Milford Railroad to the present time.

Year.	Length.	Cost.	Gross Receipts.	Current Expenses.	Net Receipts.	Receipts from Passengers.	Receipts from Freight.	Do, Miscellaneous.
1838—1842.....	60	\$179,739	\$66,217	\$65,829	\$20,388	\$26,614	\$1,886	\$2,820
1843.....	63	1,426,983	47,918	34,900	13,018	64,666	10,957	9,062
1844.....	63	1,637,722	124,812	60,176	64,636	106,137	18,138	7,128
1845.....	63	1,615,489	150,180	70,109	80,139	98,991	18,508	8,702
1846.....	63	1,628,789	150,248	72,723	78,525	129,344	19,157	8,574
1847.....	63	1,639,556	173,209	78,842	94,367	129,344	20,891	10,668
1848.....	63	1,406,824	194,209	78,842	115,788	129,344	20,891	10,668
1849.....	111	2,927,091	293,799	149,912	143,887	190,707	32,908	16,629
1850.....	111	3,070,864	361,981	170,665	191,316	234,899	26,170	16,629
1851.....	254	8,219,648	671,204	300,639	370,565	265,170	178,041	27,987
1852.....	349	11,188,380	711,459	380,770	330,689	428,080	247,468	35,010
1853.....	385	12,998,066	963,416	467,329	496,087	613,778	361,039	46,234
1854.....	385	13,625,760	1,286,037	658,401	627,636	635,688	543,137	58,218
1855.....	385	14,064,040	1,388,610	817,697	570,919	677,336	662,580	68,408
1856.....	460	16,866,308	1,524,960	987,182	537,778	736,671	724,367	64,936
1857.....	478	17,077,646	1,429,255	956,389	469,762	655,688	720,757	64,936
1858.....	607	18,070,987	1,387,884	841,369	445,515	620,085	667,376	69,420
		\$129,151,337	\$10,795,861	\$6,073,643	\$4,722,218	\$6,523,368	\$4,239,506	\$487,718

RAILROADS IN MAINE.

Statement showing the cost, earnings, etc., etc., of all the Railroads of Maine, from the opening of the first road to the present time.

Name of Road.	Length.	Cost.	Gross receipts.	Current expenses.	Net re- cepts.	Rec'd from pass'gers.	Rec'd from freight.	Do. miscel- laneous.	Divid- end.
1838.									
Bangor, Oldtown and Milford, 1838.....	12	\$354,000	\$19,551	\$14,577	\$4,973	.....	.....	.....	..
Do. do. 1839.....	12	354,000	19,634	14,501	5,133	.....	.....	.....	..
Do. do. 1840.....	12	354,000	16,324	13,888	2,427	.....	.....	.....	..
Do. do. 1841.....	12	354,000	11,843	9,620	3,222	.....	.....	.....	..
Do. do. 1842.....	12	378,739	18,865	13,243	5,622	.....	.....	.....	..
1843.									
Bangor, Oldtown and Milford.....	12	\$378,739	\$16,599	\$13,918	\$2,681	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,048,194	31,319	20,982	10,337	\$26,614	\$1,885	\$2,820	6
Total.....	63	\$1,426,933	\$47,918	\$34,900	\$13,018				
1844.									
Bangor, Oldtown and Milford.....	12	\$378,739	\$19,897	\$14,127	\$5,769	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,158,983	104,945	46,049	58,897	\$84,926	\$10,957	\$9,062	6
Total.....	63	\$1,537,722	\$124,842	\$60,176	\$64,666				
1845.									
Bangor, Oldtown and Milford.....	12	\$378,739	\$18,776	\$12,309	\$6,467	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,236,750	131,404	51,822	79,582	\$106,187	\$18,188	\$7,128	6
Total.....	63	\$1,615,489	\$150,180	\$64,131	\$76,049				
1846.									
Bangor, Oldtown and Milford.....	12	\$378,739	\$23,851	\$14,624	\$9,226	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,250,000	126,397	55,485	70,913	\$98,991	\$18,508	\$8,702	6
Total.....	63	\$1,628,739	\$150,248	\$70,109	\$80,139				
1847.									
Bangor, Oldtown and Milford.....	12	\$378,739	\$24,921	\$17,271	\$7,650	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,260,817	148,288	55,452	92,836	\$120,454	\$19,157	\$8,574	6
Total.....	63	\$1,639,556	\$173,209	\$72,723	\$100,486				
1848.									
Bangor, Oldtown and Milford.....	12	\$135,000	\$33,805	\$19,617	\$14,188	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,271,824	160,825	59,225	101,600	\$129,344	\$20,891	\$10,568	6
Total.....	63	\$1,406,824	\$194,636	\$78,842	\$115,788				
1849.									
Atlantic and St. Lawrence.....	48	\$1,500,000	\$108,662	\$43,000	\$65,662	\$66,893	\$41,769	.....	..
Bangor, Oldtown and Milford.....	12	135,000	30,382	23,133	7,249	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,292,091	154,755	58,186	96,569	123,814	20,531	\$10,410	6
Total.....	111	\$2,927,091	\$293,799	\$124,319	\$169,480	\$190,707	\$62,300		
1850.									
Atlantic and St. Lawrence.....	48	\$1,642,214	\$143,631	\$59,594	\$84,037	\$79,148	\$57,490	\$6,998	..
Bangor, Oldtown and Milford.....	12	135,000	27,549	17,482	10,067	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,293,640	190,801	72,836	117,965	155,751	25,413	9,636	6
Total.....	111	\$3,070,854	\$361,981	\$149,912	\$212,069	\$234,899	\$82,903	\$16,629	
1851.									
Androscoggin and Kennebec.....	55	\$1,816,770	\$102,647	\$68,549	\$39,098	\$60,023	\$37,732	\$4,892	..
Atlantic and St. Lawrence.....	91	2,826,175	173,447	70,219	103,228	81,005	80,321	12,122	..
Bangor, Oldtown and Milford.....	12	135,000	30,161	16,413	13,748	14,988	14,988	185	..
Kennebec and Portland.....	35	1,742,370	67,300	30,300	37,000	49,300	18,000	.....	..
Portland, Saco and Portsmouth.....	51	1,300,323	187,605	80,792	106,813	150,847	25,969	10,789	6
York and Cumberland.....	10	399,010	10,044	9,292	752	9,007	1,037	.....	..
Total.....	254	\$8,219,648	\$571,204	\$270,565	\$300,639	\$265,170	\$178,047	\$27,987	
1852.									
Androscoggin and Kennebec.....	55	\$2,009,188	\$125,658	\$58,079	\$67,579	\$67,088	\$52,208	\$6,362	..
Atlantic and St. Lawrence.....	149	4,735,258	200,234	108,986	91,248	86,577	100,611	13,046	..
Bangor, Oldtown, Milford.....	12	135,000	31,702	18,011	13,691	16,752	14,753	197	..
Calais and Baring.....	6	185,000	14,616	4,992	9,624	809	12,656	1,151	8
Kennebec and Portland.....	66	2,181,000	122,290	50,000	72,290	92,290	30,000	.....	..
Portland, Saco and Portsmouth.....	51	1,301,883	201,265	90,029	111,236	154,115	32,895	14,254	6
York and Cumberland.....	10	641,021	15,694	10,673	5,021	11,349	4,345	.....	..
Total.....	349	\$11,188,350	\$711,459	\$340,770	\$370,689	428,980	\$247,468	\$35,010	
1853.									
Androscoggin.....	20	\$315,365	\$19,141	\$10,000	\$9,141	\$9,168	\$9,555	\$428	..
Androscoggin and Kennebec.....	55	2,020,247	140,461	60,507	79,954	71,647	63,210	5,704	..
Atlantic and St. Lawrence.....	149	5,763,752	316,036	193,513	122,523	130,435	167,733	17,768	3
Bangor, Oldtown and Milford.....	12	135,000	42,372	18,654	23,718	.....	.....	.....	..
Calais and Baring.....	6	198,468	25,721	9,804	15,917	1,700	23,789	252	8
Kennebec and Portland.....	72	2,514,067	168,113	67,561	100,552	127,127	33,604	7,381	..
Portland, Saco and Portsmouth.....	51	1,302,458	222,981	91,563	131,418	158,901	49,570	14,508	6
York and Cumberland.....	20	748,699	28,591	15,727	12,864	14,800	13,598	193	..
Total.....	385	\$12,998,056	\$963,416	\$467,829	\$496,087	\$518,778	\$361,039	\$48,234	

1854.									
Androscoggin.....	20	\$343,317	\$29,782	\$16,975	\$12,807	\$13,916	\$15,145	\$1,726	..
Androscoggin and Kennebec	55	2,176,506	161,321	67,950	98,371	85,596	68,283	7,441	..
Atlantic and St. Lawrence.....	149	6,019,904	470,648	311,598	159,050	153,616	296,890	20,141	6
Bangor, Oldtown and Milford.....	12	135,000	44,189	22,150	22,039	22,595	21,594	.....	..
Calais and Baring	6	217,255	28,038	11,821	16,217	1,361	25,409	1,268	..
Kennebec and Portland	72	2,605,365	208,568	94,499	114,069	153,162	48,102	12,308	..
Portland, Saco and Portsmouth.....	51	1,363,395	262,779	108,720	154,059	189,094	58,350	15,334	6
York and Cumberland	20	765,018	30,712	24,688	6,024	16,348	14,364	.....	..
Total.....	385	\$13,625,760	\$1,236,037	\$658,401	\$577,636	\$635,688	\$543,137	\$58,213	..
1855.									
Androscoggin.....	20	\$363,551	\$29,782	\$16,975	\$12,807	\$13,916	\$14,145	\$1,721	..
Androscoggin and Kennebec	55	2,245,020	190,604	99,807	90,797	97,940	85,188	7,474	..
Atlantic and St. Lawrence.....	149	6,194,240	542,488	386,455	156,033	154,094	367,943	20,451	6
Bangor, Oldtown and Milford.....	12	178,233	47,349	22,484	24,865	29,086	28,086	177	..
Calais and Baring	6	224,000	31,640	15,616	16,024	1,420	28,890	1,330	..
Kennebec and Portland	72	2,766,677	228,566	114,104	114,462	167,438	49,042	12,086	..
Portland, Saco and Portsmouth.....	51	1,317,605	278,919	136,788	142,131	202,361	62,161	14,897	6
York and Cumberland	20	774,714	39,268	25,468	13,800	21,372	17,125	771	..
Total.....	385	\$14,064,040	\$1,388,616	\$817,697	\$570,919	\$677,636	\$652,580	\$58,403	..
1856.									
Androscoggin.....	20	\$454,277	\$25,209	\$16,326	\$8,883	\$11,080	\$12,845	\$1,284	..
Androscoggin and Kennebec	55	2,210,947	209,475	99,676	109,799	107,417	94,981	7,129	..
Atlantic and St. Lawrence.....	149	6,368,576	565,168	461,312	103,856	151,805	393,072	20,290	6
Bangor, Oldtown and Milford.....	12	178,233	35,696	17,798	17,898	18,106	17,490	100	..
Calais and Baring	6	224,566	37,172	16,973	20,199	2,521	33,201	1,450	4
Kennebec and Portland	72	2,871,264	204,367	138,747	65,620	142,059	51,826	10,482	..
Penobscot and Kennebec.....	55	1,723,408	*145,478	70,429	75,049	94,436	44,655	6,387	..
Portland, Saco and Portsmouth.....	51	1,359,218	270,214	138,921	181,293	192,885	61,299	16,029	6
Somerset and Kennebec.....	20	700,000	Run by the Kennebec and Portland R. R.	.....	.....	.....	.....	.....	..
York and Cumberland	20	774,714	32,181	27,000	5,181	16,362	15,048	771	..
Total.....	460	\$16,865,203	\$1,524,960	\$987,182	\$537,778	\$736,671	\$724,367	\$68,922	..
1857.									
* For 15 months.									
Androscoggin.....	26	\$555,897	\$25,365	\$13,489	\$11,876	\$10,976	\$13,051	\$1,338	..
Androscoggin and Kennebec	55	2,210,947	258,534	117,673	140,861	135,236	113,833	9,916	..
Atlantic and St. Lawrence.....	149	6,954,828	567,644	500,342	67,301	154,276	402,799	19,408	6
Bangor, Oldtown and Milford.....	13	178,307	32,725	16,362	16,363	15,110	17,411	204	..
Calais and Baring	6	224,000	32,381	13,720	18,661	2,407	28,558	1,416	..
Kennebec and Portland	72	2,871,264	219,886	147,706	72,180	139,574	66,958	13,354	..
Penobscot and Kennebec.....	55	1,950,341	Run by the Androscoggin and Kennebec R. R.	.....	.....	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,359,573	253,707	121,010	132,697	189,487	56,104	8,116	6
Somerset and Kennebec.....	37	734,389	Run by the Kennebec and Portland R. R.	.....	.....	.....	.....	.....	..
York and Cumberland	20	398,000	30,070	29,186	984	16,792	12,493	785	..
Total.....	478	\$17,077,546	\$1,429,251	\$959,389	\$469,762	\$653,858	\$720,757	\$54,636	..
1858.									
Androscoggin.....	33	\$645,271	\$30,957	\$13,698	\$17,263	\$10,877	\$18,609	\$1,471	..
Androscoggin and Kennebec	55	2,210,947	279,149	133,255	145,894	144,308	118,273	16,568	..
Atlantic and St. Lawrence.....	149	7,077,379	545,791	395,567	150,224	146,871	380,155	18,765	6
Bangor, Oldtown and Milford.....	13	175,232	33,059	16,529	16,530	12,870	19,895	294	..
Calais and Baring	6	224,000	28,383	15,984	12,399	1,697	25,676	1,010	..
Kennebec and Portland	72	2,871,264	165,074	94,328	70,746	87,591	54,977	22,506	8 1/2
Lewey's Island	16	310,000	12,950	7,000	5,950	2,100	10,550	.....	..
Penobscot and Kennebec.....	55	1,874,831	Run by the Androscoggin and Kennebec R. R.	.....	.....	.....	.....	.....	..
Portland, Saco and Portsmouth.....	51	1,500,000	211,997	110,498	101,499	155,954	48,029	8,014	6
Somerset and Kennebec.....	37	783,763	*50,000	*30,000	20,000	25,000	25,000	.....	..
York and Cumberland	20	398,000	30,524	24,519	6,005	13,817	15,907	800	..
Total.....	507	\$18,070,687	\$1,387,884	\$841,369	\$466,515	\$620,085	\$667,876	\$69,420	..

* Estimated.

Baltimore and Ohio Railroad.

From the following communication it will be seen that this company will probably pay regular dividends hereafter in April and October. The communication is in answer to a resolution of inquiry passed by the Baltimore City Council:

BALTIMORE AND OHIO RAILROAD, }
PRESIDENT'S OFFICE, April 1, 1859. }

John W. Randolph, Esq., Chairman:

SIR: Your communication of the 16th ultimo was received during my absence from the city.

In reference to your inquiry regarding the probability of the Baltimore and Ohio railroad company paying a dividend in April and October of this year, and the amount of dividend that may be paid, I respectfully state that the net earnings and present financial condition of the company will justify a dividend of 3 per cent., for the fiscal half year terminating 31st ultimo, which doubtless the Board will declare at an early day.

As the company is now free from floating debt, I see no cause, with judicious management and no extraordinary disasters, to prevent the payment of regular dividends hereafter.

Very respectfully, your obedient servant,
J. W. GARRETT, President.

Pittsburg, Fort Wayne and Chicago R. R.

At the annual meeting of the stockholders of this company held at Pittsburg on the 30th ult., the following gentlemen were re-elected directors, viz: J. Edgar Thomson, Philadelphia; T. Haskins Du Puy, Pittsburg; George W. Cass, Pittsburg; Wm. Robinson, Jr., Pittsburg; C. M. Russell, Massillon; John L. Erwill, Wooster; George W. Bailey, Wooster; R. McKelly, Upper Sandusky; J. K. Edgerton, Fort Wayne; Samuel Hanna, Fort Wayne; Jesse L. Williams, Fort Wayne; A. L. Wheeler, Plymouth; John Evans, Wm. B. Ogden, Chicago; and R. H. Winslow, New York.

The Board subsequently met and organized by the re-election of the present officers: President, J. Edgar Thomson; Vice President, J. K. Edgerton; Acting President, T. Haskins Du Puy.

The report of the President, J. Edgar Thomson, Esq., was read. From it we learn that the capital stock of the company, on the 31st of December last, was \$6,266,555; amount of mortgage bonds on real estate and road to date, \$9,029,765; floating debt of all classes, \$1,755,982. Total cost of road and equipment, \$14,631,110; cost of real estate to the company, \$971,604, which, together with stocks and bonds of other companies, fuel on road and materials on hand, cash and bills receivable, accounts good and bad (including \$69,581 due by Gen. Larimer), mortgage bonds and notes, coupons, &c., amount to a total of \$17,046,252. The earnings of the road during the year 1858 were \$1,567,232; expenditures for all, \$1,651,170,

showing an excess of latter for the year of \$83,938 26. The total earnings of 1857, \$1,660,424; of 1858, \$1,567,232; decrease, \$93,192. The expenses of 1858, as compared with those of 1857, show a decrease of \$103,117 73.

Panama Railroad.

At the annual meeting of this company for the election of directors held on the 4th inst., the following gentlemen were unanimously chosen:—Messrs. David Hoadley, William H. Aspinwall, Edwin Bartlett, Henry Chauncey, Samuel W. Comstock, Edward Cunard, William Fellowes, Gouverneur Kemble, Theodore W. Riley, James T. Scouter, John Steward, Jr., Isaac Townsend, and William Whiteright, Jr.

Milwaukee Railroad.

Statement of Monthly Earnings of Railroads entering Milwaukee.

MILWAUKEE AND MISSISSIPPI RAILROAD.

	Passengers.	Freight.	Mail & Mis.	Total.
Jan..	\$15,979 82	25,817 12	1,375 00	43,181 44
Feb..	14,156 58	24,534 65	1,305 00	39,896 23
Mar..	21,134 39	29,285 33	1,494 66	51,914 38
April.	33,990 06	49,798 33	1,216 66	76,005 95
May..	30,410 83	55,110 33	1,216 66	86,787 82
June..	29,422 81	73,060 09	1,216 66	103,699 56
July..	29,353 12	68,215 72	1,877 61	99,446 44
Aug..	26,617 85	62,641 56	1,877 61	89,137 02
Sep..	29,607 73	75,419 04	1,877 61	106,904 38
Oct..	34,635 64	55,963 17	1,877 61	92,467 42
Nov..	19,780 12	41,710 03	1,880 41	63,350 56
Dec..	20,696 58	30,334 83	1,384 41	53,415 82

\$305,806 83 557,900 20 19,479 89 883,186 02

Comparative Monthly Statement.

	1856.	1857.	1858.
January....	\$36,589 02	28,461 23	43,181 44
February...	28,531 64	34,107 55	39,896 23
March.....	30,563 86	40,591 30	51,934 38
April.....	35,521 39	45,986 75	76,005 95
May.....	61,367 39	81,478 88	86,787 82
June.....	66,086 12	118,443 49	103,699 56
July.....	53,070 69	91,364 06	99,446 44
August.....	56,564 62	80,784 09	86,137 02
September..	92,856 90	123,007 99	106,904 38
October.....	120,146 52	115,920 69	92,416 42
November...	55,779 13	81,093 98	63,350 56
December...	33,403 30	41,577 93	53,415 82

\$660,680 58 882,817 89 883,186 02

MILWAUKEE, WATERTOWN AND BARABOO VALLEY RAILROAD.

	Passenger.	Freight.	Mail.	Total.
March..	\$2,063 07	4,899 08	266 66	7,228 81
April..	2,383 44	5,811 37	373 81	8,568 62
May...	2,456 08	8,792 32	365 10	11,613 50
June...	2,414 70	11,697 25	360 60	14,472 55
July...	2,927 03	10,912 43	364 00	14,203 46
August	2,583 10	7,533 60	387 49	10,504 19
Sept...	3,055 24	16,595 01	441 74	20,091 99
Oct...	2,730 96	11,274 12	375 79	14,380 87
Nov...	2,385 17	8,636 77	379 80	11,401 74
Dec...	1,950 52	6,605 03	379 56	8,935 11

\$24,549 31 92,756 98 3,694 55 121,400 84

LA CROSSE AND MILWAUKEE RAILROAD.

	Passengers.	Freight.	Mail.	Total.
Jan..	\$10,702 07	12,758 24	775 86	24,236 17
Feb..	8,946 46	10,651 00	437 92	20,035 38
Mar..	12,679 38	13,040 48	544 70	26,264 56
April.	13,785 21	17,852 25	2,053 03	33,690 49
May..	17,942 92	23,803 76	632 74	42,379 43
June..	15,043 54	28,153 79	678 21	43,875 54
July..	17,316 34	28,267 40	2,025 27	47,609 01
Aug..	16,885 08	20,029 05	941 17	41,551 54
Sept..	23,714 34	37,248 03	2,339 18	63,301 55
Oct..	23,357 87	32,255 48	767 99	61,551 54
Nov..	27,003 05	26,944 10	1,054 83	55,001 98
Dec..	13,868 92	18,937 58	4,516 55	36,823 65

\$206,745 19 269,941 16 16,767 45 492,453 81

MILWAUKEE AND CHICAGO RAILROAD.

	Passengers.	Freight.	Mail.	Total.
Jan..	\$9,300 21	4,889 03	271 31	14,460 55
Feb..	7,938 12	3,908 29	1,369 85	13,216 26
Mar..	11,685 14	5,493 13	289 84	17,468 11
April.	14,469 50	4,575 25	1,112 07	20,156 82
May..	18,256 43	3,110 91	1,686 20	18,053 54
June..	12,836 61	2,508 30	1,885 79	17,230 70
July..	12,791 42	2,556 35	1,200 22	16,547 99
Aug..	12,088 58	2,129 68	683 06	14,901 32
Sept.	13,800 95	3,032 61	1,653 87	17,887 43
Oct..	14,709 04	5,226 16	565 01	20,500 21
Nov..	12,467 90	2,940 23	1,557 35	17,965 48
Dec..	10,242 94	4,993 46	561 84	15,797 74

\$145,586 84 46,363 40 12,235 91 204,186 15

DETROIT AND MILWAUKEE RAILROAD.

January.....	\$18,522 49
February.....	16,134 34
March.....	21,520 21½
April.....	31,279 75
May.....	29,017 35½
June.....	24,934 23
July.....	26,626 57
August.....	31,570 60
September.....	49,215 80
October.....	46,149 53
November.....	36,529 69
December.....	31,089 39

\$362,589 39



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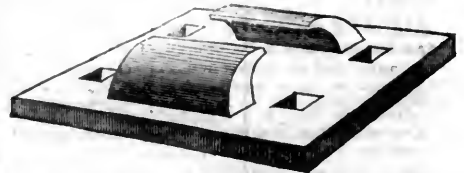
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Wrought Iron Welded Tubes, from ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.
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MORRIS, TASKER & CO.,
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 THE UNDERSIGNED,
 Sole Agents to Messrs. GUEST & CO., The Proprietors of the Dowlais Iron Works, Near Cardiff, South Wales, ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.
R. & J. MAXIN, 70 Broad st.

MORRIS & JONES & CO.,
IRON MERCHANTS,
 MARKET AND SIXTEENTH STREETS,
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IRON AND STEEL
 IN ALL THEIR VARIETIES.
 BOILER PLATE, CAR AXLES,
 BOILER RIVETS, RAILROAD IRON,
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Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.
 August 16, 1854 1753

American Railroad Iron.
 THE undersigned is prepared to contract for delivery of American Railroad Iron at points on the Mississippi, Ohio and Tennessee Rivers. Rails can be furnished 27 to 30 feet long when required.
JAMES HENDERSON,
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RAILROAD IRON.
 The Crescent Manufacturing Company,
WHEELING, VA.,
 ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address
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THE RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,
 MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.
 THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.
 Apply to
ALBERT G. SMITH,
 President of the Incorporation.
 February, 1854.

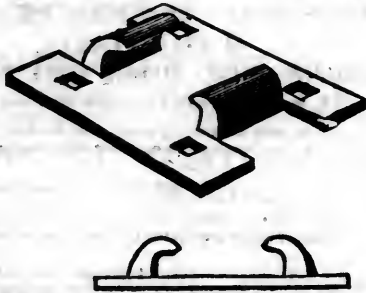
RAILROAD IRON.
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 Having leased the extensive Works of the Cambria Iron Company, Situated at JOHNSTOWN, CAMBRIA CO., PENNA., And purchased all their real estate, ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.
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 OFFER Rails of their own manufacture deliverable as may be desired by purchasers.
OLD RAILS
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IRON AND COAL COMPANY,
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 These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per linear yard, viz:—25, 30, 35, 40, 45, 50, 60, 62, and 75 lbs.
 Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.
 Address **J. H. BOKANTON, President,**
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 or **THEO. STURGES, Treasurer,**
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RAILROAD CHAIR WORKS.**
J. B. GREEN & CO., Proprietors.
SUCCESSORS TO THE
New York Wrought Iron Railroad Chair Company.
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HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late New York Wrought Iron Railroad Chair Company, and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

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The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

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Panama Railroad Company,
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The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

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SUCCESSOR TO
PRATT & FREEMAN,
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Rails, Sleepers, Chairs, Spikes, Wheels, Axles and Tires.
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Locomotive, Hand and Ship Lanterns; Car Trimmings of all
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AXLES, CHAIRS,
SPIKES, TOOLS,

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All inquiries in reference to the above articles will
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Of all kinds for Shops and Tracks,
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Springs, Chairs, Hoes and Belting, Ash, Pine and other Tim-
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Railroads, Engines and Cars, at lowest prices.

THOS. S. WILLIAMS, **PHILIP S. PAGE,**
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Orders for the purchase of goods on commission, aside from
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MANUFACTURERS' AGENTS

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STEAM ENGINES;
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Iron, Brass, Copper and Composition Castings;
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AND ALL KINDS OF RAILROAD MACHINERY
FURNISHED AT SHORT NOTICE.

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**VAN KURAN'S IMPROVED
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PATENTED MAY 1, 1849.

Manufactured under the Personal Superintendence
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ORDERS for any quantity of Wheels executed with dispatch, and Wheels and Axles fitted in the very best manner, and at the lowest rates.

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SUCCESSORS TO

**BRESE, KNEELAND & CO.,
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MANUFACTURE COAL or WOOD BURNING
LOCOMOTIVES, Steam Fire Engines,
Portable ENGINES and BOILERS, Cast Steel
SPRINGS for Engines, Tenders, Passenger or Freight
Cars; SHAFTING and ALL KINDS OF RAIL-
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They also furnish to order TYRES, DRIVING WHEELS
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Boiler Work furnished with dispatch.
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PLATE CAR WHEELS and CHILLED TYRES, equal
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WHEELS and AXLES fitted for use.
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MACHINERY of the most approved construction for Flour-
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**THE ROGERS
Locomotive & Machine
WORKS,**

SUCCESSORS TO

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HAVING extensive facilities, are now prepared to furnish
promptly of the best and most improved description, either

COAL or WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER VARIETIES OF

RAILROAD MACHINERY.

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HAVING erected an extensive Shop, with the most ap-
proved Machinery and Tools, are prepared to execute
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motive Engines and Tenders, in the best manner and on the
most favorable terms.

Also, Stationary Engines, and the various Tools suitable for
furnishing Repair Shops.

The business of Machine making, heretofore carried on by
Charles Danforth & Co., is continued by the present firm, and
all orders will receive prompt attention. 1849

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SCHENECTADY, N. Y.,

HAVING large facilities, are prepared to receive and ex-
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LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and
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BRASS and IRON CASTINGS; LOCOMOTIVE TYRES
welded and blocked to exact sizes, and every thing connected
with the building or repairing of Locomotives furnished on
short notice.

These Works being located on the New York Central Rail-
road, near the centre of the State, possess superior facilities
for forwarding their work to any part of the country, without
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ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

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MANUFACTURE to order, Locomotives of any Arrange-
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Workmanship, the Locomotives produced at these Works,
are equal to, and not excelled by any.

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Manufacturer of Marine and Stationary

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WARRANTED NOT TO GUM

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FOR RAILROADS,

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THIS OIL, having been before the public for a long time,
and having been extensively used in different parts of the
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proval, renders the manufacturers confident when making the
following claims:—

1st. Its first cost is vastly less than that of any Oil in use,
of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any
journal or bearing, all the gum in the Oil being entirely decom-
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saving also no inconsiderable amount of motive
power.

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consumers are invited to make their experiments on such jour-
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odor or unpleasant smell.

Also,—

**J. C. HULL & SONS'
REFINED BURNING OIL.**

Buyers are requested to give this OIL a trial, as it is be-
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**CHEAPEST, CLEANEST AND BEST
OIL FOR BURNING,**

(all things considered), in the market.

CERTIFICATES from a large number of Railroad
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DEALERS IN

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Adamantine Car and other Candles,

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Ten years; and is in the opinion of FORTY RAIL-
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The Cheapest and Best Lubricator in use.

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Thousands of Gallons, prove this Oil to be superior
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that is in all cases reliable, that will keep bearings cool,
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WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after
testing this Oil, pronounce it superior to any other for Lu-
bricating.—For sale ONLY by the Inventor.

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or
Europe.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 16.]

SATURDAY, APRIL 16, 1859.

[WHOLE No. 1,200, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, April 16, 1859.

Little Miami and Columbus and Xenia R. R.

Since the 30th of November, 1853, these roads have been worked together, as one, under the direction of one superintendent, appointed by the concurrent action of both boards of directors, subject to the supervision of a joint committee of four, composed of two members from each board, and removable by a two-third vote of the directors of either company. The entire equipment of the roads is held by the companies in common; each owning in the same proportion as the capital stock of each bears to the aggregate capital of both companies. All the earnings and income of each road derived from transportation, rents, franchise, etc., etc., are added together; and after deducting therefrom the current expenses of operating, including repairs, renewals, interest, etc., (and if required an appropriation to renewal fund, or sinking fund for the future payment of debts,) the residue is applied first to the payment of dividends, which are at all times to be equal, and the surplus, if any, divided between the two companies, or otherwise disposed of as the two boards shall elect. In 1856, these companies adopted the plan of issuing one joint

annual report, covering the operations of both roads, with separate statements of the assets and liabilities of each, together with a balance sheet of the joint accounts of both companies.

In the Third Annual Report of these companies for the fiscal year ending November 30th, 1858, the revenue from operations of both lines are stated as follows, viz:

From passengers	\$532,673 03
" freight	614,658 29
" mails and express	53,167 97
	\$1,200,499 29

And the attendant expenses were:

Repairs of cars	\$68,583 79
" engines	59,031 92
" road	107,223 66
" bridges	2,817 65
" depots, etc.	13,966 41
Transportation expenses	218,642 27
Fuel	77,786 61
Oil, tallow and waste	11,270 70
Taxes	10,158 84
Loss and damage	9,818 13
Rent, stationery, etc.	10,144 20
	589,394 18

Leaving as net earnings	\$611,105 11
To which, add dividends on C. & X. stock	43,270 75
	\$654,395 86

Total	\$105,838 75
Deduct interest	
Payments belonging to previous years	36,170 28
	142,009 03

Net profits..... \$512,386 83

The Little Miami Company's proportion of net profits being \$341,591 22; and the Columbia and Xenia company's proportion, \$170,795 61.

The gross earnings were \$37,336 70 in advance of those of 1857; while the net income exceeded that of the previous year in the sum of \$77,205 70.

Although the gross income from the transportation of passengers and mails was \$77,353 23 less than that received from freight traffic, the net revenue from the former, during the same time, exceeded that from the latter by \$47,751 83. This is attributable to the unnecessarily heavy burdens imposed upon the freight traffic by the unwise system of competition prevailing among the railroad companies of the country,

The assets and liabilities of the joint company are as follows:

ASSETS.	
Rolling stock	\$742,613 03
Materials, including ties, chairs, spikes, rails, fuel, etc.	156,036 95
Col. and Xenia railroad stock	38,400 00
" " " " bonds	96,000 00
Cash in hands of Treasurer of Little Miami company	107,389 22
Cash in hands of Treasurer of Columbia and Xenia company	19,117 86
Cash in hands of paymaster	185 76
Bills receivable	6,272 00
Due from agents	29,478 69
" transportation companies	47,091 37
" individuals	33,835 33
" P. O. department	10,674 51
Cash	\$1,286,644 72

LIABILITIES.	
Bills payable	13,600 97
Little Miami railroad stock account	785,817 62
Columbia and Xenia railroad stock account	392,908 82
Columbia and Xenia railroad current account	40,776 41
Due to transportation companies	42,830 59
" agents	1,709 20
" individuals	9,001 11
	\$1,286,644 72

The assets and liabilities of the Little Miami railroad company are as follows:

ASSETS.	
Construction	\$2,809,435 47
Real estate and depots	641,744 00
Columbia and Xenia railroad stock	425,650 00
Hillsboro' and Cin. stock	9,262 83
S. Mt. V. and Pittsburg stock	4,000 00
Sundry stocks	6,290 00
Individual accounts	25,978 77
Interest of this company in the joint property of both companies	785,817 62
Bills receivable	958 84
	\$4,709,137 53

LIABILITIES.	
Capital stock	\$2,981,293 12
Loan from City of Cincinnati	100,000 00
Loan of 1851, in bonds	7,000 00
" " 1853, " "	1,292,000 00
Dividends unpaid	34,196 61
Profit and loss	294,647 80
	\$4,709,137 53

The account with the stockholders is as follows:

Surplus December 1, 1857.....	\$320,328 66
Net earnings November 30, 1858...	341,591 22
Interest on old debt collected.....	1,044 30

\$662,964 18

From which deduct—

Dividend, Dec. 1857.....	\$149,064 66
" June 1858.....	119,251 72
Charged to depreciation.....	100,000 00

368,316 38

Surplus December 1, 1858.....	\$294,647 80
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COST OF ROAD AND EQUIPMENT.

Construction.....	\$2,809,435 47
Real estate and depots.....	641,744 00
Proportion of equipment.....	495,075 35

Total.....\$3,946,254 82

The assets and liabilities of the Columbus and Xenia railroad company are as follows:

ASSETS.

Construction.....	\$1,355,148 53
Real estate.....	21,101 46
Interest of this company in the joint property of both companies.....	392,908 82
L. M. & C. & X. current account.....	21,658 57
Bills receivable.....	20,525 13
Individual accounts.....	21,567 41
Central Ohio railroad stock.....	60,000 00
Interest on same.....	19,684 06
C. and X. stock held in trust.....	17,050 00
" bonds.....	12,000 00
Telegraph stock.....	2,000 00
D. X. and B. stock.....	1,000 00
Springfield and Columbus stock.....	1,000 00
Cash in hands of treasurer.....	19,895 44

\$1,965,539 42

LIABILITIES.

Capital stock.....	\$1,490,800 00
Mortgage bonds due May 1, 1859.....	18,000 00
Dividend " " Dec. 1, 1860.....	68,500 00
" " " June 1, 1866.....	68,400 00
" " " Dec. 1, 1861.....	69,600 00
" " " Dec. 1, 1862.....	66,200 00
Bills payable.....	50,500 00
Unpaid interest.....	15,048 95
Unclaimed dividends.....	2,273 97
Individual accounts.....	507 28
Surplus.....	115,709 22

\$1,965,539 42

The account with the stockholders is as follows:

Surplus December 1, 1857.....	\$127,860 39
Net earnings November 30, 1858...	170,795 61
Profit and loss.....	1,225 22

\$299,881 22

From which deduct—

Dividend Dec. 1857.....	\$74,540 00
" June 1858.....	59,632 00
Charged to depreciation.....	50,000 00

184,172 00

Surplus December 1, 1858.....	\$115,709 22
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COST OF ROAD AND EQUIPMENT.

Construction.....	\$1,355,148 53
Real estate.....	21,101 46
Proportion of equipment.....	247,537 68

Total.....\$1,623,787 67

The equipment of the road consists of 39 locomotives; 32 passenger cars; 16 baggage, mail and express cars; and 586 freight, stock, gravel and hand cars. The number of miles run by engines was 637,835; by passenger cars, 1,472,846; by freight cars of all kinds, 4,372,102. The number of passengers, ticketed to and from foreign points, carried over the whole road, was 94,500; do., carried over parts of the road, 43,187; the number of local passengers carried over the whole

road, was 13,538; do over portions of the road, 159,082—total, 310,307. The number of passengers carried one mile was 19,707,049. Average income per capita, without regard to distance, \$1.70.6. Do per capita per mile, \$2.69. The number of tons of through freight to and from foreign points was 152,683; do. local freight over the whole road 15,950; do., do., over parts of the road, 187,442—total, exclusive of express matter, 306,075. The number of tons carried one mile was 25,209,872. Average income per ton of all classes, without regard to distance, \$2.00.8. Do., per ton per mile, 2.43 cents.

The length of main line, Little Miami railroad is 83.5 miles; second track, 21.32; side track, 16.53. Length of main line Columbus and Xenia railroad, 54.5 miles; side track, 10.83.

OFFICERS OF THE LITTLE MIAMI RAILROAD.

NATHANIEL WRIGHT, *President.*D. G. A. DAVENPORT, *Treasurer.*C. H. KILGOUR, *Secretary.*S. E. WRIGHT, *Auditor.*JOHN DURAND, *Superintendent.*

OFFICERS OF THE COLUMBUS AND XENIA RAILROAD.

ROBERT NEIL, *President.*JOHN DURAND, *Superintendent.*CYRUS FAY, *Secretary and Treasurer.*

The Victoria Bridge.

The work on this great structure across the St. Lawrence at Montreal, has been in progress during the winter, and it is supposed that it will be completed within the present year. About a week ago, the last central tube, 330 feet in length, was raised to its position on the stone piers. The *Portland Argus* gives the following description:

There are many facts of curious interest connected with the erection of this tube, which are probably unknown to most of our readers. The river closed in December, and made several shoves. It was only until January that the ice became thick and firm enough to bear the enormous weight which it was to sustain. At this period an enormously heavy wooden bridge, or stage it may be more properly called, was built on ice directly under the iron tube to be erected. On this stage was set up a large stationary steam engine for the purpose of hauling up the materials to be used in its erection, on a temporary railway, also built on the surface of the ice. The iron tube was commenced in its centre, progressing from the centre towards the end day by day. This tube is of immense size and great weight; much greater than the other tubes of the bridge, they being 242 feet long, 16 feet wide, and graduated to the shore ends to 19 feet high; while the great centre tube is 330 feet long, 16 feet wide, and 22 feet high, and about 60 feet above the summer level of the river, thus allowing steamers to pass under it.

Finances of New Orleans.

From July 1st, 1858, to January 1st 1859, the receipts from all sources, were \$645,781 39. The 1st of July, 1858, the balance in the Treasury was \$421,315 38, making a sum total, when added to the receipts after that date, of \$1,067,100 77. The expenditures during the same period were \$1,065,076 57, leaving a balance on hand, on the 1st of January, 1859, of \$2,024 34.

It is estimated that the receipts from ordinary sources between January 1st and July 1st of the present year, will fall short of the estimated expenditures for the same time by \$136,948 30—the former being \$784,724 20 and the latter \$921,672-50.

Among the estimated expenditures for the current six months are \$168,655 for the Street Department; \$133,800 for Public Schools, and \$128,970 for the Police. The sum of \$216,867 was expended upon the streets during the six months ending January 1st, 1859.

Railroads of New Jersey.

Statement showing the cost, debts, earnings, expenses, etc., etc., of the Railroads and Canals of New Jersey, for 1858.

Names of Company.	Length in miles.	Capital paid in.	Funded Debt.	Other Debt.	Cost.	Earnings.	Expenses.	Net Earnings.	Rate of Dividends.	Receipts from Passengers.	Receipts from Freight.	Do Miscellaneous.
Camden and Amboy.....	98	\$2,298,400	\$8,567,800	.....	\$5,376,795	\$1,640,328	\$874,168	\$768,160	8	\$1,062,773	\$522,120	\$55,434
Delaware and Raritan Canal.....	.....	1,600,000	.....	.....	3,909,076	451,109	174,066	280,043	.....	451,108	.....	.....
New Jersey Central.....	64	2,000,000	3,000,000	\$105,920	6,674,323	836,934	346,613	491,820	8	171,829	649,605	16,358
New Jersey Railroad and Transportation Comp'y.....	34	3,749,000	711,420	.....	4,787,149	903,458	249,370	654,088	10	664,403	78,065	179,989
Morris and Essex.....	51	1,167,805	340,000	259,114	1,610,294	281,223	186,703	94,520	.....	134,023	90,025	7,173
Paterson and Ramapo.....	15 1/2	248,225	100,000	1,200	850,000	26,600	6,383	21,117	6 1/2	15,231	.....	.....
Frederick and Jamesburg.....	11 1/2	168,234	20,000	8,749	220,666	36,471	18,587	17,884	.....	16,231	.....	.....
Millsboro and New Brunswick.....	6 1/2	102,365	.....	712	111,114	7,871	4,576	3,295	.....	12,860	5,010	.....
Warren Railroad.....	18	968,000	600,000	439,085	1,568,713	193,240	96,620	96,620	6 1/2	13,649	177,439	2,258
Camden and Atlantic.....	60	656,635	1,006,800	56,667	1,787,970	133,222	75,258	57,965	.....	91,397	39,004	2,819
Flamingdon Railroad and Transportation Comp'y.....	12	150,000	91,000	.....	297,668	18,143	11,739	1,404	.....	6,830	7,213	600
Sussex Railroad.....	12	175,746	200,000	.....	376,746	30,941	21,812	9,129	.....	13,839	6,088	616
Burlington and Mount Holly.....	6	87,500	20,000	.....	120,000	20,444	14,411	6,083	.....	68,993	131,618	23,790
Belvidere Delaware.....	64	1,100,000	2,038,000	.....	3,173,285	224,303	131,220	93,083	.....	.....	274,650	.....
Morris Canal and Banking Company.....	13 1/2	2,066,300	631,439	.....	2,589,869	274,650	112,486	162,220	.....	.....	.....	.....
Paterson and Hudson River.....	18 1/2	630,000	.....	.....	630,000	63,400	12,346	63,400	4	.....	.....	.....
Newark and Bloomfield.....	6	103,880	.....	.....	101,627	12,346	10,400	1,946	.....	.....	.....	.....
Totals.....	.....	\$17,162,098	\$17,224,459	\$971,447	\$31,682,196	\$5,092,583	\$2,276,371	\$2,698,216	.....	\$2,710,681	\$1,801,305	\$345,371

TREATISE

ON THE

PRINCIPLES OF CIVIL ENGINEERING

AS APPLIED TO THE

CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, *Civil Engineer,*
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 223.)

TABLE III.

The subjoined tabular statement will show the strength of different kinds of timber. The last column (A) represents the weight in pounds that applied at the centre will break a piece one foot long and one inch square, supported at both ends:

Kind of Material.	Specific Gravity.	Length in feet.	Breadth in inches.	Depth in inches.	Weight Breaking in lbs.	Value of A.
Alder	0.555	2.5	1	1	212	530
Ash	0.753	2.5	1	1	314	785
Beech	0.690	2.5	1	1	271	677
Birch	0.720	2.5	1	1	207	517
Chestnut	0.875	2.5	1	1	180	450
Cedar	0.486	2.5	1	1	165	412
Elm	0.544	2.5	1	1	216	540
Fir, Riga	0.610	4.0	3	3	4,530	670
Mahogany	0.853	2.5	1	1	170	425
Oak, young	0.863	2.0	1	1	482	964
Do. old	0.825	2.0	1	1	218	436
Pine, southern ..	0.872	7.1	2½	5½	9,237	788
Do. white Am. ..	0.455	7.1	2½	5½	5,189	448
Do. Weymouth ..	0.460	2.0	1	1	329	658
Do. red	0.544	4.0	3	3	3,780	560
Do. yellow	0.439	4.0	3	3	2,756	410
Spruce, Am. white	0.490	7.1	2½	5½	6,646	482
Poplar, Lomb'y ..	0.374	2.5	1	1	131	327
Sycamore	0.590	2.5	1	1	214	535
Walnut, green ..	0.920	2.5	1	1	195	487
Willow	0.405	2.5	1	1	146	365

The authorities for the strength of the various kinds of wood used are Ebbels, Tredgold, Fincham, and Totten.

§ 32. Timber never should be subjected to strains sufficient to occasion fracture; when a weight is laid on a beam, between the points of support, it produces a bending or deflection of the beam, more or less.

When the beam bends considerably, it is said to be *flexible*; but if in a very slight degree, it is said to be *stiff*.

§ 33. The *stiffness* of beams is the resistance they offer against being *deflected*, or bent, by a given weight, without being broken: and depends, as in the case of ultimate strength,—upon the different circumstances of *length, breadth and depth*. It is ascertained by experiment, and measured by the deflections, or spaces, through which they are bent under given weights.

§ 34. The *deflection* of beams, is as the cube of their lengths; and the *stiffness* inversely in the same proportion.

P. Among the numerous experiments of Prof. Barlow, are the following upon pieces of fir 3 inches deep and 1½ inches thick, supported by props at various distances apart.

Experiments with weight No. 1.

Props 9 feet apart—Deflection	2½	of an inch.
" 6 " " " " " " " " " " " "	2½	" " "
" 8 " " " " " " " " " " " "	2½	" " "

Now 27, 8 and 1 are exactly proportional to the cubes of 9, 6 and 3 respectively.

Experiments with weight No. 2.

Props 9 feet apart—Deflection	40½	of an inch.
" 6 " " " " " " " " " " " "	12½	" " "
" 3 " " " " " " " " " " " "	1½	" " "

Experiments with weight No. 3.

Props 9 feet apart—Deflection	54	of an inch.
" 6 " " " " " " " " " " " "	16½	" " "
" 3 " " " " " " " " " " " "	2	" " "

These results will be found, also, to agree, very nearly, with the rule stated, and leave no doubt of its correctness.

§ 35. The *deflection* of beams is inversely as the breadth; and the *stiffness* is directly as the breadth.

If the breadth of a beam be doubled, the deflection will be but one-half, and the stiffness will be doubled.

§ 36. The deflections of beams are inversely as the cubes of their depths. Of course their stiffness is directly as the cubes of their depths.

§ 37. The deflections of rectangular beams are inversely as their breadths multiplied by the cubes of their depths.

Q. The general correctness of the three last propositions (§ 35, 36, 37) have been abundantly verified by experiment. The following by Prof. Barlow are selected for illustration.

A rectangular piece of fir of sufficient length, 2 inches by 1½ inches lateral dimensions, was laid upon props three feet apart, and a weight of 120 lbs. applied at the middle, between the bearings. When the batten was laid so that the depth was 2 inches and the breadth 1½ inches, the deflection was .10. When the depth was 1½ inches, and the breadth 2 inches, the deflection was .18. Now $2 \times 2 \times 2 \times 1.5 = 12$; and $1.5 \times 1.5 \times 1.5 \times 2 = 6.75$. Then $12 : 6.75 :: .18 : .10125$; a very slight variation.

§ 38. The *deflections* of beams, supported at both ends, are as the *deflecting weights*.

R. The fir battens 3 feet between supports, when 2 inches deep and 1½ inch in breadth, were deflected .10 by 120 lbs. and .15 by 180 lbs. When 1½ inches deep and 2 inches in breadth, they were deflected .16 by 120 lbs. and .24 by 180 lbs. These deflections are exactly in proportion to the weights.

§ 39. By the preceding sections (35, 36, 37, 38,) it is made to appear that the deflections of beams, are directly as the weights and cubes of their lengths;—and inversely as their breadths and cubes of their depths.

These particulars may be enunciated in one general rule, as follows:

The deflections of a beam are in proportion to the quotients arising from the *product of the deflecting weights, into the cube of the length,—divided by the product of the breadth into the cube of the depth.*

S. If a beam of New England white pine, 7.1 feet long, 5.5 inches deep and 2.75 inches broad, is bent 0.71 of an inch by 2,701 lbs.—what will

be the deflection of a beam one foot long and one inch square, loaded with one pound?

The resolution of this question is stated thus:

$$\frac{7.1 \times 7.1 \times 7.1 \times 2,701}{5.5 \times 5.5 \times 5.5 \times 2.75} = 2,113 : \frac{1 \times 1 \times 1 \times 1}{1 \times 1 \times 1 \times 1} = 1 :: 0.71 : 0.000336$$

or, $\frac{(7.1)^3 \times 2,701}{(5.5)^3 \times 2.75} : \frac{1^3 \times 1}{1^3 \times 1} = 1 :: 0.71 : 0.000336$, which expressions are equivalent to each other, and give 336 one millionth parts of an inch of deflection for the result.

T. The converse of this last proposition will be to find the deflection of a beam of white pine 7.1 feet long, 5.5 inches deep and 2.75 inches in breadth, loaded in the middle with 2,701 lbs. The deflection of a beam one foot long, one inch square, and with one pound in the middle being 0.000336 of an inch.

Then by the general rule the question will be stated thus:

$$\frac{1^3 \times 1}{1^3 \times 1} = 1 : \frac{(7.1)^3 \times 2,701}{(5.5)^3 \times 2.75} = 2,113 :: 0.000336 : 0.71$$

 or, more simply $\frac{(7.1)^3 \times 2,701}{(5 \times 5)^3 \times 2.75} \times 0.000336 = 0.71$

equal to seventy-one one hundredths of an inch deflection in 7.1 feet, or one-tenth of an inch per foot.

§ 40. Timber subjected to a cross strain will always bend more or less. Generally, its elasticity will be injured by a strain producing a deflection of more than one-fortieth of an inch for each foot in length.—That is to say: a beam 40 feet long should not be subjected to a deflection of more than one inch,—a beam 20 feet long, half an inch, or a beam 10 feet long to a deflection of one-fourth of an inch.

U. Suppose a beam of southern pine 7.1 feet long, 5.5 inches deep and 2.75 inches in breadth, to be deflected ¾ of an inch per foot, or 0.177 of an inch, by 1,175 lbs., what will be the weight required to produce a deflection of ¾ of an inch, in a beam of the same material one foot long and one inch square.

Then by the general rule (§ 39) the solution is $0.177 : \frac{1}{4} = 0.025 :: \frac{(7.1)^3 \times 1,175}{(5.5)^3 \times 2.75} : 130 = \frac{1^3 \times 130}{1^3 \times 1}$

This expression may be very materially simplified; for $0.177 : 0.025 :: 7.1 : 1$. Then the question may be stated thus: $7.1 : 1 :: \frac{(7.1)^3 \times 1,175}{(5.5)^3 \times 2.75} : 130$;

or dividing the first and third terms by 7.1 it will be, $1 : 1 :: \frac{(7.1)^3 \times 1,175}{(5.5)^3 \times 2.75} : 130$; or simply $\frac{(7.1)^3 \times 1,175}{(5.5)^3 \times 2.75} = 130$.

V. A beam of white pine of the same dimensions was deflected 0.177 of an inch, or ¾ of an inch per foot by a weight of 777 lbs.

What weight will be required to produce a deflection of ¾ of an inch in a beam, one foot long, and one inch square?

$$\text{Ans. } \frac{(7.1)^3 \times 777}{(5.5)^3 \times 2.75} = 85.6 \text{ lbs.}$$

The relative stiffness of southern pine to white pine is, therefore as 130 to 85.6.

§ 41. By obtaining similar results for the several kinds of timber, a table may be constructed to show their relative stiffness and which would be useful in determining the weight required to

produce a deflection of $\frac{1}{10}$ of an inch per foot, in a beam of any given dimensions. The expression for this purpose would be $\frac{(5.5)^3 \times 2.75 \times 130}{(7.1)^3} = 1,175$ for southern pine, and $\frac{(5.5)^3 \times 2.75 \times 85.6}{(7.1)^3} = 777$ for white pine.

The form of expression may be still further modified, in this manner,—instead of multiplying by 130, divide by $\frac{1}{130}$ or 0.0077,—and instead of multiplying by 85.6 divide by $\frac{1}{85.6}$ or 0.01168.

The expressions will then be—

$$\frac{(5.5)^3 \times 2.75}{(7.1)^3 \times 0.0077} = 1,175 \text{ lbs. for southern pine and}$$

$$\frac{(5.5)^3 \times 2.75}{(7.1)^3 \times 0.01168} = 777 \text{ lbs. for white pine.}$$

These expressions may be generalized, so as to apply to any dimensions and weights, by substituting the letter *B* for the breadth of the beam, *D* for the depth, *L* the length, *W* the weight and *C* for the constant quantities, or fractions 0.0077, etc. D^3 will represent the cube of the depth of the beam, and L^2 the square of the length.

Then the general expression will be $\frac{D^3 \times B}{L^2 \times C} = W$;

and this will be applicable to all kinds of timber, except that the value of *C* must be determined for each kind of timber and for each degree of deflection.

§ 42. On these principles tables have been arranged by Prof. Barlow, Tredgold, Col. Totten and other distinguished engineers, which are of great value to the practical carpenter.

TABLE IV.

Containing some results of experiments by Col. Totten on piece of wood of the dimensions given in Sections 39 and 40.

South'n Pine.	Spruce.	White Pine.	Kind of W'd.
0.872	0.490	0.455	Specific Gravity.
54.50	30.68	28.43	Weight of a cubic foot.
0.025 0.050 0.075 0.100	0.025 0.050 0.075 0.100	0.025 0.050 0.075 0.100	Deflections in parts of an inch to 1 ft.
0.177 0.355 0.532 0.710	0.177 0.355 0.532 0.710	0.177 0.355 0.532 0.710	Whole deflection in inch.
1.175 2.218 3.192 4.111	892 1,613 2,291 2,966	777 1,485 2,118 2,701	W'ght in lbs. prod'g def'n.
1.175 1.043 974 919	892 721 678 675	777 708 623 593	Difference for each divis'n on the scale of deflection.
$C=0.0077244$ $C=0.0040921$ $C=0.0028434$ $C=0.0020718$	$C=0.0101751$ $C=0.0062659$ $C=0.0039617$ $C=0.0030601$	$C=0.0116811$ $C=0.0061119$ $C=0.0038056$ $C=0.0038603$	Const't quantity (<i>C</i>) in the expr's's'n for stiffness $\frac{D^3 \times B}{L^2 \times C} = W$

§ 43. It will be seen that the difference of the weights (Table IV.) diminish as the deflection increases beyond $\frac{1}{10}$ of an inch, indicating that the elasticity of the timber is somewhat impaired, and that the law of deflection, (§ 38), does not apply beyond that point.

TABLE V.

Containing results extracted from "Tredgold's Elementary Principles of Carpentry, with the constant quantity (*C*) determined for $\frac{1}{10}$ of an inch deflection per foot.

Kind of Timber.	Specific Gravity.	Length in feet.	Breadth in inch.	Depth in inches.	Deflection in inches.	W'ght prod'g deflection in lbs.	Constant quantity (<i>C</i>) in the expression for stiffness $\frac{D^3 \times B}{L^2 \times C} = W$.
Ash, medium quality.	0.690	7.5	1	1	0.5	78.5	$C=0.0163$
Beech	0.688	7.5	1	1	0.5	150	$C=0.0127$
Birch	0.720	7.5	1	1	0.5	90.5	$C=0.0141$
Elm	0.540	7.5	1	1	0.5	125.	$C=0.0212$
Fir, New England	0.560	7.5	1	1	0.5	150.	$C=0.0121$
Maple	0.625	7.5	1	1	0.5	65.	$C=0.0197$
Oak, English	0.960	7.5	1	1	0.5	200.	$C=0.0119$
Do, Canadian	0.867	7.5	1	1	0.5	225.	$C=0.0099$
Pine, Am. white	0.460	7.5	1	1	0.5	237.	$C=0.0105$
Do, Yellow	0.712	7.5	1	1	0.5	150.	$C=0.0166$
Poplar, Lombardy	0.374	4.	1	1	0.5	1,680.	$C=0.0224$
Spruce, White Canada	0.455	2.5	1	1	0.5	56.5	$C=0.0112$
Sycamore	0.590	2.5	1	1	0.5	76.	$C=0.0138$
Walnut, green	0.920	2.5	1	1	0.5	180.	$C=0.0168$
		2.5	1	1	0.5	62.	$C=0.020$

§ 44. To find the *depth* of a beam, the length, breadth and weight being given.—

Multiply together the square of the length, weight and the constant number for the kind of material; divide this product by the breadth, and take the cube root of the quotient for the depth.

W. This rule may be otherwise expressed, when the dimensions are as given in the preceding section (40), thus

$$\frac{(7.1)^3 \times 1,175 \times 0.0077}{2.75} = (5.5)^3 \text{ for southern pine,}$$

$$\text{and } \frac{(7.1)^3 \times 777 \times 0.01168}{2.75} = (5.5)^3 \text{ for depth of}$$

$$\text{white pine, or generally } \frac{L^2 \times W \times C}{B} = D^3 \text{ for all}$$

kinds of timber.

§ 45. To find the *breadth* of a beam, the other dimensions and the weight being given.—Multiply together the square of the length in feet, the weight in lbs., and the constant number for the kind of timber, and divide the product by the cube of the depth in inches.

X. This rule is otherwise expressed,—the dimensions being the same as before,—thus

$$\frac{(7.1)^3 \times 1,175 \times 0.0077}{(5.5)^3} = 2.75 = \text{breadth for south-}$$

$$\text{ern pine, and } \frac{(7.1)^3 \times 777 \times 0.01168}{(5.5)^3} = 2.75 =$$

breadth for white pine; or generally

$$\frac{L^2 \times W \times C}{D^3} = B.$$

§ 46. To find the *length* of a beam, the breadth, depth and weight being given.

Divide the product of the breadth into the cube of the depth, by the product of the weight into the constant number for the kind of timber, and the square root of the quotient will be the length in feet.

Y. This rule—for the dimensions and weight before used—is expressed otherwise thus,

$$\frac{(5.5)^3 \times 2.75}{1,175 \times 0.0077} = (7.1)^2 \text{ for southern pine, and}$$

$$\frac{(5.5)^3 \times 2.75}{777 \times 0.01168} = (7.1)^2 \text{ for white pine:}$$

$$\text{or generally } \frac{D^3 \times B}{W \times C} = L^2.$$

§ 47. The quantity of timber in a beam being given, the stiffness will be increased by increasing the depth. It may, however, be made so thin as to be liable to warp and break sideways: therefore, unless a beam be held in position by other means, there must be certain limits to the proportions of length and breadth which should not be exceeded. The rule adopted by Mr. Tredgold is—

Divide the length in feet by the square root of the depth in inches, and multiply the quotient by 0.6 for the breadth in inches.

EXAMPLE.

Suppose a beam 20 feet long and 9 inches deep,—what should be its breadth by the above rule?

$$\frac{20}{\sqrt{9}} = \frac{20}{3} \text{ and } \frac{20}{3} \times 0.6 = 4 \text{ inches.}$$

§ 48. The deflection of a beam, when the weight is *uniformly distributed* throughout its length, is to its deflection with the whole weight applied at the centre, as 5 : 8, nearly; or more nearly as 19 : 30.

§ 49. For the purpose of further illustrating, and rendering more familiar, the principles which have been presented, relative to the strength and stiffness of beams, the following examples are introduced.

EXAMPLE 1.

If a stick of ash, 2.5 feet long, one inch deep and 1 inch in breadth, broke with 314 lbs. (Table III.); what weight will be required to break a stick of the same material, 1 inch square and 1 foot long.

$$\text{(By § 21) } 1 : 2.5 :: 314 : \frac{2.5 \times 314}{1} = 785 \text{ lbs.}$$

What weight will be required to break the stick if 4 feet long?

$$\text{(By § 21) } 4 : 2.5 :: 314 : \frac{2.5 \times 314}{4} = 196.25.$$

EXAMPLE 2.

If a stick of alder, 2.5 feet long, 1 inch in breadth and 1 inch deep, broke with 212 lbs. (Table III.), what weight will be required to break a stick of alder, of the same length and depth, with a breadth of 2.5 inches?

$$\text{(By § 22.) } 1 : 2.5 :: 212 : 530. \text{ Ans. 530 lbs.}$$

EXAMPLE 3.

If a stick of beech, 2.5 feet long and 1 inch square, be broken with 271 lbs., (Table III.), what weight will be required to break a stick of the same material and depth, 4 feet long and 2 inches in breadth?

$$\text{(By § 23.) } \frac{2.5 \times 271}{1} = \frac{4 \times 338.75}{2}. \text{ Ans. 338.75 lbs.}$$

EXAMPLE 4.

A stick of birch, 2.5 feet long, 1 inch deep and 1 inch in breadth, broke with 207 lbs.; what weight would have been required to break the stick, if it had been 2 inches deep, the other dimensions remaining the same?

$$\text{(By § 24.) } 1^2 : 2^2 :: 207 : 828. \text{ Ans. 828 lbs.}$$

In case the stick had been 3 inches deep—

$1^2 : 3^2 :: 207 : 1,863$, or $1 \times 1 : 3 \times 3 :: 207 : 1,863$, or $1 : 9 :: 207 : 1,863$.
Ans. 1,863 lbs.

EXAMPLE 5.

A stick of chestnut, 2.5 feet long, and 1 inch square, broke with 180 lbs.; what weight will be required to break a stick of the same length and kind of timber, 2.5 inches deep and 1.5 inch in breadth?

(By § 25.) $1 \times 1^2 : 1.5 \times (2.5)^2 :: 180 : 1,687.5$, or $180 \times 1,687.5$
 $1 \times 1^2 = 1.5 \times (2.5)^2$. Ans. 1,687.5 lbs.

EXAMPLE 6.

A stick of cedar, 2.5 feet long, 1 inch deep and 1 inch in breadth, broke with 165 lbs.; what weight will be required to break a stick of cedar, 5 feet long, 3 inches deep and 2 inches in breadth?

(By § 26.) $\frac{1 \times 1 \times 1}{2.5} : \frac{2 \times 3 \times 3}{5} :: 165 : 1,485$, or $2.5 \times 165 = \frac{5 \times 1,485}{2 \times 3 \times 3}$.
Ans. 1,485 lbs.

EXAMPLE 7.

Suppose the weight in the last case had been applied 6 inches from the centre of the stick.

(By § 27.) $2 \times 3 : 2.5 \times 2.5 :: 1,485 : 1,547$.
Ans. 1,547 lbs.

EXAMPLE 8.

If the deflection of a yellow pine beam, 4 feet long, be .37 of an inch, (Table V.) with a weight of 1,680 lbs.; what deflection will the same weight produce on a beam, 10 feet long, of the same breadth, depth and material?

(By § 34.) $4^2 : 10^2 :: 37 : 5.5\frac{1}{2}$ or, $64 : 1,000 \times 0.37 : 5.5\frac{1}{2}$.
Ans. $5.5\frac{1}{2}$ inches.

EXAMPLE 9.

A stick of elm, 7 feet long and 2 inches square, was deflected 1.42 inches by 125 lbs.; what would have been the deflection if the breadth had been 5 inches?

(By § 35.) $5 : 2 :: 1.42 : \frac{2 \times 1.42}{5} = .57$ of an inch.

EXAMPLE 10.

A mahogany stick, 2.5 feet long, 1 inch square, was deflected .5 of an inch by 118 lbs. Suppose its depth had been twice as great; how much would have been the deflection?

(By § 36.) $2^2 : 1^2 = 0.5 : 0.0625 = \frac{1}{16}$ of an inch.

EXAMPLE 11.

The deflection of a pitch pine stick, 7 feet long and 2 inches square, under a weight of 150 lbs., was 1.33 inches. What would have been the deflection, in case the stick had been 1 inch in breadth and 3 inches deep.

(By § 37.) $2 \times 2 \times 2 = 16$, and $3 \times 3 \times 3 = 27$.
Then $27 : 16 :: 1.33 : 0.79$ of an inch.

EXAMPLE 12.

If a deflection of one inch on a given beam be produced by a weight of 2,000 lbs.; what deflection will be produced by 875 lbs.?

(By § 38.) $2,000 : 875 :: 1 : .4375$ of an inch.

EXAMPLE 13.

A white oak beam, 7 feet long and 2 inches square, was deflected 1.275 inches by 200 lbs. How much will a beam, of the same kind of timber, 10 feet long, 6 inches deep and 3 inches in breadth, be deflected by a weight of 2,000 lbs.?

(By § 39.) $\frac{7^2 \times 200}{2^2 \times 2} : \frac{10^2 \times 2,000}{6^2 \times 3} :: 1.275 : .92$.
Ans. 92 hundredth of an inch.

EXAMPLE 14.

What weight will a white pine joist, 15 feet long, 9 inches deep and 4 inches in breadth, sustain without injury to its elasticity; that is, with a deflection of only $\frac{1}{16}$ of an inch per foot?

(By § 41.) $\frac{9^2 \times 4}{15^2 \times 0.01168} = 1,109$ lbs. in the middle; or (By § 48.) 1,751 lbs. uniformly distributed.

What weight will a spruce joist, of the same dimensions, sustain without injury?

$\frac{9^2 \times 4}{15^2 \times 0.010175} = 1,273$ lbs. applied at the middle; or, 2,010 lbs. uniformly distributed.

If the joist be of Canadian oak?

$\frac{9^2 \times 4}{15^2 \times 0.009} = 1,440$ lbs. in the middle; or, 2,273 lbs. uniformly distributed.

If the joist be of southern pine?

$\frac{9^2 \times 4}{15^2 \times 0.0077} = 1,683$ lbs. in the middle; or, 2,657 lbs. uniformly distributed.

EXAMPLE 15.

A beam of English oak is wanted for 25 feet between bearings; the breadth to be 8 inches and to support one ton in the middle, without injuring the elasticity of the timber. What must be its depth?

The general expression is (§ 44. W.)

$\frac{L^2 \times W \times C}{B} = D^3$.
Therefore, $\frac{25^2 \times 2,000 \times 0.0119}{8} = 1,860 = (12.3)^3$.
Ans. The beam must be 12.3 inches deep.

EXAMPLE 16.

The space for a beam of pitch pine does not admit of its being more than 10 inches deep. The distance between bearings is 18 feet, and the weight in the middle 2,500 lbs. What must be the breadth?

The general expression (§ 45. X.) is

$\frac{L^2 \times W \times C}{D^3} = B$. Therefore,
 $\frac{18^2 \times 2,500 \times 0.0166}{10^3} = \frac{324 \times 2,500 \times 0.0166}{1,000} = 13.45$.
Ans. The breadth must be 13.5 inches.

EXAMPLE 17.

How long will it be safe to make a beam of ash, 13.5 inches deep, and 6 inches in breadth, if it be loaded with 1,500 lbs. in the middle?

The general expression for this is (§ 46),

$\frac{D^2 \times B}{W \times C} = L^2$.
Then $\frac{(13.5)^2 \times 6}{1,500 \times 0.0163} = 603.77 = \text{the square of } 24.56$.

Ans. The length may be 24.5 feet.

Suppose the weight uniformly distributed; how long might the same beam have been?

(By § 48.) $30 : 19 :: 1,500 : 950 = \text{equivalent weight in the middle}$. Then

$\frac{(13.5)^2 \times 6}{950 \times 0.0163} = 953.32 = 30.87 \text{ square}$.

Ans. The length may be 30 feet 10.5 inches.

§ 50. When a beam is supported at both ends, and is deflected by the action of a load, the fibres of the upper part are compressed, and those of the lower part are extended. Between the extended and the compressed fibres, there is a thin stratum of fibres, which suffers neither extension nor compression, and is said to be situated in the *neutral plane*, or *neutral axis* of the beam.

§ 51. The position of the neutral plane, in a rectangular beam, depends upon the relative power of resistance which the fibres of the same material offer to extension and to compression.

Prof. Barlow's experiments fix the neutral plane, in rectangular timber beams, at about five eighths of the depth from the top surface; giving 5 compressed parts to 3 extended.

§ 52. The fibres, acted upon by compression, are represented by the sectional area of the beam which is above the neutral plane; and those acted upon by extension are represented by the section of that part of the beam which is below the neutral plane.

§ 53. The center of the section above the neutral plane, may be taken as the center, or mean point of compression; and the center of the section below the neutral plane, may be taken as the center, or mean point of extension.

§ 54. The *strength* of rectangular beams, of four surfaces, is as the distances, between the centres of compression and extension, into the area of the section. The resistance to deflection, or the *stiffness* is as the *squares* of the distances, from center of compression to center of extension, into the area of the section of the beam, and this distance is, uniformly, one-half the depth of the beam.

§ 55. The strength of a rectangular beam of unequal thickness—as consisting of a vertical rib, with horizontal flanges at the top and bottom—may be determined by first finding the strength of a beam of uniform thickness, and deducting therefrom, the strength due to the parts wanting to complete the beam of uniform thickness. The stiffness of the same beam will be found in a similar manner;—the strength being as the square, and the stiffness as the cube of the depth.

(To be continued.)

The Revenues of Cuba.

An official statement has just been published of the revenues of the colonial government of Cuba for 1858. The results are as follows:

Total \$18,126,395 00

The items are thus stated:

Imposts and contributions.....	3,842,397 43
Custom houses.....	10,778,688 97
Crown monopolies.....	1,060,395 96
Lottery.....	1,799,828 62
Public property.....	74,928 79
Eventual revenues.....	340,075 54
Items not in the budget.....	230,080 59

Total..... \$18,126,395 93

This sum exhibits a larger aggregate than really accrues to the Government, it being customary to make up their returns in such a way as shall show the largest possible total. The whole revenue for the year exhibits an excess of \$2,512,567 93 over the estimated receipts for the same time, and an increase over the receipts of 1857 of \$674,401.44. Of this increase \$172,400 29 came from an augmentation of import duties, and \$101,846 87 from an increase of the amount of export duties collected.

Pacific Railroad.

The Board of Directors of the Pacific railroad company, have voted *not to accept* the act of the last legislature, authorizing the conversion of the 7 per cent. guaranteed bonds of the company into 6 per cent. State bonds. This places the Southwest Branch of the road precisely where it was at the commencement of the session, and makes the continuation of the work dependent altogether upon the sale of the guaranteed bonds.—*St. Louis Republican*.

Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in.	Debt.	Total cost of road & equip't.	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares.	
Atlantic & St. Lawrence	148	2,494,900	3,482,000	6,223,911	545,762	160,224	6	---	
Androscog. & Kennebec	56	457,909	1,835,308	2,210,947	169,518	83,368	6	---	
Kennebec & Portland	72	1,107,526	1,763,738	2,871,261	213,255	---	---	---	
Port. & Sagadahoc	51	1,399,400	---	1,399,373	253,717	120,900	6	---	
Boston, Concord & Montreal	93	1,104,586	2,848,977	3,953,563	321,767	174,025	16	---	
Quebec & Montreal	35	1,800,000	8,242	1,808,242	317,056	125,664	6 1/2	---	
Concord & Passumps. Riv.	82	3,068,400	406,286	3,474,686	365,890	136,966	4 1/2	---	
Northern, N. H.	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	
Buttani & Burlington	117	2,233,376	4,163,765	6,397,141	312,215	41,688	none	---	
Vermont and Canada	47	1,350,000	---	1,350,000	1,350,000	---	---	---	
Ver. Central	122	5,000,000	5,276,299	10,276,299	840,105	127,339	---	---	
Boston and Lowell	28	1,830,000	438,920	2,268,920	435,863	171,362	6 1/2	---	
Boston and Maine	74	1,076,974	---	1,076,974	422,931	203,507	6 1/2	---	
Boston and Providence	43	3,160,000	239,700	3,399,700	534,176	254,134	6 1/2	---	
Boston and Worcester	44	4,600,000	999,974	5,599,974	1,019,149	393,613	6 1/2	---	
Cape Cod	47	681,680	291,007	972,687	122,960	39,899	4 1/2	---	
Connecticut River	50	1,111,110	275,772	1,386,882	267,710	65,096	3 1/2	---	
Eastern, Mass.	80	2,683,400	2,441,573	5,124,973	616,156	272,470	6 1/2	---	
Fitchburg	67	3,500,000	100,000	3,600,000	387,821	250,843	6 1/2	---	
N. Bedford and Taunton	21	500,000	---	500,000	541,580	168,925	27,827	6	---
Old Colly and Fall River	69	3,015,100	250,100	3,265,200	240,133	62,297	11 1/2	---	
Vermont and Mass.	165	2,252,541	1,018,148	3,270,689	211,982	89,763	8 1/2	---	
Western, Mass.	46	5,150,000	6,839,080	11,989,080	1,361,271	216,888	8 1/2	---	
Worcester and Nashua	43	1,141,000	205,565	1,346,565	344,773	155,044	7 1/2	---	
Providence and Worcester	72	1,510,000	300,000	1,810,000	709,065	340,835	10 1/2	---	
Hartford and N. Haven	122	2,000,000	944,000	2,944,000	274,428	112,325	---	---	
Hartford, Prov. and Fishkill	74	1,936,246	2,152,642	4,088,888	318,475	109,344	---	---	
Housatonic	57	1,031,800	624,244	1,656,044	157,055	254,599	3 1/2	---	
Waukegan	62	2,930,935	2,323,210	5,254,145	85,007	30,313	---	---	
N. York and N. Haven	66	734,258	761,462	1,495,720	129,571	61,644	---	---	
N. Haven and N. London	66	510,000	1,062,000	1,572,000	265,417	44,547	---	---	
N. London, W. & Palmer	32	439,005	1,025,098	1,464,098	117,716	9,904	---	---	
Norwich and Worcester	32	643,830	217,455	861,285	172,476	66,333	---	---	
Albany Northern	100	1,487,871	1,501,183	2,988,996	288,392	31,899	---	---	
Black River and Utica	72	798,439	2,657,849	3,456,288	879,590	356,763	10	---	
Buffalo, Conn. and N. Y.	69	1,300,000	1,040,000	2,340,000	174,089	69,606	---	---	
Buffalo and N. Y. City	47	434,111	922,393	1,356,504	---	---	---	---	
Buffalo and St. Line	95	3,115,000	2,279,854	5,394,854	135,433	---	---	---	
Calandragus and Elmira	35	687,000	600,689	1,287,689	688,390	---	---	---	
Camden and Niagara Pk	144	3,868,406	9,250,362	13,118,768	320,1	66,180	10 1/2	---	
Cayuga & Susquehanna	95	1,000,000	647,193	1,647,193	6,545,413	3,041,120	7 1/2	---	
Chesapeake and Ohio	55	24,182,400	14,404,633	38,587,033	1,454,032	---	---	---	
Long Island	184	11,000,000	28,041,468	39,041,468	1,040,391	324,891	12 1/2	---	
New York Central	154	6,717,100	4,922,498	11,639,598	2,040,153	135,754	1	---	
New York and Erie	118	1,633,022	4,047,874	5,680,896	149,373	76,784	---	---	
New York and Harlem	35	304,130	213,025	517,155	---	---	---	---	
Northern, N. Y.	29	467,200	234,189	701,389	---	---	---	---	
Oswego and Syracuse	23	810,000	140,000	950,000	---	---	---	---	
Potomac and Watertown	48	500,000	395,600	895,600	---	---	---	---	
Scranton and Saratoga	50	768,369	1,675,804	2,444,173	---	---	---	---	
Saratoga and Whitehall	27	437,830	737,079	1,174,909	---	---	---	---	
Syracuse & Binghamton	97	1,500,000	700,979	2,200,979	---	---	---	---	
Troy and Boston	64	1,000,000	1,619,000	2,619,000	---	---	---	---	
Valley Forge and Delaware	94	3,000,000	11,407,200	14,407,200	---	---	---	---	
Valley Forge and Amboy	60	3,485,000	1,650,854	5,135,854	---	---	---	---	
Valley Forge and Atlantic	32	2,485,000	788,844	3,273,844	---	---	---	---	
New Jersey Central	53	2,000,000	3,692,428	5,692,428	---	---	---	---	
Morris and Essex	44	1,577,900	909,046	2,486,946	---	---	---	---	
Albany Valley	63	1,700,000	1,940,000	3,640,000	---	---	---	---	
Catskill, W. & Erie	52	1,018,900	213,509	1,232,409	---	---	---	---	
Delaware Valley	170	3,292,772	6,194,561	9,487,333	---	---	---	---	
Del. Lack. & Western	20	600,000	150,000	750,000	---	---	---	---	
Erie and North East	33	600,000	1,200,000	1,800,000	---	---	---	---	
Phila. & Sunbury	28	2,000,100	548,222	2,548,322	---	---	---	---	
Little Schuylkill	56	3,061,805	2,820,165	5,881,970	---	---	---	---	
Norfolk	296	13,200,025	10,990,524	24,190,549	---	---	---	---	
Phila. and Reading	98	1,178,641	9,423,600	10,602,241	---	---	---	---	
Phila. and Baltimore	98	5,000,000	2,673,450	7,673,450	---	---	---	---	
Phila. Germ. & Norristown	38	899,350	378,600	1,277,950	---	---	---	---	
Pittsburg and Connelville	60	1,748,032	1,613,403	3,361,435	---	---	---	---	
Pittsburg & Steubenville	32	1,221,277	280,000	1,501,277	---	---	---	---	
Sunbury and Erie	209	3,670,030	875,293	4,545,323	---	---	---	---	
Williamsport and Elmira	78	1,000,000	1,990,000	2,990,000	---	---	---	---	
Baltimore and Ohio	382	13,118,902	10,986,804	24,105,706	---	---	---	---	
Washington Branch	41	1,650,000	25,000	1,675,000	---	---	---	---	
Norfolk and Western Va.	165	4,260,000	5,411,315	9,671,315	---	---	---	---	
Alexandria and Lynchburg	97	1,447,000	1,006,384	2,453,384	---	---	---	---	
South Side	123	1,571,800	2,136,274	3,708,074	---	---	---	---	
Virginia Central	175	6,122,998	1,833,170	7,956,168	---	---	---	---	
Virginia and Tennessee	201	3,653,000	3,221,465	6,874,465	---	---	---	---	
Kennedon and Petersburg	140	1,977,399	323,407	2,300,806	---	---	---	---	
Richmond, Fred. & Potomac	120	1,000,000	750,500	1,750,500	---	---	---	---	
Petersburg and Roanoke	63	769,000	165,502	934,502	---	---	---	---	
Richmond and Weldon	228	4,000,000	---	4,000,000	---	---	---	---	
Wilmington & Weldon	122	1,340,213	890,000	2,230,213	---	---	---	---	
Wilmington & Manchester	171	1,123,956	1,216,909	2,340,865	---	---	---	---	
Wilmington & Gaston	97	973,300	126,000	1,100,300	---	---	---	---	
Charlotte & S. Carol.	109	1,201,000	380,000	1,581,000	---	---	---	---	
Greenville & Columbia	165	1,293,494	908,800	2,202,294	---	---	---	---	
Greenville & Spartanburg	102	895,000	1,814,920	2,709,920	---	---	---	---	
South Carolina	203	4,179,205	3,813,595	7,992,800	---	---	---	---	
Atlanta and La Grange	37	1,000,000	199,000	1,199,000	---	---	---	---	
Georgia Central	211	4,168,000	476,896	4,644,896	---	---	---	---	
Georgia and Western	191	3,726,911	991,787	4,718,698	---	---	---	---	
Georgia & W. Port.	102	1,414,240	992,984	2,407,224	---	---	---	---	
Brunswick and Florida, Ga.	30	161,857	463,648	625,505	---	---	---	---	
South Western	143	1,399,100	441,292	1,840,392	---	---	---	---	
Tennessee and Alabama	30	399,754	628,889	1,028,643	---	---	---	---	
Tennessee and Mississippi	64	757,400	611,812	1,369,212	---	---	---	---	
Memphis and Charleston	257	2,228,177	3,495,288	5,723,465	---	---	---	---	
Mobile and Ohio	305	6,784,819	2,064,450	8,849,269	---	---	---	---	
Miss. Central	89	1,576,474	926,796	2,503,270	---	---	---	---	
Southern (Miss.)	82	1,000,000	1,400,000	2,400,000	---	---	---	---	
N. O. Opelousa & G. W.	80	2,800,000	750,000	3,550,000	---	---	---	---	
N. O. Jackson & G. N.	206	4,016,000	1,615,610	5,631,610	---	---	---	---	
Vicksburg, Shreveport & Tex.	21	833,766	109,285	943,051	---	---	---	---	
East Tennessee and Ga.	111	1,192,974	1,735,669	2,928,643	---	---	---	---	
East Tennessee and Va.	130	626,075	1,728,664	2,354,739	---	---	---	---	
Nash. and Chattanooga	159	2,263,906	1,626,092	3,889,998	---	---	---	---	
Ovington & Lexington	98	1,334,850	3,065,917	4,400,767	---	---	---	---	
Lexington and Frankfort	29	430,055	158,899	588,954	---	---	---	---	
Lexington and Danville	19	694,444	71,000	765,444	---	---	---	---	
Louisville and Frankfort	65	741,099	625,216	1,366,315	---	---	---	---	
Atlantic & Gt. Western	---	866,939	77,294	944,233	---	---	---	---	
Bellevue and Ind.	118	1,874,395	1,315,237	3,189,632	---	---	---	---	
Clev., Col. and Cin.	141	4,746,3	90,400	4,836,700	---	---	---	---	
Cleveland & Toledo	200	3,333,712	4,225,658	7,559,370	---	---	---	---	
Clev. and Mahoning	65	---	1,920,953	1,920,953	---	---	---	---	
Clev. and Pittsburgh	133	2,780,744	3,045,992	5,826,736	---	---	---	---	
Clev. P. & Ashland	95	3,000,000	1,495,545	4,495,545	---	---	---	---	
Cin. Hamilton & Dayton	60	2,155,800	1,626,092	3,781,892	---	---	---	---	
Cin. Wm. & Zanesville	131	2,421,176	3,782,040	6,203,216	---	---	---	---	
Columbus and Xenia	55	1,490,450	149,000	1,639,450	---	---	---	---	
Dayton, Xen. & Belpre	65	457,836	422,658	880,494	---	---	---	---	
Dayton and Michigan	140	1,076,802	293,011	1,369,813	---	---	---	---	
Dayton and Western	36	310,000	700,481	1,010,481	---	---	---	---	
Dayton and Hamilton	42	459,742	832,608	1,292,350	---	---	---	---	
Little Miami	65	2,081,212	3,925,157	6,006,369	---	---	---	---	
Sandusky, Dayton & Cin.	171	2,697,700	3,368,000	6,065,700	---	---	---	---	
Central Ohio	135	1,277,807	6,225,656	7,503,463	---	---	---	---	
St. Cath. Ft. Wayne & Cin.	123	6,247,040	9,822,560	16,069,600	---	---	---	---	
Pittsburg, Mayers & Cin.	60	871,250	31,000	902,250	---	---	---	---	
Sand'y, Mans. & Newk.	127	1,350,000	2,205,357	3,555,357	---	---	---	---	
Scioto & Hocking Valley	66	403,975	609,050	1,013,025	---	---	---	---	
Spring Mt. Vernon & P.	113	1,000,000	650,000	1,650,000	---	---	---	---	
Tol. Wabash & St. Louis	242	2,965,100	7,577,800	10,542,900	---	---	---	---	
Cin. Log. and Chicago	25								

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible.	7	1st Jan. 1st July	N.Y.	1872	60	
Buffalo and State Line	600,000	Do. inconvertible.	7	April, October.		1866	90	96
Bellefontaine and Indiana	600,000	Do. convertible.	7	Jan'y, July		1866	75	
Do. do.	200,000	Real estate, convertible.	7	Jan'y, July		1858		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.		1859		
Central Ohio	1,250,000	1st mort. conv. east sec.	7	Divers		1861-64	60	70
Do.	800,000	2d do. inconvertible.	7	March, Sept.		1865	40	42
Cincinnati, Hamilton, and Dayton	600,000	1st mortgage inconvertible.	7	20 Jan. 20 July		1867	90	92½
Do. do.	485,000	2d do. do.	7	May, Novemb.		1880	79	79½
Cincinnati and Marietta	2,600,000	1st mortgage, conv. till 1862.	7	Jan'y, July		1863		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible.	7	May, Novemb.		1862	98	100
Cleveland, Palmyra, and Ashtabula	567,000	Do. inconvertible.	7	Feb'y, August.		1861	67½	75
Cleveland and Pittsburgh	800,000	Do. convertible.	7	Feb'y, August.		1860	60	67
Do. do.	1,200,000	Do. on Branches.	7	March, Sept.		1863	75	80
Cleveland and Toledo	525,000	Do. inconvertible.	7	Feb'y, August.		1862-72	30	50
Chicago and Mississippi	800,000	Do. conv. till 1857.	7	April, October.		1862-72	30	50
Do. do.	1,200,000	Do. inconvertible.	7	April, October.		1867	60	65
Covington and Lexington	400,000	Do. do.	7	March, Sept.		1863	47	55
Do. do.	1,000,000	2d mortgage, convertible.	7	April, October.		1875	89½	91
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	March, Sept.		1891	77	78
Florida Freehold	1,500,000	Do. not convertible.	7	Jan'y, July		1873	72½	74
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863.	7	Feb'y, August.		1863	92	94
Galena and Chicago	2,000,000	Do. inconvertible.	7	May, Novemb.		1875	90½	91½
Do. do.	2,000,000	2d mortgage, do.	7	April, October.		1868		
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	10 April, 10 Oct.		1863	87½	93
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible.	8	April, October.		1873		
Jeffersonville	300,000	Do. 2d sec. inconv.	7	May, Novemb.		1866	65	
Indiana Central	600,000	Do. do.	7	Jan'y, July		1860-61	70	80
Indianapolis and Bellefontaine	450,000	Do. do.	7	March, Sept.		1866	83	87
Indianap. & Cin'ti (for Lawb. & U.M.)	600,000	Do. conv. till 1857.	7	May, Novemb.		1874	76	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	Feb'y, August.		1865	71	72
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859.	7	2 May, 2 Nov.		1863	63	86
Little Miami	1,500,000	Do. inconv.	6	April, October.	Bost.	1860	95	97
Michigan Central	1,000,000	No mortgage, convertible.	8	March, Sept.		1869	92	93
Do. do.	600,000	Do. do.	8	Jan'y, July	N.Y.	1862		80
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	April, October.		1863	77½	78
Do. do.	650,000	Do. 2d do. 1858	8	June, Decemb.		1877	67	72½
Do. do.	1,250,000	Do. 3d do. 1860	8	April, October.		1868-62		
New Albany and Salem	500,000	Do. 1st section	10	May, Novemb.		1864-75		90
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	Jan'y, July		1873	75	
Northern Cross	1,200,000	1st mortgage, convertible.	7	Feb'y, August.		1867	80	
Ohio and Indiana	1,000,000	Do. do.	7	Jan'y, July		1865-66	69	70
Ohio and Pennsylvania	1,750,000	Do. do.	7	April, October.		1872	55	55
Do. do.	2,000,000	Income, convertible.	6	Jan'y, July	Phila.	1860	100½	101½
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860.	6	Feb'y, August.		1875		75
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	May, Novemb.		1861		
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	Jan'y, July		1865		
Steubenville and Indiana	1,500,000	Do. convertible.	7	March, Sept.		1866		
Terre Haute and Indianapolis	800,000	Do. do.	7	Feb'y, August.		1862-72	68	72
Terre Haute and Alton	1,000,000	Do. do.	7					

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85½	86½
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	84	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.		1867	96	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.		1869	83	84
Do. do.	6,000,000	3d mortgage	7	March, Sept.		1863	72½	73
Do. do.	6,000,000	4th mortgage, not convertible	7	April, October		1860	53	57
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.		1875	31	33
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August.		1871	30	31
Do. do.	3,600,000	Convertible	7	Jan'y, July		1862	30	32
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.		1869-70	102	102½
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.		1860	76	84
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.		1870	76	77½
Illinois Central	17,000,000	Mortgage, inconvertible.	7	April, October		1860	90½	91
Do. (Free Land)	3,000,000	M'ge \$45,000 acrs-priv. 7 shars	7	March, Sept.		1860	91	91½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.		1860	84	88
New York and Harlem	1,300,000	Do. do.	7	May, Novemb.		1861-72	84½	95
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.		1855-60	66	68
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July		1875	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.		1861	80	83
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.		1868	71½	72½
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.		1863	92½	93
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	15 June, 15 Dec.		1864	103½	104
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July		1866	118	
Do. 2d do.	1,470,000	Do. till 1868	7	Jan'y, July		1866	90	91
Reading	1,300,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	3,468,000	Do. convertible	8	Jan'y, July		1870	84½	85
Do. do.		Do. inconvertible	8	April, October		1866	75	76

CITY SECURITIES.	Int'at payable.	Off'd Ask	CITY SECURITIES	Int'at payable.	Off'd Ask
New York, 5 per ct. 1858-60	98	99	Milwaukee, 7 per ct. coup.	X	45 70
Do. 5 do. 1870-75	93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	75 80
Do. 6 do. 1885	103	104	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	85 90
Do. 6 do. 1890-98	92	95	Philadelphia, 6 per ct. 1876-98	Jan'y, July	98½ 99
Albany, 6 per ct. coup. 1871-81 X	98	101	Pittsburgh, 6 per ct. coup.	X	45 50
Alleghany, 6 per ct. coup.	50	60	Quincy, 8 per ct. coup.	1868 X	67 75
Baltimore, 6 per ct. 1879-90	99	100	Racine, 7 per ct. coup.	1873 X	50 60
Boston, 5 per ct. coup.	X	100 101	Rochester, 6 per cent. coup.	X	90 97½
Brooklyn, 6 per ct. coup. Long X	101½	102	St. Louis, 6 per ct. coup. Long X	Do.	84 85½
Clev'Pd, 7 per ct. cp. W.W. 1879 X	100	103	Do. do. Municipal	X	86 87½
Cincinnati, 6 per ct. coup.	X	92½ 95	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	37 45
Chicago, 6 per ct. coup. 1873-77 X	86	87	S. Francisco, 7 p. cp. 1865, pay. N.Y. X	May, Novemb.	60 70
Do. 7 per ct. coup.	1880 X	97½ 99½	Do. 10 p. ct. cp. 1871 X	Do.	69 91
Detroit, 7 per ct. W.W. 1873-78 X	100	102	Do. 10 do. pay. N.Y. X	Jan'y, July	
Duquesne, 8 per ct. cp. Long X	100	100	Do. 6 per ct. pay. N.Y. 1875 X	Do.	58 61
Greeneville, 6 per ct. W.W. 1877 X	99	101	Wheeling, 6 per ct. coup.	X	50 50
Louisville, 6 per ct. cp. 1880-83 X	71	72½	Do. 6 per ct. Mm. 1874 X	March, Sept.	80 81½
Mamph, 6 per ct. coup. 1882 X	97	97	Zanesville, 7 do. 1862-63 X	April, October	

Cincinnati Stock Sales.
By KIRK & CHEEVER.

For the week ending April 11, 1859.

BONDS.	Per cent.
Little Miami, 1st Mort.	68 58½ and int.
Covington and Lexington, 1st Mortgage	68
Do. do. 2d do.	78 60
Do. do. Income	10
Ohio & Miss., E. D., Construction	78
Cinc. Ham. and Dayton, 1st Mortgage	78
Do. do. 2d do.	78 63
Indianap. & Cincinnati, do. do.	78
STOCKS.	
Cincinnati, Hamilton & Dayton	58
Columbus and Xenia	42
Indianapolis & Cincinnati	88
Little Miami	90
Ohio and Mississippi (E. D.)	8

Railroad Earnings.

The earnings of the Stonington Railroad in March were \$21,239 86
March, 1858 15,798 33

Increase \$5,441 03

The earnings of the Galena and Chicago Union Railroad for the month of March, were:

	1858.	1859.
Freights	\$61,907 50	\$49,906 92
Passengers	87,573 12	31,001 11
Mails, &c.	4,481 01	2,500 00

Total \$103,911 63 \$86,408 03

The earnings of the Toledo and Western Road in March were:

Passengers	\$22,198 48
Freight	36,204 69
Miscellaneous	3,316 66

Total \$61,769 83

March, 1858 59,124 61

Increase \$2,655 22

The receipts of the Little Miami and Columbus and Xenia Railroad were:

For March, 1859	\$103,511 48
" " 1858	100,243 86

Increase \$8,267 57

The earnings of the Cleveland and Toledo railroad for the past eleven months were as follows:

	1858-9.	1857-8.
May	\$70,000*	\$85,849
June	57,298	71,220
July	53,565	63,855
August	59,502	63,846
September	84,388	83,871
October	80,120	95,256
November	75,620	82,724
December	70,750	87,165
January	59,637	65,211
February	56,937	54,974
March	75,330	90,956

Total 11 months \$748,137 \$846,104

*Not official.

The earnings of the Norwich and Worcester Road for March were:

	1858.	1859.
Passengers	\$7,655 87	\$9,222 56
Freight	11,784 20	16,642 10

Total \$19,440 07 \$25,864 66

Increase \$6,424 59

The comparative earnings for eight months past were as annexed:

	1858.	1859.
August	\$30,650	\$31,571
September	32,314	31,837
October	19,835	27,310
November	17,240	27,012
December	15,916	24,094
January	13,540	21,633
February	14,259	19,703
March	19,440	25,864

Total \$163,294 \$209,074

Increase in 1858-9, \$45,780—nearly 80 per cent

The earnings of the Michigan Central Railroad for March are more favorable than anticipated. The figures are:

	1859.	1858.
Passengers.....	\$77,837 87	\$81,886 52
Freight.....	68,715 50	77,933 41
Miscellaneous.....	5,311 29	6,106 10
Total.....	\$151,864 66	\$165,926 03
Decrease.....		\$14,091 37
The earnings of the Chicago and Rock Island Railroad in March, were.....	\$64,700 00	
March, 1858.....	92,063 07	

Decrease.....	\$27,633 70
The earnings of the Macon and Western Railroad for March were.....	\$34,490 81
1858.....	26,191 39

Increase..... \$8,299 42
The earnings of the Cincinnati, Hamilton and Dayton Railroad Company for March compare as follows:

1859.....	\$47,060 70
1858.....	39,430 99

The earnings of the Fond du Lac Road in March were \$22,970 19 against \$19,500 in February.

The receipts of the Grand Trunk Railway of Canada for the week ending March 26, were.....	\$51,664 54
Week ending March 27, 1858.....	50,383 11

Increase.....	\$1,281 43
Total traffic from July 1st.....	\$1,668,504 92
Same period last year.....	1,753,819 21

Decrease.....	\$85,314 29
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American Railroad Journal.

Saturday, April 16, 1859.

St. Louis and Iron Mountain Railroad.

The chief object in the construction of this road was to penetrate the great mineral and lumber regions of Missouri and make them tributary to the city of St. Louis. No doubt is entertained that this object will be fully realized. The track is laid, and the road in operation, from Plum street, in St. Louis, to the Iron Works at Pilot Knob, a distance of 86½ miles—being two miles longer than originally contemplated by its projectors. Of this distance 47½ miles are straight lines; the remainder of the distance are curves of large radii. The maximum ascending grades on the first 40 miles south of St. Louis are about 16 feet to the mile in approaching the city, and 20 feet in leaving it. For the remainder of the distance, the maximum ascending grades going south are about 55 feet; going north, 45 feet.

The cost of the road is stated in the report of the company made to the board of public works in December last as follows:

Graduation and masonry.....	\$2,198,731 07
Superstructure.....	821,910 98
Engineering and contingencies.....	211,997 76
Bridges, shops, machinery and tools.....	276,843 42
Land and land damages.....	130,261 78
Equipment.....	283,869 72
Stations, engine houses and machine shops.....	105,469 96
Fencing.....	16,659 92

\$4,045,744 61

Add interest, exchange, discount and commissions on sale of bonds. \$1,154,313 92

Making a total cost.....\$5,200,058 53

The work is not however entirely finished; the engineer estimates the sum necessary to put it in complete order at \$118,244 31.

The total amount of stock subscribed to the road is:

In bonds.....	\$1,575,000 00
In cash.....	424,300 00

Total subscriptions.....	\$1,999,300 00
Deduct delinquent list.....	\$111,400 00

Discounts and commissions on bonds.....	236,694 13
	348,094 13

Total cost receipts.....	\$1,651,205 87
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The whole amount of State bonds authorized for the road is \$3,600,000; the amount issued to the company is.....\$3,276,000 00
The discounts, etc., on the same.... 598,547 16

Total cash proceeds.....	\$2,677,452 84
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The amount of bonds due the company on the 1st of March last was \$324,000. It will be observed that nearly one-fourth of the cost of the road has been absorbed by commissions, discount, interest and exchange. The debt reported due by company amounts to \$171,103 33. The amount due the county of St. Louis is \$17,500. The semi-annual interest due on county bonds until December, 1864, is \$17,500. The annual interest due on State bonds is \$196,560. The semi-annual interest due on State bonds the 1st of January last, and unpaid, is \$98,280. The estimated cash value of assets on hand is \$72,449. Judgments against the company amount to \$14,443. The earnings of the road for the year ending October 31, 1858, were \$152,360 72. For November they were \$19,102 03; and for December, 19,559 63. The total net earning of the Carondelet train for 6 months—making 6 trips per day—are set down at \$8,105 45. The President is of opinion that the earnings of the road will reach \$25,000 per month the coming year. The expenses attending the same about \$15,000. This road has cost a very large amount of money, but its construction is of a very substantial character. After being thoroughly finished up it will cost but little comparatively to keep it in good running order. The masonry is solid and permanent. Some portions of it are unnecessary expensive. The bridges are thought to be substantial and safe, and when the ballasting and draining are completed, it will take rank with the first class roads. From the rocky character of the road bed, and the fact that the entire road is ballasted with rock and gravel, it is believed that it will compare favorably, as to the expense of repairs, with any road in the West.

The officers are:

LEWIS V. BOGEY, *President.*
J. B. MOULTON, *Chief Engineer.*

Montgomery and West Point Railroad.

The business year of the Montgomery and West Point railroad company closed on the 1st instant, and the receipts for the past year have been:

From passengers.....	\$235,271 70
From freight.....	149,829 92
Mail pay.....	31,052 30

Total.....	\$416,153 92
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104,994 passengers have been passed over the road. 32,793 bales of cotton passed down the road to Montgomery.

20,733 bales passed up the road to Columbus and West Point.—*Mountain Mail.*

Fairbanks Scales.

These Scales were invented more than thirty years ago by the Messrs. FAIRBANKS, of St. Johnsbury, Vt., and are still made only there, and by them. We believe they are in use everywhere, and are everywhere regarded as the cheapest and best. We are informed that other makers in order to introduce their own scales, make them similar in appearance to Fairbanks' scales—but in appearance only; and represent that they employ some of Fairbanks' workmen; and sometimes even that they are the genuine Fairbanks' scales. This shows the high estimate placed upon Fairbanks scales by the business public, and should put persons desiring to purchase them, on their guard, lest they get a different and inferior article.

Messrs. Fairbanks have always on hand a full assortment of railroad, coal, hay, grain, cattle and store scales. Address MESSRS. FAIRBANKS & Co., 189 Broadway, New York.

Ohio Central Railroad.

The following is a statement of the operations of this road for the year ending November 30, 1858.

Receipts from freight.....	\$421,749 40
Receipts from passengers.....	302,216 39
Receipts from mails, express, rents &c.....	48,127 74

Total.....	\$772,093 53
The total cost of operation.....	439,999 88

Net earnings.....	\$332,093 65
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The ratio of the cost of operation, in which is included repairs of locomotives and cars, repairs of the road and bridges, the renewal of the track, loss and damages, insurance, taxes and salaries, as well as all the other items usually comprehended in working expenses, it is thus seen, is 57 per cent of the gross receipts.

The gross earnings for the year ending

Nov. 30, 1857, were.....	\$739,924 20
The expenses of operating.....	453,957 16

Net earnings.....	\$295,967 04
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The increase in earnings in 1858 over those of 1857, has therefore been... \$32,169 33
The decrease in expenses..... 3,957 28

Net increase.....	\$36,126 61
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The number of miles run in 1857, was 515,809. The number of miles run in 1858, was 646,413.—So, that while the mileage has been increased 25 per cent., the expenses of operating are slightly reduced.

During the year there has been no collision and no loss of life, or injury to passengers.

The total expenditure for the construction and equipment of the road, including payments for right of way, as appears from the books of the company,

November 30, 1858.....	\$9,157,232 83
For telegraph line, personal property, &c.....	145,055 91

Total.....	\$9,320,288 74
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Assets Beaver Co., bonds (hypothecated.).....	\$31,000 00
Bills receivable.....	7,791 96
*Massillon bank judgment.....	52,139 00
Cash.....	12,764 27
Fuel on hand.....	9,550 62
Personal accounts.....	63,553 22

Total.....	\$176,790 07
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The following accounts are on the ledger but will be charged to other accounts when a settlement is effected with the O. L. I. and Tr. Co., and C. W. Rockwell.

* Directions have been given to charge this item to construction account.

Beaver Co. bonds.....	\$7,000 00
Wheeling city bonds.....	41,000 00
Alleghany Co. bonds.....	10,000 00
O. L. Ins. and Trust Co. account....	124,024 00

Total..... \$182,024 00

Grand total..... \$9,661,102 81

The liabilities of the Company appear as follows:

Stock.....	\$3,942,368 63
Stock scrip and dividends.....	49,827 54
First mortgage bonds.....	800,000 00
Second mortgage bonds.....	1,189,000 00
Third mortgage bonds.....	1,165,000 00
River line bonds.....	1,154,000 00
Income bonds.....	118,500 00
Dividend bonds and scrip.....	491,825 21
Bills payable.....	653,821 55
Balance of net earnings account....	96,759 87

Total..... \$9,661,102 81

The expenditures for all objects have been as follows:

Interest.....	\$219,757 97
Pittsburg, Fort Wayne and Chicago lease.....	55,000 00
Bills payable, running expenses and construction accounts for 1857, &c.....	113,076 38
Right of way.....	18,572 70
Income bonds.....	3,000 00
Alleghany bonds.....	2,458 18
Cash on hand.....	17,764 27

Total..... \$424,659 50

It appears from this statement that the indebtedness of the company has been reduced within the year, \$137,097 26.

North Eastern Railroad.

The earnings of this road for the year ending February 28, 1859, were

From passengers.....	\$78,689 24
" freight.....	108,271 46
" mail and other sources.....	33,053 04

Making an aggregate of..... \$220,013 74
While the expenses reached..... \$123,868 93

The net revenue being therefore..... \$96,144 81

The receipts to capital, to the date named has been as follows:

From stockholders.....	\$897,242 87
" 1st mortgage bonds.....	700,000 00
" 2d mortgage bonds.....	224,500 00
" Preferred stock.....	75,500 00
" Bonds for real estate.....	35,910 00
" Bills payable.....	98,265 81
" Open accounts.....	9,906 76

\$2,041,325 44

Assets on hand and applicable to the above:—

1st mortgage bonds, at par.....	\$8,000 00
2d mortgage bonds, at par.....	79,500 00
Stock in Cheraw and Darlington railroad.....	14,268 71
Bills receivable.....	895 62
Cash.....	23,153 69

\$1,915,507 42

The cost of the road on the 28th February, 1859, with all its properties, inclusive of interest, losses on sales of bonds, &c., &c., as shown by the annexed report of the Treasurer, is..... \$2,011,652 23

From which deduct net proceeds of transportation for the past year, carried to credit of construction account..... 96,144 81

Cost on 28th February, 1859..... \$1,915,507 42

The sum of \$29,295 in interest has accrued and is payable on the 1st of March, 1859, but is necessarily excluded from the Treasurer's statements, which are dated 28th February, 1859, the close of

our fiscal year. The above is the cost, after deducting the balances of transportation, since 1856; to arrive at its actual cost, these balances should be added, which were as follows:

	\$1,915,507 42
For the year 1856.....	\$8,241 96
For the year 1857.....	20,247 93
For the year 1858.....	34,197 21
For the year 1859.....	56,144 81

158,831 85

Making..... \$2,074,339 27

The directors elected for the current year are:

A. F. RAVENEL, President.

Hon. Charles Macheth, Hon. Mitchell King, Col. Allan Macfarlan, John Ravenel, Esq., Smith Mowry, Jr., Esq., Edward Sebring, Esq.

Toledo, Logansport and Burlington R. R.

Means have recently been provided for the extension, under the above title, of the Peoria and Oquawka Railroad to Logansport, Indiana, where a junction will be formed with the Wabash Valley line. Bonds have been issued on the extension to the amount of \$800,000. The Wabash Valley, Cleveland and Toledo, Cleveland, Painesville and Ashtabula, and Buffalo and State Line Companies undertake to purchase the mortgage bonds—or virtually redeem them at par from the first or original holders—with one-half of the proceeds of the business which these companies derive from the new connection, both ways. The purchases are to be thus made every month; the numbers of the bonds for surrender at par to be drawn by lot. The companies are parties to this arrangement in the proportion of the respective lengths of their road. That is the Wabash Valley undertake to purchase \$300,000; the Cleveland and Toledo \$200,000; the Cleveland, Painesville and Ashtabula \$150,000; and the Buffalo and State line \$150,000. The Peoria and Oquawka Company, as perpetual lessees, undertake to provide the interest upon the bonds. Of the mortgage of \$800,000, the sum of \$450,000 has been placed in England for the rails, and the remaining \$350,000 have just been sold, by subscription, in this city, by Messrs. De Coppet & Co.

Railroads in Maine.

Bills, appropriating one and a half millions of the public lands to aid in the construction of the Aroostook railroad, and the European and North American railway, were passed by the Maine legislature on the 4th instant. A loan act was also passed authorizing the City of Bangor to loan its credit thereto to the amount of \$500,000.

There is to be a trunk line from Bangor to the boundary of New Brunswick by the way of Matamoras, with a branch line to Aroostook.

These matters have occupied the chief attention of Legislature for the last four weeks, but finally passed by overwhelming majorities.

In the Senate the vote stood 24 to 2; in the House 122 to 5. These measures, it is believed, secure the building of the railways named.

Cairo and Fulton Railroad.

At the annual meeting of the Stockholders of this road, held at Cape Girardeau, on the 14th inst., the following board of directors was elected. M. Brayman, of Springfield, Ill.; S. Sexton Chicago, D. F. McCrellis, Ill.; H. H. Bedford, Charleston, Mo.; S. G. Kitchen, Bloomfield, Mo. At the subsequent meeting of the directors, M. Brayman, Esq., was elected President, S. Sexton, Vice President and Superintendent, and S. R. Teasdale, Secretary and Treasurer.

Delaware and Hudson Canal Company.

Statement of the Business of the Delaware and Hudson Canal Company, for the year ending March 1, 1859.

Coal on hand March 1, 1858.....	\$590,703 50
Mining coal.....	232,606 97
Railroad transportation and repairs.....	213,059 18
Canal repairs and superintendence.....	205,161 79
Freight of coal to Rondout.....	273,650 70
Labor and expenses at Rondout.....	51,507 43
Rent, salaries, current expenses, &c.....	
N. Y. Office.....	35,806 45
Coal-Yard and harbor expenses, taxes, interest, &c.....	190,794 45
Balance.....	420,650 09

Total.....	\$2,213,450 56
Sales of coal to March 1, 1859.....	\$1,666,633 33
Canal and railroad toll collected.....	307,698 11
Profits of barges, &c.....	17,507 77
Coal on hand at Honesdale, Weymart, Rondout and New York....	221,611 30

Total..... \$2,213,450 56

The Delaware and Hudson Canal Company in account with the Treasurer, to March 1, 1859.

DR.

To Capital stock.....	\$7,500,000 00
To 7 per cent. bonds.....	900,000 00
To mortgages payable.....	\$18,436 24
To bills and accounts payable.....	304,281 11
To profit and loss.....	842,899 55

Total..... \$9,565,616 90

CR.

By canal.....	\$6,156,468 98
By railroad.....	1,484,762 12
By coal lands and other real estate.....	445,094 02
By canal boats, barges, steamboats, machinery, tools, &c.....	442,662 60
By mortgages receivable.....	\$42,963 40
By bills and accounts receivable.....	310,677 46
By cash and demand loans.....	145,304 67
By coal on hand at New York, Rondout and Honesdale, with advances on business of 1859.....	497,463 45

Total..... \$9,565,616 90

During the year the company's railroad has been extended to Archbold, six miles, to lands of the company not heretofore worked. The cost of this improvement has been \$300,000, for which the bonds of the company, at 7 per cent. due in five years, have been sold at par. The whole funded debt of the company is now \$900,000, to provide for the payment of which a sinking fund of \$75,000 per annum has been established. The report says:

A site for a coal depot and basin has been purchased on the Hudson river, at Weehawken. The contract for the construction of the docks has been let, and the work upon them will be proceeded with as soon as the weather will permit, and it is hoped they will be ready for partial use before the close of the present season. The area covered with the proposed improvements will be about 17 acres, affording an ample basin for the harbor of loaded boats at the close of navigation, and space

* In making the improvements in the railroad referred to in the Report, it became necessary to abandon several miles of the old line of road. The account will, at the proper time, be credited with the value of the property so abandoned, now estimated to be about \$150,000. When this is done, the profit and loss account will of course be correspondingly diminished. The other construction accounts generally represent values considerably greater than the amount with which they stand charged.

on the docks for the deposit of all the coal which the company will need for the supply of its customers during the Winter and Spring months.—The interest on the cost of property when improved will be less than the rents now paid for yards in the city, while the facilities secured thereby will be very much greater.

Canadian Trade.

From the Trade and Navigation Returns of the Canadian Government, we learn that the value of the goods enumerated in the Reciprocity Treaty—being the growth and produce of the United States, and imported into Canada during the years 1857 and 1858—was as follows:

1857.....	\$8,642,044
1858.....	5,564,615

Decrease.....\$3,077,429

The following shows the total exports of Canada to all parts of the world during the past two years:

	1857.	1858.
Produce of the mine....	\$286,469	\$314,823
" " fisheries.....	540,113	718,296
" " forest....	11,730,387	9,447,727
Animals and their products.....	2,107,240	2,462,765
Agricultural products....	8,882,825	7,904,400
Manufactures.....	398,821	325,376
Other articles.....	121,120	112,538

Total value of exports...\$24,076,975 \$21,285,925

Value of ships built at Quebec.....1,383,444 743,640

Estimated amount of exports, short returned at inland ports.....1,556,205 1,443,044

Grand total to exports...\$27,006,624 \$23,472,609

Statistical view of the Commerce of Canada, exhibiting the value of Exports to, and Imports from Great Britain, her Colonies, and foreign countries during the year 1858.

	Exports.	Imports.
Great Britain.....	\$8,898,611	\$12,295,487
North American Colonies.....	960,428	415,375
United States.....	11,930,094	15,635,582
Other foreign countries..	240,432	732,083

Total.....\$22,029,565 \$29,078,527

Comparative Statement of the value of imports and exports of Canada, during the years 1857 and 1858:

	Exports.	Imports.
1857.....	\$27,000,625	\$39,430,598
1858.....	23,472,609	29,078,527

Comparative statement of the gross and net revenue received from customs for the years 1857 and 1858:

	1857.	1858.
Gross re'pts of duties..	\$3,927,208.77	\$3,383,290.93
Charges for collection..	303,685.95	341,863.37
	\$3,623,522.82	\$3,041,427.56
Less return duties and balances.....	27,767.90	15,133.17

Net revenue of Customs duties.....\$3,595,754.83 \$3,026,294.39

Census of Louisiana.

A State Census recently taken in Louisiana, exhibits the following results, as compared with the National Census of 1850:—

	Year 1850.	Year 1859.	Increase.
White.....	255,491	325,007	69,516
Free colored..	17,462	18,164	702
Slaves.....	244,809	303,800	58,991
	517,762	646,971	129,209

The white population has increased in a somewhat greater ratio than the slaves.

From 1840 to 1850 the free colored population

decreased, according to the census returns...8,040
Increase from 1850 to 1859.....702

Net decrease of free colored in 20 years....7,338

In 1830 the free colored population of Louisiana was 19,710. Increase in thirty years, 1,454. In the meantime the white population has increased from 89,441 to 325,007, and the slave population from 109,588 to 303,800.

Grand Trunk Railroad.

21 OLD BROAD STREET, LONDON, E. C., }
8th March, 1859. }

The undersigned London Directors of the Grand Trunk Railway of Canada, believing an erroneous impression prevails respecting its present and future position, and as the statutory constitution of the Grand Trunk Company requires the general meetings of the shareholders to be held in Canada, the Directors are anxious at the present time to lay before the proprietors, by this circular, a concise account of the present position of their undertaking, showing the amount of capital already expended and still required, the works which have been finished and those that remain to be executed, and to make some remarks on the present revenue and future prospects when the line is open to Sarnia and the Victoria Bridge completed.

The total capital set forth in the original prospectus as necessary to complete the line amounted to £9,500,000. The sum of £3,111,500 has been raised in bonds of the Province of Canada, the interest on which formed the first claim on the railroad. The remaining capital consists of the debentures and shares of the company.

Many circumstances arose, especially connected with the line between Montreal and Portland, which caused an expenditure not originally contemplated, and a junction of twenty-two miles in length has also been made between St. Mary's and London; but, on the other hand, the Canadian Legislature liberally consented to forego all claims for interest on the amount of provincial bonds above stated, until the original shareholders received 6 per cent.; and the eastern portion of the line has been curtailed nearly thirty miles, causing a saving of about £250,000.

The actual capital raised and expended to this date, on which interest is payable, is £8,426,000, which stands in the following order:

- 1st. £2,000,000 Preference Debentures, 6 per ct.
- 2nd. 2,144,600 Ordinary " "
- 3rd. 1,500,000 7 per cent. " "
- 4th. 2,781,600 Consolidated Stock.

£8,426,2000

And authority is to be asked for at the meeting about to be held in Canada, to raise the further sum of £1,111,500, by Second Preference Debentures, under the powers granted by the Act of 1858, which sum, with existing assets, will be required to pay off present liabilities, and to open the whole line from Sarnia to Quebec and Riviere du Loup, and to Portland, a total distance of 1,057 miles, including the Victoria Bridge.

The cost, therefore, of the railway to the shareholders, equipped with working stock, and including the bridge, will be about £10,000 per mile, a sum which the directors cannot but consider extremely moderate, when it is remembered that all the works will be of the most substantial character, the bridges and viaducts being of stone and iron, that the Victoria Bridge will cost £1,350,000, and that interest has been paid by the company during the construction of the works, to the extent of £1,200,000. The length of line now opened is 880 miles, and by October next, the bridge and the extension to Sarnia, of seventy miles, will be ready for traffic; and at the same time a railway in the State of Michigan, between Port Huron, opposite to Sarnia, and Detroit, fifty-five miles in length promoted in the interests of the Grand Trunk Railroad, and to be worked by it, will also be open.

The position of this latter railway must insure to its own shareholders a highly remunerative re-

turn, whilst its importance to the Grand Trunk cannot be over-estimated, as it completes the link with all the American railways extending west and south, thus forming a continuous line between Chicago and the eastern seaports of Quebec and Portland.

It now remains for the directors to examine into the extent and character of the traffic already obtained, to compare it with that calculated upon in the prospectus, and thus to enable the shareholders to form their own opinion as to the future.

The traffic to the present time has been almost entirely local; but it is most gratifying to find that the receipts upon the portions of the line now open, 880 miles, have already exceeded the total amount originally looked for from that source over the whole length of the road, and this traffic is evidently increasing. The gross amount calculated upon in the prospectus was £460,000 on 1,112 miles, or at the rate of £8 per mile per week. The sum actually received in the two years, 1857 and 1858, has been at the average rate of £11 per mile per week upon the whole distance as opened.

In regard to the through traffic, the directors can see no reason for doubting the accuracy of the original calculations. The vast trade of the West has greatly increased during the last few years, as likewise the exports and imports and the population of the Province of Canada. A regular line of steam packets between Quebec and Portland and Europe, shortly to form a weekly communication, has been established. The Grand Trunk will thus form the best route to the Western States of America and the Red River settlement of the Hudson's Bay Company, and ultimately to British Columbia.

At the close of this year, when the junction between the Grand Trunk and the various railways in the state of Michigan has been effected at Detroit, the advantages offered by the Grand Trunk for the conveyance of the Western produce to the Eastern ports, a distance of 800 miles, without break or gauge, must attract to itself a large share of this traffic; and with the view of forming an opinion of its extent, the directors have examined the gross revenue actually obtained on the four principal lines, which have hitherto transported a large proportion of it, and it appears that, taking the total receipts during the two years 1857 and 1858, the latter being one of great commercial stagnation, the average amount received per mile per week has been; on the Michigan Central, £31 4s.; on the Great Western of Canada, £32 6s.; on the New York and Erie, £46 10s.; and the New York Central, £49 16s.; the average of these four lines exceed £40 per mile per week.

In addition to a share of this vast trade, to obtain which the Grand Trunk is in a most favorable position, it will derive additional traffic from the produce brought by the Lake navigation, and intercepted at Sarnia, where ample provisions will be made for its reception and transport.

With these facts before them the directors have every confidence that the very moderate estimate of £30 per mile on the Western, and £20 on the Eastern half, making an average, on the whole line of £25 per mile per week, from the local and through traffic combined will be realized, and also that the working expenses under these circumstances will not exceed 50 per cent. of the receipts.

On the portion of the line, West of Toronto, already opened, the local receipts for the last few months have exceeded £20 per mile per week, and the working expenses have been less than 50 per cent.

Assuming that the total capital on which interest will have to be paid may in round numbers be £10,000,000, the result will be as follows:

£25 per mile per week on 1,057 miles...£1,374,100
50 per cent. for working expenses.... 687,050

£687,050
Deduct rent on Portland section..... 73,000

Leaving a net profit.....£614,050
—or more than sufficient to pay 6 per cent. on the

whole debenture and share capital of the company.

Under these circumstances, the London Directors, in offering, without reserve, their views on the position of the Railway, feel that the Board have adopted the best and most equitable mode of raising the necessary funds by the proposed issue of £1,111,500 Second Preference Debentures, which, with the £2,000,000 of First Preference already issued, assume the position originally occupied by the Provincial Debentures of £3,111,500.

As soon as the London Directors have received from Canada the information that the requisite sanction has been given for this issue, they will announce the arrangements they propose to make for the disposal of the debentures.

THOMAS BARING, *Chairman.*

GEORGE CARR GLYNN,

KIRKMAN D. HODGSON,

H. WOLLASTON BLAKE,

WILLIAM CHAPMAN.

Buffalo, Bradford and Pittsburg Railroad.

The Bradford (Penn.) *Miner*, alluding to the consolidation of the Buffalo and Bradford railroad companies, under the title of the Buffalo, Bradford and Pittsburg railroad, gives the following statement in regard to the location and condition of these consolidated roads;

The Buffalo and Pittsburg railroad company, by the terms of its charter, was authorized to construct a railroad from the city of Buffalo to the northern line of Pennsylvania, in the valley of the Tunungwant. The portion of this road lying between Carrolton Station, on the New York and Erie railroad, and the State line, is entirely bridged and graded, and a large amount of work has been done north of the last named road.

The Buffalo and Bradford railroad company was empowered to build a road from the State line, up the valley of the Tunungwant, southwardly, to connect with the Alleghany Valley and Sunbury and Erie railroads, with the privilege of constructing as many lateral roads, each not exceeding twenty miles in length, in McKean, Elk and Clearfield counties, as may be useful for the transportation of the productions of said counties. The road is now graded from the State line, at its connection with the Buffalo and Pittsburg, to within about a mile of Marshburg.

Journal of Railroad Law.

INSURANCE COMPANIES.—PENNY WISE AND POUND FOOLISH.

Heretofore, that Insurance Company stood highest in public estimation which was the most prompt to pay its losses, refusing so to do only when absolved from the obligation by the fraud of the insured, or by his palpable violation of their rights, a violation accompanied with injury to themselves. But latterly some of our Insurance Companies have adopted a policy, which if it be not at once and publicly disowned by the other companies, will have the effect seriously to impair insurance business. If, amid all the numberless conditions of the policy or all the mutations to which insured property is subject, astute counsel can find some technical objection upon which to found a plea whereby to delay at least, and if possible, entirely to avoid the payment of the loss, there are companies to be found, companies hitherto maintaining good positions, that are not ashamed to avail themselves thereof. Now, insurance business, more than any other rests upon a foundation of trust and confidence. Ordinarily where a contract is entered into, both contracting parties stand upon the same level in respect to the care which they exercise for the protection of their respective rights. If the contract be one of solemnity and importance, and is submitted to the legal adviser

of either party, it is generally submitted to the legal adviser of the other. Not so in the contract of insurance. The policy is carefully prepared beforehand by counsel in the interest of the company. Its numerous conditions carefully studied and elaborately discussed, and their effect well considered before it is given to the insured. He, upon the other hand, is without legal advice. He has neither the time nor the ability to give to its provisions the careful study which the Insurance Company has done through their counsel. To employ another lawyer to do so would cost him the amount of his premium many times over. If therefore the parties are to stand upon their strict legal rights, the merchant had better altogether abandon the idea of insuring. If, therefore, the Insurance Companies desire to retain their business, they must, by their course in meeting losses, establish in the community, this faith, that unless the insured is guilty of a fraud in procuring the insurance, or of a palpable violation of the company's rights, and one injurious to them, the loss, if there be one, will be promptly and unhesitatingly met by the company. Those companies who adopt a different principle, and who seem to think that they manifest great shrewdness in devising new and unheard of defences, well deserve to suffer. For though by the interposition of such defences, they may save a few thousand dollars in single instances they destroy by their course the confidence of the community in them, and cannot fail to lose in premiums much more than they will ever gain by the occasional avoidance of the payment of losses. It is unfortunate that they bring injury not only upon themselves but also upon the whole insurance business. We are led to these remarks more particularly by some recent cases, most of which will be found in the 17th Vol. of the New York Reports, Court of Appeals. We give four of these cases as illustrations of the kind of defences of which we have been speaking.

Benjamin vs. The Saratoga County Mutual Fire Insurance Company.

In this case the policy contained the usual clause that in case of subsequent insurance on the property insured, notice thereof should be given to the defendant with all reasonable diligence. The plaintiff subsequent to his insurance with the defendants, obtained an additional insurance of \$6,000, one-half in the Howard Insurance Company and one-half in the Hartford Insurance Company. Notice of the additional insurance was given to the defendants, but by accident it was stated to have been all taken out in the Howard Insurance Company. The defendants as one of their grounds of defence claimed that this error avoided the policy, and sought to evade the payment of the loss upon that ground. The Court of Appeals, however, held that the circumstance did not constitute even a legal defence, that it was enough that the defendants were informed of the amount of reinsurance, and that the names of the particular companies which made the insurance were immaterial.

Hooper vs. The Hudson River Fire Insurance Company.

In this case the insurance was effected on a retail stock of goods. After the insurance, the stock was sold on execution to the present plaintiff and a few days after the sale, an assignment of the policy was given with the consent of the company.

A fire occurring thereafter, the company refused to pay, on the ground that the policy became void in the hands of the original insured, by reason of the fact, that his interest in the property passed by the sale under the execution, that the insured had therefore, no interest which he could assign, and therefore although the company had consented to the assignment they were not liable on the policy. The force of this point was not appreciated by the courts, who held that the company were liable and rendered judgment against them.

The case of *Grosvenor vs. The Atlantic Fire Insurance Co.* of Brooklyn, is another instance of one of these defences, but as the principle involved in this case is one of great importance, we will leave it for another article. Those Insurance companies, and they constitute the large majority, who are willing honestly to bear the burdens which they have voluntarily and for a consideration assumed, should take measures to denounce the course pursued in such cases as these, and to enable the community to distinguish between those companies in whom trust can be reposed, and those who mean to take advantage of every mode of escape, which the ingenuity of astute counsel can devise for them.

Sandusky, Mansfield and Newark Railroad.

The "Third Annual Report of the President and Directors of the Sandusky, Mansfield and Newark Railroad Company, to the stockholders, for the year ending December 31, 1858," has been issued. During the year the road and its appurtenances have been subjected to a thorough system of repairs and renewals, and may now be considered in a secure condition for the transportation of persons and property.

In regard to the sources of revenue, the Directors say:

"The experience of the past strengthens our conviction that the chief reliance of this road must always be in its local business; it is gratifying to observe an increase from it hereafter. One of the most encouraging features of your road may be traced in the fact that its way business alone yielded nearly \$185,000 in 1858—\$26,000 more than the operating expenses and new works and reconstruction both included."

The expenses of the year foot up \$158,556 68; from this \$25,000 should be deducted for "extraordinary expenses." After making this deduction we have \$133,556 68 as the amount properly chargeable for ordinary repairs and expenses for the year:

Earnings	\$209,918 00
Ordinary expenses	\$133,556 68
New Works	25,000 00
	<hr/> 158,556 68

Net income \$51,371 32

In regard to future management, the opinion of the board is as follows—an opinion that embodies a correct principle for all railroad management:

"The Board are of opinion that hereafter whenever the income of your road reaches \$250,000 per annum, the property can be maintained whole, and the obligations of the Company promptly met; whenever it falls below that sum, it cannot be done. The directors believe that their first duty is to protect their road and its equipments from depreciation, and to discharge all obligations incidentally incurred in the business. The road, its equipments and patronage, constitute your capital, and if the capital be suffered to decay and run to waste, the entire investment becomes valueless. They regard it as a fraud on the owners and creditors of a road to allow the track to rot down and the machinery to be worn out, in order that large net earnings may be shown for a year or two."

Debt of South Carolina.

The debt of this State on the 30th September, 1858 amounted to \$1,244,165 and since that date \$200,000 additional bonds have been issued making the whole \$1,444,165, viz: stock and bonded debt \$3,192,743 and U. S. surplus revenue deposited with the State \$1,051,422. During the year 1857-'8, \$429,241 had been redeemed; and the State has a sinking fund amounting to \$1,843,803.

St. Louis, Mo.

A census taken in 1858 returned the population of this city at 135,330. Of which number, 59,657 were Americans; 43,874 Germans; 22,014 Irish; 3,451 English; 1,337 French; 1,951 foreigners of other origin; 1,672 free blacks, and 1,481 slaves. In 1852, the population was 87,654, viz: whites 84,340, free colored 1,456, and slaves 1,859, and in 1856 it was 97,642, viz 94,686 whites, and 2,956 colored.

East Pennsylvania Railroad.

On the 7th instant, the following gentlemen were elected Directors of the East Pennsylvania road (the Allentown link): Edward M. Clymer of Reading; James M. McLean, New York; William M. Heister, Reading; John McMannus, Reading; Charles H. Hunter, Reading; Edward Brooke, Reading; Horation Trexler, Mertztown; Robert E. Wright, Reading, and John S. Richards, Reading.

Railroad Iron.

The report of the American Iron Association for 1858, gives the amount of railroad iron made in the United States in 1856 as 142,555 tons. In addition to the above, five rolling mills for the manufacture of railroad iron were idle in 1856. Of the 142,555 tons of rails manufactured, 84,654 tons were made at nine rolling mills in Pennsylvania, and 57,901 tons at seven rolling mills in other States; consequently, three-fifths of the whole quantity of railroad iron produced in the United States in 1856 was supplied from the rolling mills in Pennsylvania.

St. Louis Car Works.

We paid a visit yesterday morning to the shops of the St. Louis Company, who are engaged in manufacturing cars for the Hannibal and St. Joseph road. This establishment seems to be in a very flourishing condition; the proprietors, Messrs S. B. Lowe & Co., are working all the men that they have room for, and are turning out on an average two cars a day. They have, we understand, about forty yet to build, in order to fill their contract, and at this rate they will soon be done. They have in their employ the very best of workmen, as the cars already turned out abundantly prove.—*Hannibal Messenger.*

Terre Haute, Alton and St. Louis Railroad.

Among the many routes leading from St. Louis to the East and North, there are none more deservedly popular with our citizens and the traveling public than the one mentioned above. For the past two weeks hundreds of laborers have been at work along the entire line of this road, setting new ties, ballasting and repairing the track, and have now succeeded in getting it in the most thorough and perfect condition. By an advertisement in another column it will be seen that the Morning Express now leaves the office at 6 15, and the Telegraph Express at 2 15, P. M., and they have also renewed their celebrated express trains, running through from St. Louis to New York city in forty-five hours. Having often traveled over this route, we most cordially recommend it to all who desire to make a speedy, pleasant and agree-

able trip. We are pleased to learn that the passenger trains are crowded daily with emigrants for the far West and gold regions of Pike's Peak.—The officers of this road are thorough railroad men, well posted upon all matters relating to the business, and, with all, are most courteous and polite gentlemen.—*St. Louis Republican.*

North Missouri Railroad.

The following gentlemen have been elected directors of this company for the ensuing year:—Isaac H. Sturgeon, James T. Sweringen, James C. Edwards, John Wickham, Ferdinand Overstolz, John Sexton, Jr., Daniel H. Donovan, Daniel A. Griffith, John A. Talley, George W. Dyers, Daniel E. Bryan, John P. Clark, John W. Minor.

Notice to Contractors.

SEALED PROPOSALS for the grading and masonry of the extension of the **ROANOKE VALLEY RAILROAD**, from Clarksville to Key-ville, on the Richmond and Danville Railroad, will be received at the office of the Company in Clarksville until the 12th of May. The road will be thirty miles long. Plans and specifications of the work may be seen in Clarksville on and after the 5th of May. Letters of inquiry may be addressed to Henry Wood, Esq., President Roanoke Valley Railroad, Clarksville, Va., or to me at Christiansville P. O., Mecklenburg Co., Va.

4116

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1858

April 8, 1859.

JOURNAL

OF THE

American Geographical and Statistical SOCIETY.

The Third Number of this Journal is now ready.

The American Geographical and Statistical Society have commenced the publication of a monthly JOURNAL, of 32 pages, the principal object of which is to furnish information on the important subjects to which the Society is devoted: such as the physical features and meteorological phenomena of our own continent, as well as other countries; our internal and foreign commerce; geography, population, and general statistics of various countries.

In the absence, in our own country, of Governmental Bureaus special devoted to these subjects, it is believed that a work of the character of that now undertaken by this Society is indispensable to their proper elucidation and publication.

The Editorial duties of the JOURNAL are performed by a Committee of the Council, whose labors are gratuitous.

The principal contents of the first number are as follows:—

Subscription Price, \$3.00 per year, or 25 cents per copy.

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The Rooms of the Society are in Clinton Hall, Astor Place, where all communications must be addressed.

Letters relating to the business of the JOURNAL are to be addressed to the Publishers

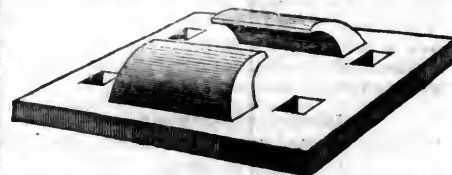
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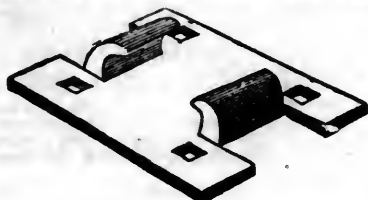
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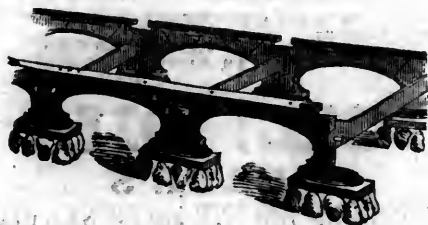
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AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 17.]

SATURDAY, APRIL 23, 1859.

[WHOLE No. 1,201, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, April 23, 1859.

La Crosse & Mil. Railroad, for 1858.

Since the completion of the La Crosse and Milwaukee railroad, and its opening to the Mississippi river, the effect upon the business of the city has been decisive and advantageous. And though it cannot be said to fairly commence its legitimate through business until the opening of the river in the Spring, still the traffic has felt a new impetus since reaching La Crosse.

As a matter of record, we have compiled the following table, showing the time at which the road was opened to various points:

To Schleissingsville. 30 miles.....	Aug. 22, 1855
" Hartford..... 34 "	Sept. 10, 1855
" Woodland..... 43 "	Oct. 16, 1855
" Iron Ridge..... 45 "	Nov. 21, 1855
" Horicon..... 51 "	Dec. 31, 1855
" Junction..... 54 "	March 6, 1856
" Rolling Prairie..... 56 "	" 18, 1856
" Beaver Dam..... 61 "	April 24, 1856
" Fox Lake..... 68 "	Oct. 22, 1856
" Midland..... 87 "	Dec. 29, 1856
" Portland City..... 95 "	Mar. 16, 1857
" Kilbourn City..... 112 "	Aug. 20, 1857
" Mauston..... 131 "	Dec. 7, 1857
" Lisbon..... 138 "	Dec. 23, 1857
" Tomah..... 156 "	April 30, 1858
" Greenfield..... 161 "	June 11, 1858
" Sparta..... 173 "	July 14, 1858
" Salem..... 188 "	Aug. 4, 1858
" La Crosse..... 200 "	Aug. 21, 1858

MONTHLY RECEIPTS.

	Passengers.	Freight.	Total.
January.....	\$19,702 07	\$12,758 24	\$24,286 17
February....	8,946 46	10,651 00	20,035 38
March.....	12,679 33	13,040 48	26,264 56
April.....	13,785 21	17,862 25	33,690 49
May.....	17,942 98	23,803 76	42,379 43
June.....	15,043 54	28,163 79	43,875 54
July.....	17,316 34	28,267 40	47,609 01
August.....	16,885 08	20,029 05	37,682 12
September..	23,714 34	37,248 03	63,301 55
October.....	28,357 87	32,255 48	61,554 52
November..	27,003 05	26,944 10	55,001 98
December...	13,368 92	18,937 58	36,823 05

Total.. \$205,745 19 \$269,941 16 \$492,453 80

RECEIPTS OF WHEAT AND FLOUR, 1858.

	Wheat, bush.	Flour, blbs.
January.....	46,766	7,298
February....	35,886	6,208
March.....	44,208	4,173
April.....	72,415	5,707
May.....	82,151	7,740
June.....	169,154	6,913
July.....	119,992	7,918
August.....	64,277	3,796
September..	266,715	9,505
October.....	93,195	11,516
November..	84,531	6,690
December...	42,552	6,199

Total 1,121,842 83,663

Flour reduced to wheat, the total of wheat 1,540,157 bushels. This is an increase of over 250,000 bushels over the large receipts of 1856.

We find upon examination, that a large traffic is carried on between the local stations. Particularly is this case in lumber. Large quantities are distributed from Horicon and the Junction, to the various stations on the road.

As a sample of the new life which a railroad gives a region of country, we instance the fact that in 1856 pork was shipped from Milwaukee to the points on the road, while in 1858 there was brought to this market over 1,000,000 pounds of dressed hogs. From large consumers, the farmers on the line had become large producers.

On the first of January, 1860, some of the Minnesota roads will be opened, if the contracts are fulfilled. The entire Minnesota system of railroads is tributary to the La Crosse and Milwaukee railroad, and there is but little doubt that they will prove important and valuable feeders. The vast region of country to the west and north of the La Crosse road, and the rapidly increasing population, cannot but afford an extensive, constantly improving, and finally a largely profitable traffic. As an instrument for the settlement of a large part of the State; as a means of trade for Milwaukee;

and as a link that connects us with the great and growing State of Minnesota, we consider the La Crosse railroad of incalculable importance.—*Daily Wisconsin.*

The Flour and Grain Trade of the Lake Regions.

The *Buffalo Commercial Advertiser* publishes the twenty-first annual statement of the trade and commerce of Buffalo for the year 1858, including statistics showing the whole export of flour and grain from the Lake regions. These statistics show a wonderful degree of progress and prosperity in that city. The following table of the receipts of grain at the principal grain ports in 1858 is of general interest:

	BUFFALO.	CHICAGO.
	Bushels.	Bushels.
Wheat in flour.....	8,072,600	2,610,685
Wheat.....	10,785,909	9,689,614
Corn.....	6,621,668	8,252,641
Oats.....	2,275,241	2,313,597
Rye.....	125,214	71,012
Barley.....	309,223	413,812
	28,219,855	23,301,361
	ST. LOUIS.	CINCINNATI.
	Bushels.	Bushels.
Wheat in flour.....	1,861,196	3,166,590
Wheat.....	3,835,759	1,211,543
Corn.....	900,000	1,000,236
Oats.....	1,690,562	588,950
Rye.....	46,198	64,358
Barley.....	406,000	400,967
	8,789,715	6,532,644

Buffalo in 1858 is thus shown to have received 4,918,494 bushels of grain more than Chicago, and 12,947,486 bushels more than the receipts at St. Louis and Cincinnati combined.

Census of Texas.

The *Austin State Gazette* publishes a summary of the State census, giving a total population of 457,620, of whom 138,265 are slaves, and 250 free negroes. Of the whites, 67,850 are voters. The *Gazette* thinks that over 40,000 persons have come into the State and settled since the rolls closed. In 1850 the population was 212,492. The same rolls give the total number of acres under cultivation 1,948,215, of which 5,081,808 in cotton, 15,965 in sugar, 80,347 in corn, and 208,097 in wheat.

TREATISE ON THE PRINCIPLES OF CIVIL ENGINEERING AS APPLIED TO THE CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, Civil Engineer,
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 245.)

§ 56. Beams of great length, often cannot be obtained solid of sufficient depth, and are made up by placing one or more sticks of timber upon another and packing them together.

Z. These four sections of made-up beams are of equal areas:

Fig. 17.



- A. 24 inches deep and 12 inches in breadth = 288 inches.
- B. 36 " " " 8 " " " = 288 "
- C. 48 " by 12 less (36×8)..... = 288 "
- D. 60 " " 12 " (48×9)..... = 288 "

Their relative strength is as 1 : 1.5 : 2.5 : 3.25, and their stiffness as 8 : 18 : 46 : 77.

§ 57. The great advantage of disposing the material in a beam, in such a manner that the distance from centre of compression to centre of extension shall be as great as practicable, is apparent from what has been said in sections 54, 55 and 56, and especially by reference to the examples **Z.** and illustrations Fig. 17.

§ 58. It has been seen, that the parts of a beam which are near the neutral plane, are subjected to but little strain; consequently, they oppose but little resistance, and may be, to a considerable extent, removed without injury to the strength of the beam. If the parts, thus removed, could be disposed at a greater distance from the neutral plane, they would increase the strength of the beam in proportion to the squares of their distance from the neutral plane.

§ 59. In compound or made-up beams, consisting of upper and lower flanges and intermediate web, (as illustrated by C and D, Fig. 17), it is not necessary that the web, connecting the flanges, should be of uniform thickness throughout, or that the fibre of the material composing the web should run longitudinally of the beam. This web or filling-in, may be composed of materials placed longitudinally, transversely or diagonally, and acting as ties, struts, braces, counter-braces, etc., etc., leaving more or less of the web open, or with interstices.

A beam so constructed, is usually denominated a trussed beam, or simply a truss.

§ 60. Timber bridges, of any considerable span, depend for their ability to carry a load, mostly upon the strength of their longitudinal trussed beams, or deep trusses.

The upper flange, or longitudinal timber of a truss, is very commonly called the upper or top chord, and the lower longitudinal timber, the lower chord.

§ 61. If the two longitudinal timbers or chords be placed parallel to each other, and at any convenient distance apart, but without intermediate connections, it is evident nothing would be gained. Nor would there be, were they simply connected by vertical ties; for in either case each would act as a single beam, and their united strength would be equal, only, to the sum of the resistances they would offer independently of each other.

aa. The upper and lower chords of a truss, (Fig. 18), connected by struts at the ends, and by ties intermediate, when loaded will take the form repre-

Fig. 18.



sented by Fig. 19, and it is seen that the right-angled parallelogram of Fig.

Fig. 19.



18 have become changed to oblique-angled parallelograms, with one diagonal increased, and the other diminished, in length.

§ 62. By observing the effect of flexure upon this system, it will be manifest that to prevent any change in the figure of the rectangles, resort may be had to braces, closely fitted, to prevent the shortening of diagonals; or ties, or rods, to prevent the lengthening of other diagonals.

bb. Fig. 20 represents a truss supported by diagonal braces.

Fig. 20.



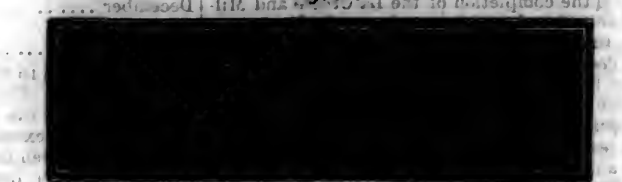
Fig. 21 represents a truss supported by diagonal ties.

Fig. 21.



Fig. 22 represents the combined support of braces and ties.

Fig. 22.



§ 63. The vertical side frames, or trusses of a bridge, are, therefore, composed of chords, ties and braces, which are the only indispensable elements in the formation of such a structure, where weight is uniformly distributed and at rest.

Any yielding of the materials, however, by compression or extension, under the weight of a load, will cause deflection, and, on the removal of the load, a corresponding reaction will take place.

§ 64. To provide against reaction, counter-braces, or counter-ties, should be inserted while the truss is loaded; or otherwise arranged so that the counter-braces may be extended, or the counter-ties shortened,—as the case may be—until a strain shall be produced, upon all the other timbers and iron ties, as great as that which will be caused by the load in passing over the bridge.

cc. Counter-braces will occupy the position of the ties *ad* and *a'd'*, (Fig 21 and 22).

The counter-rods will occupy the position of the braces *bc* and *b'c'*, (Fig. 20 and 22).

§ 65. The well-known "*Howe Bridge*" truss, is composed of parallel upper and lower chords, vertical ties, braces and counter-braces; but is without diagonal ties or counter-rods. The counter-braces in this bridge provide, to a very limited extent, against reaction,—they being neither inserted after the truss is deflected under a load, nor provided with the means of producing the necessary strain by being lengthened.

§ 66. *Rider's Patent Iron Bridge*, is arranged with the usual upper and lower parallel chords, vertical ties, braces, and counter-braces. The braces serv, also, as counter-ties, and the counter-braces as diagonal ties.

Town's Wooden Lattice Bridge, is constructed upon, nearly, the same principles, but without the vertical ties. Both of these bridges are subject to considerable deflection under a load, and to the consequent reaction when the load passes off.

The counter-braces, when needed, do not act as such.

dd. To illustrate the principles on which the counter-braces should act, let Fig. 23 represent a truss supported at D and E and without counter-

Fig. 23.



braces. AB and DE the chords, somewhat cambered. AD and BE end posts, or connecting pieces. CF a tie-rod or king post. CD and CE, braces, so closely fitted in as to produce the camber of the chords.

Now suppose a sufficient weight (W) to be applied at C, (Fig. 24), to pro-

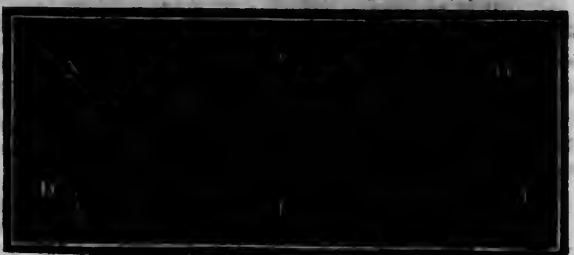
Fig. 24.



duce a deflection of the chords to, or below a straight line, compressing the braces CD and CE. Insert the counter-braces AF and BF, and remove the weight.

The truss will now rise, until the bearings upon the braces and the counter-braces are equalized; or, they become equally compressed, if of equal

Fig. 25.



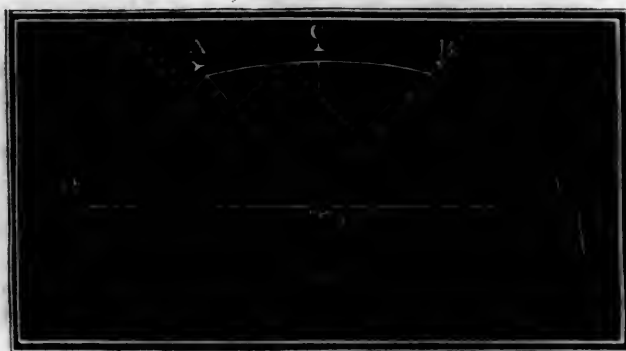
size. The truss is then represented by Fig. 25, upon which a weight much less than W, (Fig. 24), will produce no sensible deflection.

§ 67. A very simple but efficient form of bridge truss, may consist of a lower chord, arched straining beam (instead of a top chord), braces and tie-rods arranged in a manner peculiar to the combination recently patented by Mr. D. C. McCallum.

In its most simple form, this truss fully provides the necessary sustaining principles, but is without counter-braces, or other means of preventing reaction, or vertical vibration,

This great deficiency is, however, corrected in the next and each succeeding step towards the very important improvements which that gentleman has introduced by his mode of constructing wooden bridges.

Fig. 26.



ee. Fig. 26 exhibits this truss, in its most simple form, with nothing but the sustaining principle. The weight (W) tends to deflect the truss, but as deflection commences the arched straining beam (AB) begins to straighten by the action of the tie CF, and the points A and B to recede from each other. The tendency is, for the point A to move upward and about D as a fulcrum, with the radius AD. The point B tends to move, in a similar manner, about the fixed point E.

The point F, at which the weight (W) is attached, is supported from the points A and B, by the tie-rods AF and BF. No deflection can occur, in this case, except that due to the actual compression of the braces and straining-beam, and to the extension of the ties.

§ 68. The compression due to a given load having once taken place, and the chord (DE) having been adjusted to a straight line, by means of the ties AF and BF (Fig. 26), the truss will maintain its stability, to a remarkable degree, on passing a load over it, and with little reaction, or vertical vibration.

Fig. 27.



ff. Fig. 27 is a truss, similarly arranged to that represented by Fig. 26, with the addition of the timber AB bent over the straining-beam, and secured at the ends by the bolts and connecting pieces AD and BE, and by other tie-rods. The force required to bend this timber to its place, provided its elasticity be not injured, is so much load upon the truss, and, to that extent, supplies the want of counter-braces, and overcomes the tendency to vertical vibration.

Fig. 28.



gg. This truss (Fig. 28) presents another application of the principle of loading a bridge, or producing a permanent strain upon the truss, without the use of counter-braces, (Fig. 24 and 25). Suppose the arched top timber

(AB) to be 60 feet long 10 inches deep and 14 inches in breadth, and the force required to bend it into the form, or give it the necessary deflection, to be equal to 4 tons applied at A and 4 tons at B; then the truss will be loaded with a permanent strain of 8 tons by that means, and any additional weight less than eight tons which may be put upon it, will produce no deflection, and no more strain, except at the bearings D and E.

§ 69. In the arrangement of the materials composing a bridge truss, the attainment of the following results is of great importance:

1st. *A sufficiency of material*, contributing to the sustaining principle in due proportion to the load to be supported, not only, but considerably in excess.

2nd. *Perfect inflexibility*, or absence of all vibratory motion of the structure.

3rd. *Freedom from the necessity for frequent adjustments* of the parts.

§ 70. A large surplus of material is requisite of which the fibre and elasticity become impaired by age or use.

The ultimate strength of a truss, when new, should be equal to sustaining a load at least four or five times greater than any to which it will be subjected.

§ 71. A large surplus is requisite, of material that suffers considerable compression or extension under a load. The tendency of compression; or of extension, as the case may be, is to allow deflection; and on the load passing off, reaction, in consequence of the elasticity of the fibre.

§ 72. A large surplus of material increases the relative weight of the structure, as compared with the passing load: a condition favorable to repose under the dynamic action of the load.

§ 73. The strains, to which a piece of timber may be subjected, are four; each acting in a different manner to resist a force applied:

1st. It may be pulled asunder by tension.

2nd. It may be destroyed by compression or thrust.

3rd. It may be broken by a cross strain.

4th. It may be crushed at a point of bearing.

§ 74. In bridges, of all kinds, composed of timber and iron, the sustaining principle of their trusses acts chiefly by *tension* and *thrust*. When there is a sufficiency of material to counteract these forces, those which act laterally, to crush or break across, will generally be provided against.

Fig. 29.



hh. Fig. 29 represents what is commonly known as the "A" truss. The weight (W) being laid upon any point of the tie, or chord (ab), between the abutments, (as at e), will produce a tendency to compression on the braces (ac and bc),—to extension on the chord, (ab),—to break across (at e), and to crush the ends of the chord (at a and b).

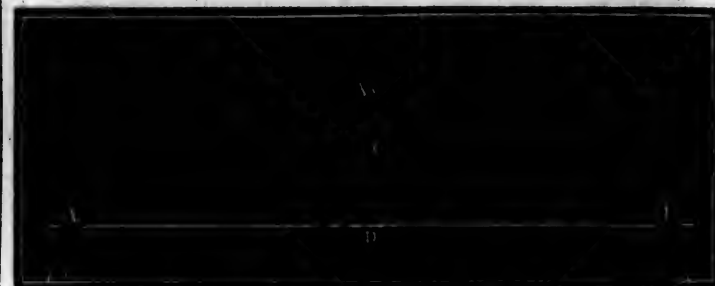
Fig. 30.



Fig. 30 represents a truss with precisely the same extent of sustaining principle, as in the last case, but with the addition of a top chord and end posts, adding somewhat to the stability of the truss, by increasing its weight, (§ 72).

§ 75. When a weight is applied at the middle of a horizontal beam, the vertical force, produced thereby, is constant at every point, and equal to one-half the weight.

Fig. 31.



ii. This figure represents a beam with a weight (W) at the middle. This weight is resolved into two equal forces, (§ 10), which are transmitted along the lines CA and CB, to the points of support, (A and B), each of which sustains, vertically, one-half the weight. CmDn is the parallelogram of forces; CD representing the vertical force of W, om, on, the horizontal, and Cm, Cn, the oblique forces.

§ 76. When the weight is not applied in the middle, the vertical forces, on each side will be constant, and equal to the pressures on the points of support.

Fig. 32.



kk. Fig. 32 represents a beam with the weight (W) applied at three-fourths the distance from A to B. CD represents the total vertical force of the weight (W), Cp is the portion of the same transmitted to B, while pD=Co is transmitted to A.

Fig. 33.



ll. This figure illustrates a case where the weight is placed at nine-tenths the distance from A to B. Co is the vertical pressure at A, and Cp the vertical pressure at B.

The vertical pressures in the three cases represented by Fig. 31, 32 and 33 will then be, in Fig. 31, upon A, .50W, and upon B, .50W;

in Fig. 32, " A, .25W, " " B, .75W;

in Fig. 33, " A, .10W, " " B, .90W.

§ 77. If the weight be applied perpendicularly over either point of support of a beam, the vertical pressure at that point will be a *maximum*—that is, it will be equal to the whole weight—while, at the other point of support, the vertical pressure will be a *minimum*, or nothing: therefore, the vertical pressures, upon the points of support of a beam, are *inversely as the distances* of the weight from those points of support.

§ 78. The horizontal strain, with the weight upon the middle of a beam, will be to the same strain when the weight is applied at any other point, as

the square of half the length of the beam, to the rectangle of the two segments, (§ 27).

In Fig. 31, 32 and 33, the horizontal strain in the direction DA is represented by *om*, and in the opposite direction (DB) by *pn*.

These two horizontal strains, in all cases, are equal, and either of them will represent the whole horizontal strain.

That this principle may be fully comprehended, Fig. 34 and 35 are introduced to illustrate it.

Fig. 34.



mm. Fig. 34 represents two rafters or braces, (AC and BC), supported by two walls (A and B) without any connecting tie, and with a weight (W) applied at C. With any convenient scale, and upon the vertical line CE lay off a distance CD, to represent the number of pounds of the weight (W).

Then *Cm*, on the same scale, will be the number of pounds of thrust upon A, in the direction CA, and *Cn* will be the thrust upon B, in the direction CB. *Co* will be the number of pounds acting vertically at A, and *Cp* the number of pounds of vertical pressure at B,—neglecting in all cases the weight of the rafters.

In like manner *mo* measures the number of pounds of horizontal thrust at A, and *pn* is the horizontal thrust, in the opposite direction, at B. From the construction of the diagrams, it is evident that the two opposite horizontal strains are equal.

In this figure *mo* is equal to $\frac{1}{2}$ CD, and the horizontal strain at A is, therefore, $\frac{1}{2}$ W.

Fig. 35.



Again, Fig. 35 represents the same pair of rafters with the same weight at C. It is obvious that the horizontal thrust against A, may be effectually counteracted by means of a cord attached to the foot of the rafter at A, and, passing over the pulley at *i* with a weight ($\frac{1}{2}$ W) suspended. The horizontal thrust at B, may likewise be neutralized by a cord attached at B, and the weight ($\frac{1}{2}$ W) suspended over the pulley *h*.

The horizontal thrusts are now sustained by the two cords; that toward A, by the cord *Ai*, and the other, toward B, by the cord *Bh*. The strain is alike upon the cords and on each equal to $\frac{1}{2}$ W.

Now knot the two cords together, between *h* and *i*, remove the weights suspended over the pulleys, and the strain upon the cords remains the same as before, equal $\frac{1}{2}$ W, or to *om*, Fig. 34.

nn. If the lengths of each beam, (Fig. 31, 32 and 33), be divided into ten equal parts, then the horizontal strains will be, respectively, as 25, 18 $\frac{1}{2}$ and 9; that is, as $5 \times 5 : 7 \frac{1}{2} \times 2 \frac{1}{2} : 9 \times 1$. Again, if the depth CD be $\frac{1}{10}$ the length, then the horizontal strain will be in Fig. 31, $1 \frac{1}{2}$ W = *om*;

$$\text{in Fig. 32, } 25 : 18 \frac{1}{2} :: 1 \frac{1}{2} W : \frac{56 \frac{1}{2}}{50} W = om;$$

$$\text{in Fig. 33, } 25 : 9 :: 1 \frac{1}{2} W : \frac{27}{50} W = om.$$

Fig. 36.



oo. Fig. 36 is a beam of the same proportions as those represented by Fig. 31, 32 and 33, with three equal weights upon the different points of the same beam, to wit: one weight at the middle, one weight at one fourth the length of the beam from B, and one weight at one-tenth the distance from B.

The sum of the vertical forces will be, at A, $.50W + .25W + .10W = .85W$, and at B, $.50W + .75W + .90W = 2.15W$.

The sum of the horizontal forces will be, $1.5W + \frac{56 \frac{1}{2}}{50}W + \frac{27}{50}W = 3.165W$.

(To be continued.)

Michigan Southern Railroad Company's Annual Report for 1858.

Capital stock—Common	\$6,081,800 00
Guaranteed	2,893,600 00
	\$8,975,400 00
Funded debt	9,343,000 00
Floating debt, Nov., 1857	\$2,314,000
" " Jan'y 1, 1858	1,935,000
" " March 1, 1859	1,211,000 07

EARNINGS in 1858:—

From passengers, mails and express	\$997,573 27
Freight and storage	872,419 14
Miscellaneous	149,432 55
	\$2,019,424 96
EXPENSES	\$1,242,152 23
Interest and payment to sinking fund	775,981 65
	2,018,133 88

The net earnings, exclusive of interest, are	\$777,273 19
Same in 1857	544,311 73

Net gain in 1858

Comparison of 1857 and 1858—Force and Pay of Men.

Time.	No. Men.	Pay Rolls.
1857—October	3,249	\$95,150 92
1858—January	1,725	52,842 01
1858—December	1,516	51,477 73
1859—February	1,506	46,402 40

	1857.	1858.
Earnings	\$2,227,978	\$2,019,724
Expenses	1,652,299	1,232,151
Repairs of road	423,825	315,153
Do. engines	158,793	97,443
Do. cars	147,098	69,855
Fuel	164,000	108,433
Passengers carried	534,550	402,929
Tons of freight	234,804	261,613
Passenger earnings	1,316,478	920,366
Freight do.	838,053	847,102
Per cent. expenses to earnings	74	61-61 $\frac{1}{2}$

If the gross earnings of 1858 were equal to those of 1856, which were

There would have been a net surplus of	\$696,715
This would give 10 per cent. on \$2,893,600 of guaranteed stock	\$289,340
And 6 per cent. on \$6,081,800 common	364,998
	654,26

And leave a surplus of

A clear evidence that a revival of business only is necessary to enable the company to increase dividends. As an earnest that such a revival has commenced, a reference to the schedule I annexed, shows that the gross earnings of the first half of 1858 were

And for the last half of 1858 were

A gain in favor of the last six months of,

Maine, 6 per ct. 1860-101	103	Indiana, Can. Loan 6 per ct.	100
Massachusetts, 6 per ct. 1859-100	100	Do. do. pref. 5 do. 7	104
New York, 6 per ct. 1860-62-100	103	Kentucky, 6 per ct. 1869-72-104	106
Do. 6 do. 1864-65-102	106	Louisiana, 6 do. cp. long- 96	97
Do. 6 do. 1866-67-104	107	Maryland, 6 do. cp. 1870-90-106	106
Do. 6 do. 1872-75-111	113	Do. 6 do. cp.	91
Do. 6 do. 1880-81-100	101	Missouri, 6 do. cp.	88
Do. 5 do. 1865-101	103	N. Carolina, 6 do. cp. 1873- 99	99
Do. 5 do. 1869-60-100	102	Ohio, 6 do. 1870-101	102
Do. 5 do. 1866-74-101	103	Do. 6 do. 1875-107	107
Do. 4 do. 1868-69-64- 90	100	Do. 6 do. 1882-107	108
Alabama, 5 do. coup. 86	86	Do. 5 do. 86- 96	96
California, 7 do. coup. 1877- 81	83	Penna., 5 do. 93	93
Georgia, 6 do. do. 1872-100	101	Do. 6 do. cp. 1880- 96	96
Florida Int. Imp. 7 p. ct. 1891	85	Tenness., 5 do. cp. 80	80
Illinois Int. Imp. 6 per ct. 1847-104	105	Do. 6 do. cp. 93	93
Indiana 6 do. 90	91	Virginia, 6 do. cp. 1888- 98	98
Do. 2 do. 60	62		
Iowa 1868, January, July-100	110		

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$333,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	80	80
Buffalo and State Line	600,000	Do. convertible	7	April, October	"	1866	90	90
Bellevue and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	75	75
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1866		
Do. do.	200,000	Income, guar. Cl. Col. & Cl.	7	Feb'y, August.	"	1866		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Div's	"	1861-64	60	70
Do.	800,000	2d do. convertible	7	March, Sept.	"	1866	40	42
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	90	92½
Do. do.	448,000	2d do.	7	May, Novemb.	"	1860	70	79½
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1862		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August.	"	1861	98	100
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August.	"	1860	67½	67
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	80	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August.	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	30	50
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	30	50
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1875	87½	91
Florida Freehold	1,600,000	Do. not convertible	7	March, Sept.	"	1891	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873		72½
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August.	"	1863	92	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875	90½	91½
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868		
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	87½	93
Jeffersonville	800,000	Do. 2d sec. conv.	7	April, October	"	1873		85
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		85
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	83	87
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	\$4,000,000	1st mortgage, conv. till 1869	7	Feb'y, August.	"	1866	71	72
Little Miami	1,500,000	Do. inconvert.	6	2 May, 2 Nov.	"	1863	83	86
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	95	97
Do. do.	900,000	Do. do.	8	March, Sept.	"	1869	92	93
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862		80
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863		77½
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	67	72½
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-72		90
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		90
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867		80
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	69	70
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	55	56
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	100½	101½
Racine and Mississippi	630,000	Do. conv. sink'g'd	8	Feb'y, August.	N.Y.	1876		75
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1866		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1862-77½	68	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85½	86½
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	94	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	96	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	88	84
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	72½	73
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1860	55	57
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1875	31	33
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August.	"	1871	30	31
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	80	82
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	102	102½
Do. do.	2,000,000	2d do.	7	16 June, 16 Dec.	"	1860	94	94½
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	76½	77½
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	90½	91
Do. (Free Land)	3,000,000	M'ge \$45,000 acrs-priv. 7 shar's	7	March, Sept.	"	1860	91	91½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	84	88
New York and Harlem	1,900,000	Do. do.	7	May, Novemb.	"	1861-72	94½	96
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	96	98
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	80	83
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1863	71½	72½
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	92½	95
Do. do.	3,000,000	1st mort. conv. from June 57-59	7	16 June, 16 Dec.	"	1864	103½	104
Panama, 1st issue	900,000	Convertible till 1855	7	Jan'y, July	"	1866	118	
Do. 2d do.	1,475,000	Do. till 1859	7	Jan'y, July	"	1866	90	91
Reading	1,000,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860		
Do. do.	3,400,000	Do. convertible	6	Jan'y, July	"	1870	84½	85
		Do. inconvertible	6	April, October	"	1866	75	76

CITY SECURITIES.	Int't payable.	Off'd Ask	CITY SECURITIES.	Int't payable.	Off'd Ask
New York, 5 per ct. 1858-60	98	99	Milwaukee, 7 per ct. coup.	X	46 70
Do. 6 do. 1870-76	93	95	New Orleans, 6 per ct. cp. R.R. X	Do.	75 80
Do. 6 do. 1883	103½	104	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	85 90
Do. 6 do. 1890-98	92	95	Philadelphia, 6 per ct. 1870-98	Jan'y, July	98½ 99
Albany, 6 per ct. coup. 1871-81 X	98	101	Pittsburgh, 6 per ct. coup.	X	46 50
Allegheny, 6 per ct. coup.	95	100	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	67 75
Baltimore, 6 per ct. 1870-90	98	100	Racine, 6 per ct. coup. 1873 X	10 Feb'y, Aug.	80 80
Boston, 5 per ct. coup.	X	100 101	Rochester, 6 per cent. coup.	X	90 97½
Brooklyn, 6 per ct. coup. Long X	101½	102	St. Louis, 6 per ct. coup. Long X	Do.	64 85½
Clev'rd, 7 per ct. cp. W.W. 1879 X	100	103	Do. do. Municipal X	Do.	56 87½
Cincinnati, 6 per ct. coup.	X	92½ 96	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	37 46
Chicago, 6 per ct. coup. 1873-77 X	85	87	S. Francisco, 7 p. cp. 1865, pay. N.Y. X	May, Novemb.	60 70
Do. 7 per ct. coup. 1880 X	97½	99	Do. 10 p. ct. cp. 1871 X	Do.	89 91
Detroit, 7 per ct. W.W. 1873-78 X	100	102	Do. 10 p. ct. pay. N.Y. X	Jan'y, July	
Dubuque, 8 per ct. cp. Long X		100	Do. 6 per ct. pay. N.Y. 1876 X	Do. do.	56 61
Jones City, 6 per ct. W.W. 1877 X	99	101	Wash'g, 6 per ct. coup.	X	80 80
Louisville, 6 per ct. cp. 1880-83 X	71	72½	Do. 6 p. ct. cp. Mun. 1874 X	March, Sept.	80 81½
Memphis, 6 per ct. coup. 1882 X	97	97	Jerusalem, 7 do.	X	April, October

Railroad Earnings.

The business of the Illinois Central Railroad for March was as follows:

Land Department.

Acres Construction Lands sold 2,481.85 for \$33,670 31
Acres Interest Fund Lands sold 45.05 for 807 69
Acres Free Lands sold 1,160.36 for 16,941 10

Total sales during the month 3,687.36 for \$51,419 10
To which add Town Lot sales 3,819 70

Total of all \$55,238 80
Acres sold since Jan'y 1, 1859 10,306.24 for \$141,013 47
Acres sold prev'ly, 1,229,835.33 for \$15,637,148 91

Total 1,240,141.57 for \$15,778,162 42

Construction Bonds canceled in March, 1859 \$28,000
Do. canceled previously 984,000
1,012,000 00

Free Land Bonds canceled previously 129,000

Total Bonds canceled up to March 31, 1859 \$1,141,000
Actual cash receipts in March, 1859 \$42,734 56
Do. do. do. 1858 42,021 59

Traffic Department.

Receipts from passengers \$64,714 70
Do. freight 71,254 00
Do. mails 6,358 23
Do. rent of road 5,133 00
Do. other sources 3,664 56

Total receipts in March, 1859 \$151,124 59
Do. do. 1858 163,847 71
Do. since Jan'y, 1859 \$418,011 51
Do. do. 1858 410,379 17

The earnings of the Central Railroad Company of New Jersey for the month of March were—

1859 \$75,163 68
1858 64,063 38

Increase (17 per cent.) \$11,100 30

The earnings of the Terre Haute, Alton and St. Louis road for the month of March were—

1859 \$82,601 19
1858 71,230 24

Increase \$11,370 95

The first quarter of this year, as compared with 1858, is as follows:

	1859.	1858.
January	\$67,011 13	\$57,128 86
February	63,720 47	52,327 72
March	82,601 19	71,230 24

Total \$213,332 79
Increase \$32,645 97

—being about 18 per cent.

The following statement shows the business of the Reading Railroad for the month of March:

	1859.	1858.
Received from coal	\$109,972 04	\$115,166 79
Do. merchandise	47,978 98	29,678 96
Do. travel, etc.	30,657 79	23,256 54

Total \$188,608 81
\$168,102 29

Transportation, road-way, dumpage, renewal Fund, and all charges 109,030 89
98,827 82

Net profit for the month \$79,577 92
Do. for previous 3 mos. 216,382 05
170,288 17

Total net profit for 4 months \$295,959 97
\$239,501 54

The receipts of the Grand Trunk Railway of Canada for the week ending April 2, were.....\$51,554 10
Week ending April 3, 1858 46,304 35

Increase\$5,239 75
Total traffic from July 1st.....\$1,720,049 03
Same period last year 1,800,123 56

Decrease.....\$80,074 53

The following is a comparative statement of earnings and expenses for the month of March, 1858 and 1859, on the Buffalo and State Line Railroad:

EARNINGS.			
	1858.	1859.	Decrease.
Passengers..	\$35,656 93	\$34,920 41	\$736 52
Freight.....	56,930 67	44,238 45	12,692 22
Other source's	1,150 00	1,316 00	Inc. 166 00

Totals...\$93,787 60 \$80,474 86 \$13,262 74

EXPENSES.			
	1858.	1859.	Decrease.
Construction..	\$2,377 80	.....	\$2,377 80
Maint'g roads.	20,973 35	\$6,395 49	14,577 86
Rep'r's mach'y,	5,976 75	3,239 17	2,737 58
Operating	24,062 12	15,289 24	8,772 88

Totals...\$53,390 02 \$24,923 90 \$28,466 12

The receipts of the Cleveland, Columbus and Cincinnati Railroad, in March, were \$98,000—an increase of \$3,000 over the same month last year.

The receipts of the Catawissa Railroad Company for March, 1859, were.....\$31,091 03
Less due connecting roads. 5,450 00

Net receipts for March, 1859...\$25,641 03
Do. do. 1858... 21,950 09

Increase.....\$3,690 94

The earnings of the Erie Railroad for the month of March are:

1859\$364,296 22
1858 461,494 83

Decrease.....\$97,198 61

The following is a statement of the earnings and expenses of the Pittsburg, Fort Wayne and Chicago Railroad, in March, 1859:

EARNINGS.	
From freight.....	\$72,146 67
" passengers	81,594 65
" mail	7,825 00
" rent of road	5,600 00

Total.....\$167,066 32

Earnings in same month last year 160,878 06

Increase (10¾ per cent.)....\$16,188 26

EXPENSES.	
Conducting transportation..	\$21,281 00
Motive power	35,695 32
Maintenance of cars.	21,695 88
Maintenance of way.	11,010 69
General expenses.....	5,601 99

Total.....95,284 88

Expenses same month last year 69,824 43

Increase.....\$25,460 45

Net earnings in March, 1859\$71,781 44
Do. do. 1858 81,053 63

Decrease.....\$9,272 19

The following is a statement of the earnings of the New York Central Railroad, for the month of March, 1859, compared with its earnings for the corresponding month of the previous year:

1859\$502,699 35
1858 527,857 87

Decrease.....\$25,158 52

The revenue of the Baltimore and Ohio road for the month of March was as follows:

Main Stem.			
Passengers	\$60,679 16		
Express.....	5,564 68		
Mails.....	7,833 33		
Tonnage.....	265,367 04—	\$339,444 21	
Northwestern Virginia.			
Passengers	\$4,241 41		
Express.....	.....	
Mails.....	862 75		
Tonnage.....	24,695 64—	\$29,799 80	
Washington Branch.			
Passengers	\$31,182 53		
Express.....	1,850 00		
Mails.....	1,000 00		
Tonnage.....	7,334 48—	\$40,817 01	
Total,.....		\$410,061 02	

Compared with the same month of last year, the following result is shown:

	Main	N. W.	Wash'ton	Total.
March: Stem.	Stem.	Va.	Branch.	
1858.	\$368,917 17	27,728 53	42,615 53	439,256 23
1859.	339,444 21	29,799 80	40,817 01	410,061 02

Total decrease for March, 1859.....\$29,195 21

The financial year of the Company commenced with October. The receipts of the first six months of the present year compare with those of the previous year as follows:

	1858.	1857.
October.....	\$392,503 02	\$396,191 85
November.....	383,159 22	361,443 38
December.....	336,861 01	379,259 02
	1859.	1858.
January.....	327,176 63	317,513 72
February.....	321,391 10	277,044 43
March.....	410,061 21	439,061 09
	\$2,171,152 19	\$2,173,513 49
		2,171,152 19

Decrease present year.....\$2,361 30

Real and Personal Property in Ohio.

The following table exhibits the taxable property in the State of Ohio, and the amount of State and all other taxes assessed thereon for the last nine years.

Years.	Value of Real Estate.	Value of Personal Property.	Aggregate value.
1850 ..	\$301,388,838	\$198,487,502	\$499,866,340
1851 ..	346,241,233	104,495,278	450,836,511
1852 ..	354,937,147	152,644,762	507,581,909
1853 ..	363,490,901	229,955,947	593,446,848
1854 ..	569,868,410	297,061,572	866,929,982
1855 ..	577,578,539	283,019,815	860,598,354
1856 ..	530,834,487	240,026,550	770,861,037
1857 ..	585,620,682	263,793,297	849,413,979
1858 ..	590,285,947	250,514,084	840,800,031

Years.	Total State Taxes.	Total Taxes for all property.
1850	\$1,402,669 03 4	\$4,227,808 23 6
1851	1,621,228 33 7	4,957,012 97 0
1852	1,776,536 68 8	5,674,335 52 1
1853	3,026,323 92 5	7,828,805 27 6
1854	3,077,601 40 9	9,092,339 49 7
1855	2,754,307 51 7	8,954,511 89 7
1856	2,626,133 83 0	8,009,513 92 9
1857	2,609,395 01 6	8,673,298 24 8
1858	2,978,122 15 0	9,756,659 80 0

It will be seen by the above table that there is a decrease in the total value of property since 1855 and 1856. This decrease occurs in the personal property, and is in a great measure attributable to the fact that bank property illegally placed upon the tax list of 1855, is omitted in these late years.

Cincinnati, Hamilton and Dayton R. R. Co.

The report of the officers of this company, to be submitted to their stockholders at the approaching annual meeting, contains the following items of general interest:

Total income year ending April 1, 1859\$489,437 92
Total income year ending April 1, 1858 487,214 27

Increase.....\$2,016 65

The net earnings show a gain (in consequence of the reduction of expenses) of \$33,778 75, which, considering the prostration of business and short crops, is very satisfactory.

During the year nothing has been charged to construction account. The amount expended for additional depot and other facilities for business, together with extraordinary expenses, caused by the floods, have been charged to transportation account. Notwithstanding this, the expenses of transportation show but 49 per cent. of the gross income.

The floating debt of the company, it may be said, has been paid, as there remains but \$24,075 outstanding, which consists of bills payable due in July next, with cash on hand to discharge the same at maturity.

In addition to this, sufficient of the net earnings to March 31, 1859, have been applied to the credit of depreciated stocks held in connecting roads, to wipe out the total amount of subscriptions made, thus bringing the stock of the company to par on their books.

The report shows also that the company now have on hand assets to the amount of \$83,268 31, over all outstanding liabilities. A portion of these assets will not be available before next fall, and for this reason, we understand, the directors will not make a dividend before June next.

American Railroad Journal.

Saturday, April 23, 1859.

New York City Railroads.

We give below an article upon the subject of our city railroads from the pen of one of our most capable and intelligent railroad engineers. It demonstrates fully the causes of the excessive eagerness for new charters, which are of themselves, worth vast sums of money, in giving possession of leading streets, and the right to tax all travelers a rate equal to twice the cost of their transportation. We are glad that the legislature has adjourned without granting any new charters. Before any further action is had, we hope an adequate system of railroads, will be planned, and be given to the parties that will offer the most favorable conditions to the public.

We hear a great deal said in this city about official corruption. There is a plenty of it, no doubt; but is it any worse to filch directly from the city Treasury, than to levy an indirect tax in the shape of double charges for a given service. The mean and sneaking hangers on about the City Hall, have precedents set them and are stimulated in their efforts to rob the treasury, by the enormous sums made by more favored and respectable parties, under the color of law. Everything in this city is a job, and hardly a person in it will refuse one, let it only be presented in a manner to overcome his scruples. It is entirely respectable to have the nominal cost of a city railroad equal twice or thrice its actual: but so long as this is the case, just so long will the city continue to be defrauded, in a less respectable, but in a manner not a whit more dishonest:

An analysis of the reports of the city railroads of New York and Brooklyn for the year ending September 30, 1857, (the reports for 1858 are not yet published,) shows the following as their cost:

Name of Road.	Length in miles.	Number of Cars.	Cost of Cars.	Number of Horses and Harness.	Cost of Horses and Harness.	Cost of Buildings, Real Estate, and Miscellaneous Items.	Cost of Tracks and Grading.	Cost per mile of Tracks and Grading.	Cost per mile of all other items.	Cost per mile of road, including all items.	Total Cost of each Road.
Brooklyn city r'ds.	20.51	100	\$65,803	900	\$135,502	\$224,582	\$580,121	\$28,319	\$21,681	\$50,000	\$1,026,708
Eighth Avenue.	4.89	61	48,800	471	77,500	207,124	475,000	97,137	66,863	164,000	808,424
Sixth " "	4.00	98	61,101	354	71,927	166,915	555,012	138,750	75,239	213,989	865,957
Third " "	6.00	71	50,000	529	80,000	40,000	1,000,000	166,666	28,333	195,000	1,170,000
Second " "	9.00	68	43,500	368	55,200	40,000	764,664	82,578	17,866	100,374	903,864
Totals.....	44.40	388	\$289,204	2,622	\$420,159	\$678,621	\$3,376,497	\$76,000	\$31,260	\$107,260	\$4,757,468
Average.											

From this, it appears that in the cities of New York and Brooklyn there are 44.4 miles of double track railroads, representing a capital of \$4,757,468 in the aggregate, or about \$107,260 per mile. The lowest are the Brooklyn city railroads, which are represented by a capital of \$50,000 per mile, and the highest is the Sixth Avenue, representing a capital of \$213,989 per mile.

It must be apparent to any one at all familiar with the cost of railroads that these roads could not have cost one-half the amount represented.

The great portion of the dilution seems to be in the cost of tracks and grading, which varies from \$28,319 to \$166,666 per mile. Assuming that the cost of cars, horses, buildings and real estate is correctly stated, and applying REAL values to the tracks, we should have the following as the actual cost of these roads:

388 cars.....	\$289,204
2,622 horses, including harness.....	420,159
Buildings and real estate, and miscellaneous items.....	678,621
44.4 miles of tracks, at \$16,000 per mile,	710,400
Total.....	\$2,098,384

The extent of the dilution would, therefore, be \$2,659,069.

On this amount, at least, of fictitious capital in these roads, are the public paying 10 to 12 per cent. per annum.

Assuming that 10 per cent. is no more than a fair return for investments of this kind, \$2,659,069, or an average of about \$60,000 per mile, was the actual value of these franchises to the persons who obtained them. This average is kept down by merging in the calculation the Brooklyn city railroads, which are represented by a comparatively low cost. If we take the New York city lines by themselves, the following is the cost as represented:

288 cars.....	\$203,491
1,722 horses.....	284,657
Buildings and real estate, and miscellaneous items.....	454,039
23.89 miles tracks.....	2,794,676
Total.....	\$3,736,773

—Equal to an average per mile of\$156,415

Their actual cost, assuming the correctness of the cost represented in the items of cars, horses, buildings and real estate, would show as follows:

Cars, horses, buildings, real estate.....	\$942,097
23.89 miles tracks.....	382,240
Total.....	\$1,325,337

—Equal to an average per mile of\$55,476

The value of the New York franchise to those who obtained them was, therefore, over \$100,000 per mile, and the public are paying 10 to 15 per cent. interest on a fictitious capital of nearly 2½ millions in the shape of 5 ct. fares upon these roads.

All this goes to prove that the city of New York and any other populous city where similar conveniences of transport are required, could by a proper control and disposition of these franchises furnish the public with conveyance in railroad cars at a much cheaper rate than at present.

In this connection the statistics of the business of these roads deduced from the receipts referred to will be appropriate. The following table explains itself.

Name of Road.	Brooklyn City.	Eighth Avenue.	Sixth " "	Third " "	Second " "	Totals
Cost of Operation.	\$287,832	194,883	182,060	287,094	140,000	\$1,061,869
Receipts from Passengers.	\$78,791	341,471	262,041	405,278	168,368	\$1,587,581
Net Receipts.	\$90,950	147,088	99,981	188,184	68,368	\$536,212
Number of Passengers carried.	7,557,823	6,879,452	5,240,277	8,155,515	3,367,371	31,783,068
Miles run by Cars.	1,891,215	1,023,157	950,572	1,570,000	985,500	6,420,444
Cost of each Passenger.	3.8	2.84	3.1	3.25	3.62	3.3
Net Receipts per cent. on Cost of Road.	9	18.3	11.7	11.8	6.6	11.3

* Number of miles not stated in report—estimated. No report published for 1857. These figures are taken from the report of 1856, showing the business from March 19, to Sept. 30, about 6½ months. Proportional amounts are added to make a statement for one year. + Average.

From this it appears that the railroads of New York and Brooklyn for the year 1857 paid an average of 11.3 per cent. on the capital they represent, or 25.5 per cent. on their actual cost. If we take the roads of New York city alone, we find they paid an average of 12 per cent. on their capital, or 33.6 per cent. on their actual cost.

Taking into consideration the annual increase of travel upon these roads, as shown in the following table, there can be no doubt but that the reports for 1858 will exhibit a business which would pay at least 40 per cent on their actual cost:

NO. OF PASSENGERS CARRIED.			
Name of road.	1855.	1856.	1857.
Brooklyn city...	6,324,557	6,552,582	7,575,823
Eighth-avenue...	5,748,901	6,097,299	6,829,452
Sixth-avenue....	4,283,743	4,757,108	5,240,978
Third avenue....	5,770,078	7,131,881	8,105,515

No report for Second-avenue road having been published for 1857, the probable number of passengers carried can only be estimated, without going to their books, by adding the average percentage of increase to the number carried in 1856. This would give about 3,700,000 for 1857, making the total number of passengers carried on these roads in that year, 31,461,768; and, if the increase has continued, as is no doubt the case, for 1858 we shall have a grand total of 35,000,000 passengers, not including the Fourth-avenue railroad.

This company makes no report separating the city travel from its other business; hence it has not been considered in the tables; but, making due allowances, the number of passengers carried on the railroads of New York and Brooklyn for the year 1858, is not far from 40,000,000, and in New York alone about 32,000,000. The table setting forth the operations of the roads for 1857, it will be seen, shows the average cost of carrying each passenger to have been 3.3 cents. At a fare of four cents per passenger, the gross receipts from this amount of travel, on the New York roads, excluding the Harlem railroad, viz: 28,000,000 passengers, would be \$1,120,000. The expenses would be \$924,000. The net receipts, \$196,000. This would be equal to about 15 per cent. on a fair cost. These are correct deductions from the reports, and cannot be controverted. For every passenger carried, therefore, these companies could have paid the city one cent., and yet have received a splendid return for their investment.

This would have given the city \$230,000 that year.

We do not mean to be understood as being in favor of the city selling these grants to the highest bidder, or of imposing a one-cent toll upon every passenger who rides. Whether the 5 cent franchises are sold at \$100,000 per mile, or whether a one cent tax is imposed, is the same thing. It is a discrimination against the class who travel in these cars, and who are obliged to use them, that ought not to be thought of for a moment. It would be simply the imposition of a tax of over \$300,000 per annum upon the working population for the benefit of those who can afford their carriages.

Why should the mechanic or the laborer be taxed one cent. every time he rides between his home and his work? If the alternative was between giving this \$300,000 per annum to these railroads for nothing, or giving it to the city, we should be decidedly in favor of the latter, but this is not the alternative.

The question is between the working public and the railroads, and no such tax should be imposed upon this travel for the benefit of either the city or the railroads. The travel should have the advantage of it, and the true plan is, to put up these franchises at auction, not to the highest bidder, but the lowest—to give them to that responsible company who will carry passengers at the lowest rate of fare. It is only in this way that the benefits of railroads can be most fully developed and equitably distributed.

But, before even this is done, a well digested and comprehensive system should be planned—one

that will accommodate the whole city, and upon which a passenger may travel any distance, in any direction between certain limits, if he desires to, for a single fare. There is no reason why a passenger should pay two or three fares because he desires to go two miles obliquely across the city, instead of going two miles up one of the avenues, which he can do for one fare. The system should be so thorough and comprehensive that the antiquated and barbarous vehicles called omnibuses can be dispensed with.

The legislature may charter a dozen separate lines of railroad, but under separate management, without concert of plans, or of action, or of interest, the public cannot be accommodated, and the streets must still be lumbered up and the pavements torn to pieces by omnibuses. That a system can be devised which will accomplish all we say, accommodating every part of the city better than is now done by omnibuses, and upon which passengers may travel in almost every direction for one fare, can be easily demonstrated, and it can be done, too, by the construction of but few miles more railroad than the present bills before the legislature contemplate. It may take 30 miles of double track in addition to those now in operation to provide a thorough system as far up as the Central Park. This would make a grand aggregate of 60 miles, which, at a fair cost, ought not to represent a capital exceeding \$3,300,000. Ten per cent. upon this amount would be \$330,000. As we have shown the profit per passenger at a four-cent fare to be 0.7 cent, there would be required but 46,000,000 passengers per annum to enable the roads to earn this dividend. That such a system as is here proposed would carry more than 50,000,000 passengers per annum admits of not a moment's doubt. This is a subject of the deepest importance not only to the city of New York, but to all of our large cities; and it is time that the public should awake to the manner in which their rights are squandered—for the privilege of transport through the public highways at the lowest fair rate is a privilege of which they ought not to be dispossessed. Loose legislation, the influence of interested parties and an unscrupulous system of lobbying are fast disposing of this right, and subjecting us to an incubus which, once fixed, can never be removed. No city in the world, in its general shape and plan, presents such favorable features for the adoption of a great system of transit as the city of New York, if proper advantage be taken and proper use be made of them. Let us pause before it is too late. The necessity for the roads now pending in the legislature is not so imminent but that time can be taken to devise a general system, of which these may possibly form a part.

District of Columbia.

The value of property in the District of Columbia in 1858 was \$52,842,055, viz: individual property, personal and real, \$34,720,424; government reservations \$13,412,293, and cost of public buildings, furniture, statuary, paintings, etc., \$14,709,338.

Great Western, Ill. Railroad.

The Great Western road of Illinois has recently been recognized under a new charter. The road is one hundred and seventy-four miles long, and runs from the State line of Indiana, near Danville, Vermillion county, Illinois, to Naples, in Scott county, Illinois, passing through Toledo, Decatur, Springfield and Jacksonville. At its eastern terminus it connects with the Toledo, Wabash and Western road (running through Fort Wayne and Lafayette to Toledo.) From Naples, its western terminus, to Quincy, on the Mississippi river, is a distance of forty miles, to which the Pike county railroad is, we believe, completed. The Great Western road also connects with the Illinois Central at Tolono and Decatur, and with the Chicago and St. Louis road at Springfield.

Insurance Law.

We give this week a report of the case of *Grosvenor vs. The Atlantic Fire Insurance Company* alluded in our last week's article. The nature of the action and defence, and the facts necessary to an understanding of the case sufficiently appear in the opinion of the Court, which was as follows:

HARRIS J.—The contract of Insurance is a contract of indemnity. To sustain an action upon such a contract, it must appear that the party insured has sustained a loss. This involves the necessity of an insurable interest at the time of the alleged loss. Without such interest, the party insured cannot be dammed.

In this case, the contract was between the defendant and M'Carty. The agreement was to insure E. W. M'Carty against loss or damage by fire, to the amount of \$7,000, on his three story brick dwelling house. But after the contract was made, and before the alleged loss, M'Carty had sold and conveyed the property insured. At the time of the fire he had no insurable interest; of course he has no claim for indemnity. No action therefore could be maintained on the policy by M'Carty.

But at the time the insurance was effected, the plaintiff in this action, Grosvenor, was the holder of a mortgage upon the premises insured. As such mortgagee, he too, had an insurable interest. The extent of that interest was the amount of his debt. To that extent he might have contracted with the defendants, to indemnify him against loss by fire. The payment of his debt would as completely terminate the contract to insure as would the alienation of the property, when the contract is made with the owner.

The important enquiry in the case is, to which of these classes does the contract in question belong? The action is brought by the plaintiff as mortgagee. The contract was made with M'Carty, the mortgagor. But the policy provides that in case of loss, such loss should be payable to the plaintiff. What is the legal effect of this provision? Without it the plaintiff could have had no claim against the defendants for indemnity. Is this provision to be regarded as an appointment of the plaintiff to receive any money which might become due from the insurers, by reason of any loss sustained by the mortgagor, or has it the effect to render the policy, which would otherwise be a contract to indemnify the mortgagor against a loss, a contract to indemnify the mortgagees? A determination of this question will also determine the rights of the parties to this action.

Were it not for one or two decisions in this State bearing upon the question, I should have little difficulty in pronouncing in favor of the former of these propositions. It seems to me to be very clear that it was the intention of all the parties that the interest of the mortgagor, and not that of the mortgagee, should be insured. It is stated in the policy that the property insured is the property of M'Carty, and that he is the person insured. M'Carty paid the premium. He made the contract. His interest as owner, and not that of the plaintiff as mortgagee, was the subject of the insurance. The plaintiff was merely the appointee of the party insured, to receive the money which might become due him from the insurers upon the contract. The provision in the policy in this respect had no more effect upon the contract itself, than it would if it had been provided that the loss for which the insurers should become liable, should

be deposited in a specified bank to the credit of the party insured.

Suppose that the plaintiff, although described in the policy as a mortgagee, had in fact held no mortgage, could it be pretended that the defendants might have avoided the policy, on the ground that the plaintiff had no insurable interest? Or suppose again, that after the contract had been made, the mortgage had been paid, could it be claimed that the contract to insure had also ceased?

I presume none will deny that, in either case, the contract would have continued in force for the benefit of the owner of the property insured. I agree with the court below, that "there is nothing in the language of the policy on which the court can adjudge that in legal effect it is a contract insuring the interest of the mortgagee as such, except in the provision which declares that the loss, if any, which occurs under the contract insuring the mortgagor's interest, shall be payable to the mortgagee. That provision merely designates a person to whom such loss is to be paid, and shows that he is a person who may have an interest in its being so paid."

The undertaking to pay the plaintiff was an undertaking collateral to, and dependant upon the principal undertaking to insure the mortgagor. The effect of it was, that the defendants agreed that whenever any money should become due to the mortgagor upon the contract of insurance, they would, instead of paying it to the mortgagor himself, pay it to the plaintiff. The mortgagor must sustain a loss for which the insurers were liable, before the party appointed to receive the money would have a right to claim it. It is the damage sustained by the party insured, and not by the party appointed to receive payment, that is recoverable from the insurers. (*Macomber vs. Cambridge, Mutual Fire Insurance Company* 8 Cush. 133.) The insurance being upon the interest of the mortgagor, and he having parted with that interest before the fire, no loss was sustained by him, and of course, none was recoverable by his assignee or appointee. The right of such a party being wholly derivative, cannot exceed the right of the party under whom he claims. (16 *Peters* 495—2 *Gray* 216.)

After citing and commenting upon some authorities at length, the Judge concludes as follows:

Upon the merits of the question I have already sufficiently expressed the convictions of my own judgment. The defendants contracted with M'Carty, and not the plaintiff. They agreed, upon the performance of certain conditions, to pay for him to the plaintiff certain money. Some of these conditions were positive in the character; others negative. Certain things were to be done by the assured, and other things were not to be done. If all these conditions were performed, then if a loss occurred, the defendants agreed to indemnify him against that loss, to the extent specified in the policy, and he appointed the plaintiff, his creditor, to receive from the defendants the amount for which they were thus contingently liable. The terms of this contract have never been waived, relaxed, or modified. The defendants have shown an express violation of one or more of the conditions upon which their liability was to depend. And yet it has been adjudged, although it is evident that it has been done with reluctance, and against the better judgment of the court making

the decision, that the proof of these violations constituted no defence to the action.

The judgment should be reversed and a new trial granted, with costs to abide the event.

Pacific Railroad.

At the meeting of the Board of Directors of this company, GEORGE R. TAYLOR, Esq., was elected President of the Board; D. R. Garrison, Vice President; E. Miller, Chief Engineer; T. McKissock, Superintendent; D. Trowbridge, Auditor; C. C. Whittelsey, Attorney; J. D. Stevenson, Land Agent; George P. Roberts, Paymaster and Supply Agent; C. Williams, Master Machinist. Before these elections took place, the case of the tie vote between Messrs. Holmes and H. I. Bodley was settled, by the election of Mr. Holmes.

Baltimore and Ohio Railroad.

The regular monthly meeting of the Board of Directors of the Baltimore and Ohio Railroad Company was held on the 18th inst. Mr. Hopkins, from the Committee of Finance, reported the following resolutions, which were adopted unanimously:

Resolved, That a dividend of three per cent. be declared on the stock of the Baltimore and Ohio railroad company from the net earnings of the Main Stem, for the fiscal half year terminating on the 31st ult., payable on and after the 18th of May next, at the Merchants' Bank of Baltimore, and that the transfer books of said Company be closed from the 23d of April till the 18th of May, aforesaid.

Resolved, That a dividend of 4½ per cent. on the stock of the Washington Branch railroad be declared for the half year ending on the 31st ult., payable on and after the 25th inst., at the Merchants' Bank of Baltimore, and that transfer books of said road be closed from the 20th till the 25th inst.

Previous to the adoption of the resolution declaring a dividend upon the stock of the road from the net earnings of the Main Stem, Mr. Garrett, the President, at the suggestion of Dr. Ohr, explained to the Board the condition of the finances of the Company, upon which the declaration of a dividend was based.

Mr. Garrett said, in connection with the declaration of the dividend, the financial exhibits for the fiscal half year, terminating 31st ultimo, embrace interesting features. The following comparative and analytic statements are presented for the information of the Board:

First—The revenue of the Main Stem has been			
Working expenses including repair and maintenance of road and machinery	\$1,762,789 65		
		843,943 70	
Leaving the net earnings	\$918,845 95		
The ratio of expenses has thus proved 47 87:100 per cent., being the best result heretofore realized in the history of the company for a similar period.			
Second—Comparative statement of the revenue and working expenses of the first six months of the last and of the present fiscal year:			
	1857-'8.	1858-'9.	
Revenue	\$1,817,120 37	\$1,762,789 65	
Working expenses..	1,511,150 86	843,943 70	
Net earnings	\$305,969 51	\$918,845 95	
Decrease of revenue		\$54,330 72	
Decrease of working expenses		667,207 16	
Increase of net earnings		\$612,876 44	

Third—Since the close of the last fiscal year, September 30, 1858, the remainder of the first mortgage loan for \$1,000,000, viz: \$83,668, has

been paid except \$4,700 not yet presented, for the payment of which this amount of city stock is reserved.

Fourth—On the 30th September, 1858, the floating debt, viz: bills payable was \$284,653 79, all of which has been paid except \$4,843 97 not yet matured. The company has purchased all its materials and supplies for cash.

Fifth—The policy of the Board in fully and effectively maintaining the sinking fund for the redemption of its debts has been successfully continued.

On 30th September 1858 the sinking funds amounted to	\$937,284 13
On 31st March, 1859 the sinking funds amounted to	1,097,474 37

Exhibiting an increase by investments from revenue of..... \$160,190 24

This conservative and valuable system will ultimately fully repay and reward stockholders, providing as it does for the absorption and payment of the entire mortgage debts of the Company at the periods of their respective maturities.

Sixth—Cash payments have been made during the same period for real estate and other investments of capital, \$61,104 21.

Seventh—The profit and loss account September 30th, 1858, was	\$5,052,275 07
On 31st March, 1859	5,660,172 58

Exhibiting a gain of..... \$607,897 51
Being upwards of 6 per cent. on the capital stock.

Eighth—The revenue of the Northwestern Virginia road for the six months has been	\$149,407 03
Working expenses	101,712 17

Yielding net revenue..... \$47,694 86

Heretofore the expenses on this road have exceeded the gross revenue. The present ratio of working expenses 68 per cent. indicates better results henceforward.

Ninth—The revenue of the Washington Branch has been	\$228,229 76
Working expenses (40 37-100 per cent.)	92,131 32

Showing excess of revenue over working expenses..... \$136,098 44

A favorable winter, combined with careful and judicious economy in connexion with every detail of the Company's service and interests, has, notwithstanding an unprecedentedly low tariff produced these results, the road and equipments being also maintained in the most effective condition.

Acknowledgements are due and are made with much satisfaction to the officers and men of the service, for the rigor, ability and energy with which important reforms and economies have been inaugurated and successfully maintained. A rigid adherence to the system now in such satisfactory operation is alone required to ensure in the future a similar fruition alike desirable and important to all the great interests involved.

The Committee on Finance also reported on the subject of the claim of A. J. Marshall, Esq., in regard to compensation claimed by him for services rendered to the Baltimore and Ohio railroad company at the session of the Legislature of Virginia of 1847. The committee after reviewing the ground upon which the claim is made, say that there is no new matter calling for action in the premises, nor do they see "any reason for recommending to the present Board to review, upon the same state of facts, a decision which appears to have been fully acted upon and considered by their predecessors." The committee were by unanimous vote discharged from the further consideration of the claim and the subject thus finally disposed of.

Mr. Travers presented a memorial from the coal trade, calling the attention of the Board to the alarming diminution in the Cumberland Coal

Trade of that city, notwithstanding the well established fact of the daily increasing demand for Bituminous Coal for steam purposes in all parts of the country. The petition was signed by a number of members of the city council, and also by the firms engaged in the coal trade. It was referred to the Committee on Machinery and Transportation.

The transportation eastwardly, into the city of Baltimore, during the month in some of the principal staples, has been as follows:

Bark	122 tons
Coal	21,468 "
Fire brick	176 "
Flour	55,015 bbls
Grain	2,276 tons
Granite	100 "
Iron	250 "
Iron Ore and Manganeese	498 "
Lard and Butter	309 "
Leather	294 "
Cotton	1,023 bales
Wool	95 "
Flax-seed	8 tons
Soap stone	17 "
Lard oil	197 "
Lumber	1,972 "
Lime	39 "
Live stock, viz:	
Hogs	9,655
Sheep	3,085
Horses and Mules	596
Horned cattle	2,048
Meal and shorts	516 tons
Pork and Bacon	3,231 bbls
Tobacco	2,243
Whiskey	9,065 bbls
Miscellaneous	667 tons
Hay	57 "
Hemp	71 "
Flour from Washington Branch	1,791 bbls

STATEMENT OF FLOATING DEBT AND AVAILABLE MEANS.

Debt.	
Amount of bills payable	\$4,843 97
Balance of interest uncalled for due on Company's bonds	16,855 00
Balance of interest uncalled for due on bonds of the Northwestern Virginia Railroad company	700 00
	\$22,398 97

Available Means.	
Uncollected revenue—judged to be the same as on the 1st, when it was	\$274,395 88
Cash on hand	109,048 00
Bills receivable	48,422 99
	\$426,866 87

The bills payable on March 9th, the date of the last statement, amounted to	\$6,232 10
The bills payable at the present date amount to	4,843 97

Showing a decrease of..... \$1,388 13
J. I. ATKINSON, Treasurer.
Treasurer's Office, B. & O. R. R. Co.,
April 13, 1859.

Delaware and Hudson Canal Company.
The following circular in reference to the affairs of the Delaware and Hudson Canal Company has been sent to the stockholders:

OFFICE DELAWARE AND HUDSON CANAL CO., }
New York, April 5, 1859. }

It having been stated in certain quarters that this company has been able to pay its large dividend only by adding to its debt, the following facts and figures are submitted for the information of those interested:

The enlargement of the Canal was completed and the construction account therefore closed in 1853.

On the 1st of March, 1853, the debt of the Company funded and floating was \$656,905 47
The available cash assets were..... 854,445 73

Excess of assets over debt..... \$197,540 26

On the 1st of March, 1859, the debt of the Company, funded and floating, was \$1,222,717 35
The available cash assets were..... 1,036,408 98

Excess of debt over assets..... \$186,368 37

Actual increase or debt in six years, from 1853 to 1859..... \$383,848 63

During these six years there was paid to the stockholders in cash..... 4,498,500 00

Excess paid to stockholders in cash, over the increase of debt..... 4,114,651 37

During these six years the capacity of the Company's railroad has been doubled, at an expense of..... \$350,000 00
"T" rail substituted for flat rail do. do. 100,000 00
The road extended 6 miles, do..... 225,000 00

\$675,000 00

In addition to the above, three hundred thousand dollars have been expended on the canal, for walling and other improvements, during the same period, and every department of the work has been placed in a high state of sufficiency.

GEO. TALBOT OLYPHANT, President.

Greenville and Columbia Railroad.

The capital account of this road on the 1st day of January, 1859, stood as follows:

To Capital stock	Dr. \$1,207,598 92
Assessment on capital stock	221,409 00
	\$1,429,007 92
Comp.'s 7 per cent. coupon b'ds.	1,145,000 00
Co.'s B'ds, short date, \$3,500 00	
Bills payable	210,502 58
	214,002 58
Surplus income account.....	131,544 12
	\$2,919,554 62

By Cost of Road—

Main Line.....	143 1/4 miles.	Cr.
Abbeville Branch ..	11 1/2 "	
Anderson " ..	9 1/2 "	
	164 1/4 "	\$2,439,769 52
Outfit of road, locomotives and cars		324,160 81
		\$2,763,930 33

Real estate.....		30,234 82
Bills receivable	\$21,404 65	
Negro property	665 27	
Stock in Laurens R.R.Co.	4,420 00	
Stock in S. & U. R. Co.	33,271 06	
S. & U. R. R. Survey, Bal.	129 01	
Suspense account.....	1,585 14	
		61,475 73

Rebuilding Broad River Bridge, payments		30,411 18
E. Saunders, Clerk, Workshops, Disbursing acc't, balance, \$15,500 02		
Cash, Balance in Treas'y, 31st Dec., 1858.....	15,002 54	
		33,502 56
		\$2,919,554 62

The earnings for the year were—
From passengers..... \$122,790
" freight..... 201,760
Mails, etc..... 16,640

\$341,190

Expenses..... 215,319

Net earnings..... \$125,871

Of the amount of expenses, \$6,990 were for losses by fire.

The gross earnings for 1857 were \$294,627; the expenses, \$217,394,—showing a net gain for the year of \$18,637.

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VOSE, LIVINGSTON & CO.,
9 South William st., N. Y.
1m15

April 9, 1859.

Notice to Contractors.

SEALED PROPOSALS for the grading and masonry of the extension of the ROANOKE VALLEY RAILROAD, from Clarksville to Keyesville, on the Richmond and Danville Railroad, will be received at the office of the Company in Clarksville until the 12th of May. The road will be thirty miles long. Plans and specifications of the work may be seen in Clarksville on and after the 5th of May. Letters of inquiry may be addressed to Henry Wood, Esq., President Roanoke Valley Railroad, Clarksville, Va., or to me at Christiansville P. O., Mecklenburg Co., Va.

B. W. JONES,
Chief Engineer.

4t16

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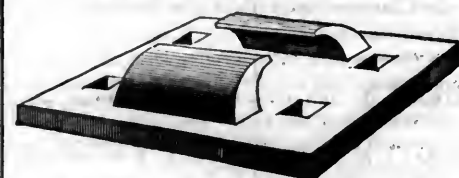
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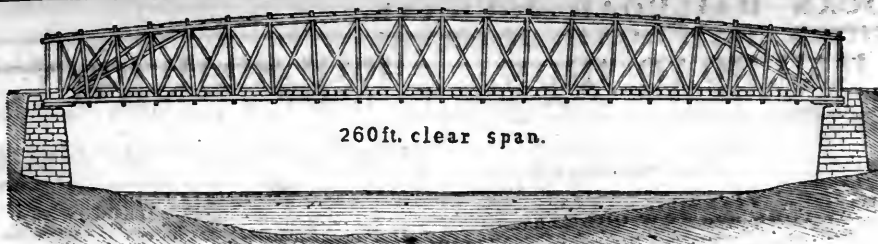
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 February, 1853.

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 Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.
 Address J. H. SCRANTON, President,
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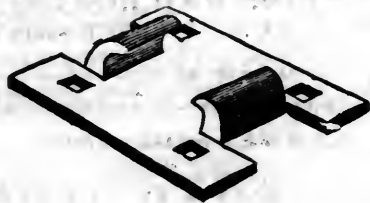
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J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late New York Wrought Iron Railroad Chair Company, and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our Chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

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The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

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NEGOTIATORS OF SECURITIES.

Railroad Iron.

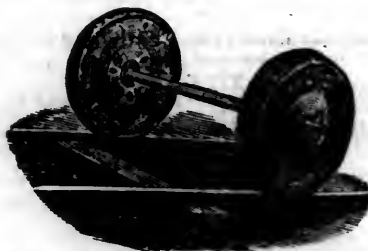
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PLATE CAR WHEELS and CHILLED TYRES, equal
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HAVING extensive facilities, are now prepared to furnish
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BRASS and IRON CASTINGS; LOCOMOTIVE TYRES
welded and blocked to exact sizes, and every thing connected
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and bright as new, thus not only saving wear and tear, but
saving also no inconsiderable amount of motive
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consumers are invited to make their experiments on such jour-
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5th. It is sweet and clean, and entirely free from all
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Also,—

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Buyers are requested to give this OIL a trial, as it is be-
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**CHEAPEST, CLEANEST AND BEST
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CERTIFICATES from a large number of Railroad
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THIS celebrated GREASE has been in use upwards of
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Thousands of Gallons, prove this Oil to be superior
for Burning, and TWENTY-FIVE per cent. more
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WILL NOT GUM

In no case has it failed to meet the approval of the consumer.

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AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 18.]

SATURDAY, APRIL 30, 1859.

[WHOLE No. 1,202, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, April 30, 1859.

Central Railroad of New Jersey.

The following is a comparison of the receipts, expenses and net earnings of the Central railroad of New Jersey for the fiscal year ending March 31, 1859, with the previous fiscal year:—

	1859.	1858.	Increase.
Receipts..	\$870,953	\$682,940	\$188,013 or 28 per ct.
Expenses..	350,281	325,748	24,533 or 8 per ct.

Netearn'g's. \$520,672 \$357,192 \$163,480, or 46 per ct.

The following disposition has been made of the net earnings:

Interest on \$3,000,000 bonds	\$210,000 00
Interest on incomes, notes, &c	46,672 26
Loss in redeeming \$260,000 income bonds	20,650 00
Sundry charges for depreciation	13,499 01
Income bonds towards loss on future purchases	6,000 00
Taxes to State	23,854 34
Dividend, ten per cent.	200,000 00

Total.....\$520,675 61

This dividend, which has been made in stock, represents that amount of the net earnings applied to the redemption of the income bonds, estimating them at the rate at which they were issued.

Montgomery and West Point Railroad.

The annual meeting of the stockholders in this road was held at Montgomery, Ala., on the 12th inst., at which the old board of directors were unanimously re-elected. At this meeting a resolution was passed agreeing to endorse, in connection with the railroad companies east, the bonds of such roads west of Montgomery as are necessary to fill the gaps between that point and Vicksburg, and to the extent necessary to insure the completion of those roads.

The annual report of the company for the fiscal year ending February 28th, 1859, was presented. From this we learn that the receipts during that time were:

From passengers	\$235,271 79
" freight	179,829 92
" mail	31,052 30
Total	\$446,153 92

And the expenses were—

Maintenance of road	\$80,170 23
Do. equipment	80,302 72
Operating road	51,974 52
Incidental	21,825 00
Interest paid on loans	65,050 68
	\$234,272 47
	302,323 15

Leaving a net income of

—a fraction over 10 per cent. on the capital stock of the Company paid in, amounting to \$1,419,672; out of which has been declared two semi-annual dividends of three dollars per share, amounting to \$86,302 46; leaving a surplus to the credit of Reserved Fund of \$57,528 31.

A comparison of the earnings of the past with those of the preceding year, shows a gratifying increase in each department. The total increase being \$55,269 87.

Since the completion of the road the business has steadily increased, as will be seen by the following statement:

1854.....	\$230,046 65	1857.....	\$385,723 53
1855.....	249,628 69	1858.....	390,884 05
1856.....	332,873 91	1859.....	446,153 92

The trains have been run with unusual regularity and freedom from accident or serious detention, and during a period of four months, not a single mail train failed to make its regular connection with the adjoining roads.

There have been carried over the road during the year, 104,094 passengers, none of whom have received the slightest injury; and the loss of damage to freight, and property of all kinds transported, has been but \$887 94, being, less than one fifth of one per cent. of gross receipts.

The condition of the road and outfit in every department has been as rapidly improved and increased as the means of the company would warrant. Within the past four years, trestle work has been replaced by permanent earth work, and substantial stone culverts and abutments have been constructed wherever it could be done to advantage. Of the 48 miles of flat bar iron then in use but five miles now remain, which will be replaced with T rail by the 1st of October next.

The equipment of the road consists of 20 engines; 12 first class, 2 second class, 10 baggage and mail, and 262 freight and construction cars: to which four locomotives and fifty freight cars will be added during the present year.

GENERAL STATEMENT.

Capital stock	\$1,419,672 00
Due State of Alabama	122,621 77
Coupon bonds due May 1, 1860	\$100,000
Coupon bonds due May 1, 1863	150,000
Coupon bonds due May 1, 1865	100,000
Coupon bonds due July 1, 1866	450,000
	800,000 00
Due on open account	18,956 90
Net earnings for 1858-9	\$143,830 77
Less div. Nov. 1, 1858	42,588 72
	101,242 05
	\$2,462,492 72

Cost of road—including bridge over the Chattahoochee	\$1,819,403 21
Cost of engines and cars	279,435 00
" shops and tools	49,050 85
Real estate and depot buildings	47,704 61
Wood etc., on hand	5,536 30
Ala. and Florida railroad stock	100,000 00
Negroes, etc.	59,306 86
Cash and cash items	102,056 39
	\$2,462,492 72

OFFICERS.

C. T. POLLARD, *President.*
W. H. POLLARD, *Treasurer.*
DANIEL H. CREAM, *Superintendent.*

TREATISE OF THE PRINCIPLES OF CIVIL ENGINEERING AS APPLIED TO THE CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, Civil Engineer,
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 261.)

§ 79. When the beam is not a solid one, but a combination, like a bridge truss, of parts acted upon only by thrust or tensile strains, the directions of those strains are coincident with the direction of the fibre of the timber, and considerable modifications, in the application of the foregoing principles, will sometimes be necessary.

Fig. 37.



pp. This is one of the simplest forms of truss in use. The weight (W) is applied at the middle, and is sustained equally by the abutments (a and b). It acts, also, obliquely through the braces (ac and bc), giving rise to horizontal forces which are counteracted by the tie or chord (ab).

Suppose the height of truss 1 yard, and span, 6 yards. The length of the rafters or braces (ac and bc) $\sqrt{3^2+1^2}=3.162$ yards, and the weight (W) 1,000 lbs.

The oblique thrust of the braces will then be $cd : cm :: W : \text{thrust}$; or, $1 : 1.581 :: 1,000 : 1,581$ lbs. The tension upon the chord (ab) will be $cd : om :: W : \text{tension}$; or, $1 : 1.5 :: 1,000 : 1,500$ lbs.

Fig. 38.



qq. Fig. 38 is another form of truss, of the same span and height as the last, but composed of two pairs of rafters or braces, of unequal lengths, arranged for the support of equal weights, at one-third the distance from each abutment.

Now, of the weight applied at d , two-thirds are sustained at a , and one-third at b ; for $dp = \frac{1}{3}df$, and $do = \frac{2}{3}df$. Consequently, if the weight at d be 1,000 lbs., the brace ad will be subject to a vertical pressure of 666 $\frac{1}{3}$ lbs., and the brace bd to a vertical pressure of 333 $\frac{1}{3}$ lbs.

The length of the brace ad will be $\sqrt{2^2+1^2}=2.236$ and of the brace bd $\sqrt{4^2+1^2}=4.123$. The oblique strains upon the braces will then be,

$$1 : 2.236 :: 666\frac{1}{3} : 1,490\frac{1}{3} \text{ lbs., on } ad, \text{ and}$$

$$1 : 4.123 :: 333\frac{1}{3} : 1,374\frac{1}{3} \text{ lbs., on } bd.$$

The tension upon the chord (ab) will be,

$$dp : pn :: df : fa :: 1 : 2 :: 666\frac{1}{3} : 1,333\frac{1}{3} \text{ lbs.; or,}$$

$$do : om :: df : fb :: 1 : 4 :: 333\frac{1}{3} : 1,333\frac{1}{3} \text{ lbs.}$$

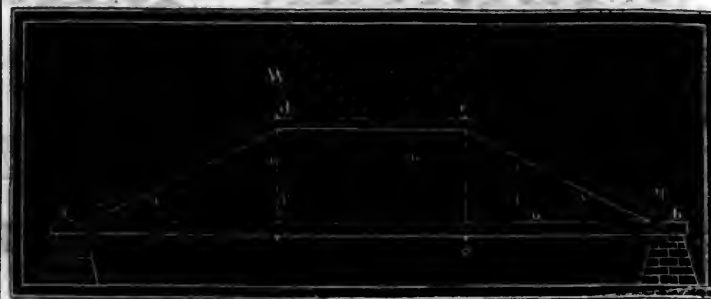
rr. In the other example, (**pp.** Fig. 37), where the weight was applied at the centre, the tension was found to be 1,500 lbs. These tensions are therefore, as the rectangles of their respective segments, (§ 78), that is:

$$3 \times 3 : 4 \times 2 :: 1,500 : 1,333\frac{1}{3}.$$

ss. Placing another weight of 1,000 lbs. at e , an additional tension of

1,333 $\frac{1}{3}$ lbs. will be produced, making a total horizontal strain, upon the whole length of the chord (ab), of 2,666 $\frac{1}{3}$ lbs.

Fig. 39.



tt. Fig. 39 is a truss of the same length and height as in the last two cases, but has a straining beam (de), one-third the span in length, instead of the two longer braces (ae and bd , Fig. 38).

If at d , one-third of the span from a , a weight of 1,000 lbs. be applied, $\frac{1}{3}$ of that weight (§ 77) will be sustained at a and $\frac{2}{3}$ at b . The strains, to which the brace ad will be subjected, are, vertical 666 $\frac{1}{3}$ lbs., oblique 1,490 $\frac{1}{3}$ lbs., and horizontal 1,333 $\frac{1}{3}$ lbs., precisely as in Fig. 38.

This horizontal thrust acts, equally, upon the chord in the direction ba , and upon the straining beam in the direction de .

The vertical and horizontal pressures are to each other, as $dp : pn$, and $do : om$, but, $do : om :: df : fb$; and $do : dm :: df : db$.

Thus the resultant, of the vertical and horizontal forces on this side of the weight, is represented in force and direction by dm , and, also, in direction by db .

One-third of the weight at d will, therefore, act upon the abutment b , through the intervention of the straining-beam and braces with the same vertical and horizontal forces, as it would through a straight brace from d to b , as in Fig. 38, for $do : dm :: 1 : \sqrt{4^2+1^2} = \sqrt{17} = 4.123 :: 333\frac{1}{3} : 1,374\frac{1}{3}$.

The brace be is resisted at b by a vertical pressure $bq = ru = do = 333\frac{1}{3}$ lbs.; and by a horizontal pressure $bu = om = 1,333\frac{1}{3}$ lbs., the resultant of which is $br = dm = 1,374\frac{1}{3}$ lbs. Resolving this force again, into those of de and eb ,

$$bd : br :: de : rs, \text{ and } bd : br :: be : bs, \text{ and}$$

$$br : bt :: 4.123 : 4.472 :: 1,374\frac{1}{3} : 1,490\frac{1}{3} = bt;$$

but $bs = \frac{1}{3}bt = 745\frac{1}{3}$, therefore the oblique thrust of the brace be is one-half that of ad .

Fig. 40.



uu. This truss is in every respect like the last one, but with two equal weights applied at equal distances from the middle, as in Fig. 38. The horizontal strain upon the chord, as the effect of 1,000 lbs. vertical pressure at d , was 1,333 $\frac{1}{3}$ lbs. It may, at first, seem reasonable to conclude that the effect of another weight of 1,000 lbs. applied at e , will be the same, and that the joint effect of the two vertical pressures, will be a horizontal strain of 2,666 $\frac{1}{3}$ lbs. This, however, is not the result.

By substituting the straining-beam (de) in place of the long braces in Fig. 38, the whole vertical force acts upon the short braces and at a greater angle with the horizon, than when divided between the braces of unequal length.

In Fig. 38, two-thirds of the weight act upon the braces under an inclination of 1 : 2, and one-third of the weight acts under an inclination of 1 : 4. Their horizontal results sum up 2,666 $\frac{1}{3}$ lbs., that is, $1 : 2 :: 666\frac{1}{3} : 1,333\frac{1}{3}$ and $1 : 4 :: 333\frac{1}{3} : 1,333\frac{1}{3}$.

But in the present case (Fig. 40), the whole weight acts upon the braces under an inclination of 1 : 2.

With 1,000 lbs. at d the vertical pressure at a was 666 $\frac{1}{3}$ lbs., and at b 333 $\frac{1}{3}$ lbs. Putting the other weight of 1,000 lbs. at e , the pressure at a will be increased 333 $\frac{1}{3}$ lbs. and at b 666 $\frac{1}{3}$ lbs., so that the two weights will counter-balance each other. The vertical pressure, at each of the points a and b , will be 1,000 lbs., and the same at d and e . Then

$$df : af :: 1 : 2 :: 1,000 : 2,000 \text{ lbs.}$$

Therefore, the horizontal thrust of the brace (ad), the tension upon the chord (ab), and the crushing tendency upon the straining-beam (de) will be equal to 2,000 lbs.

Again. The weights are applied at one-third the distance from the middle of the truss, and act upon the middle point with two-thirds their vertical force, or 1,333 $\frac{1}{3}$ lbs. Then

$$1 : 3 :: \frac{1,333\frac{1}{3}}{2} : 2,000 \text{ lbs. That is}$$

the height of truss : $\frac{1}{3}$ the span :: $\frac{1}{3}$ weight at middle : horizontal strain.

vv. If the whole weight (2,000 lbs.) had been applied at the middle, the horizontal strain would have been $1 : 3 :: \frac{2,000}{2} : 3,000$ lbs.; and if the whole weight had been evenly distributed, from one end to the other of the truss, the horizontal effect would have been the same, as would be produced by 1,000 lbs. applied at the middle, (§ 28); or, $1 : 3 :: \frac{1,000}{2} : 1,500$ lbs.

Now, $1,500 : 1,333\frac{1}{3} :: 3 \times 3 : 2 \times 4$, that is, the horizontal effect produced by a weight uniformly distributed, is to that of one-half the same weight applied at one point, as the square of one half the span, is to the rectangle of the two segments of the span.

Different forms of truss for the support of three cross beams, or of weights applied at three equi-distant points, are represented by Fig. 41, 42 and 43.

Fig. 41.



ww. The height of this truss is $\frac{1}{2}$ its span. Constructing the parallelograms of forces, the strains upon its several parts are found to be as follows:

The weight at d , upon the central pair of braces, is equally divided between the two. The vertical pressure upon each is, therefore, $\frac{1}{2}W$. The oblique thrust is

$$1 : \sqrt{(2^2 + 1^2)} = \sqrt{5} = 2.236 :: \frac{1}{2}W : 1.118W.$$

$$\text{The horizontal strain is } 1 : 2 :: \frac{1}{2}W : W.$$

Putting the weight $W = 1,000$ lbs., these strains will be 1,118 lbs. oblique, and 1,000 lbs. horizontal.

The weight at e , upon the braces ac , bc is divided between the two, unequally, for

$$ef : co :: 1 : \frac{1}{2}, \text{ and } of : cp :: 1 : \frac{1}{2}. \text{ Then}$$

$$1 : \frac{1}{2} :: W : \frac{1}{2}W = \text{vertical pressure on brace } ac, \text{ and}$$

$$1 : \frac{1}{2} :: W : \frac{1}{2}W = \text{vertical pressure on brace } bc.$$

The lengths of these rafters are:

$$\sqrt{(1^2 + 1^2)} = \sqrt{2} = 1.414 = \text{length of brace } ac.$$

$$\sqrt{(3^2 + 1^2)} = \sqrt{10} = 3.162 = \text{length of brace } bc.$$

Their oblique strains are:

$$1 : 1.414 :: \frac{1}{2}W : 1.0605W = \text{thrust of } ac,$$

$$1 : 3.162 :: \frac{1}{2}W : 0.7905W = \text{thrust of } bc,$$

and the horizontal strain is,

$$cf : om :: 1 : \frac{1}{2}, \text{ or as } cf : pn :: 1 : \frac{1}{2}, \text{ and}$$

$$1 : \frac{1}{2} :: W : \frac{1}{2}W = \text{tension on } ab.$$

Putting $W = 1,000$ lbs., then the strains will be—

$$1,060\frac{1}{2} \text{ lbs. oblique thrust of } ac,$$

$$790\frac{1}{2} \text{ " " " thrust of } bc,$$

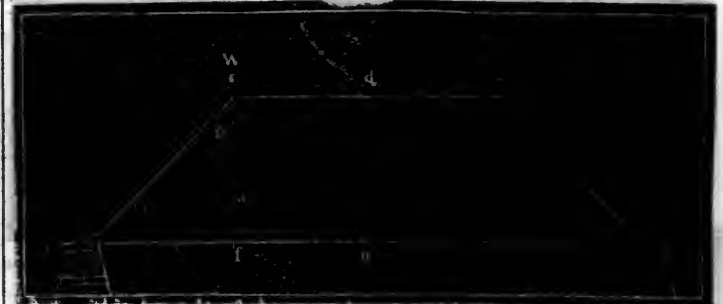
$$750 \text{ " " tension on } ab.$$

The horizontal effect of the weight at d is to the horizontal effect of the weight at e as the rectangle of the segments ah , hb to the rectangle of the segments af , fb , for $2 \times 2 : 3 \times 1 :: 4 : 3 :: 1,000 : 750$.

Applying the third weight of 1,000 lbs. at e , the sum of the horizontal strains upon the chord ab will be—

$$\frac{1}{2}W + W + \frac{1}{2}W = 2\frac{1}{2}W; \text{ or, } 750 + 1,000 + 750 = 2,500 \text{ lbs.}$$

Fig. 42.



xx. This truss is of the same length and height as the last; but consists of a straining beam half the span in length, and two braces of the length of the shortest in Fig. 41, instead of the three pairs of braces. Also, the tie-beams or chord common to both trusses.

First, place a single weight at c and construct the parallelogram of forces $acdf$, making $co = \frac{1}{2}cf$, to represent the vertical pressure at a , and $cp = \frac{1}{2}cf$, the vertical pressure at b . The horizontal thrust of the brace ac , will be $\frac{1}{2}W$, for $cf : om :: 1 : \frac{1}{2}$, and $1 : \frac{1}{2} :: W : \frac{1}{2}W$, as in Fig. 41.

The horizontal pressure in the direction ce is $pn = om$, and cp is the vertical pressure on that side of c . The resultant of these two pressures is cn and acts in the direction cb .

The oblique thrust of the brace ac is—

$$cf : co :: 1 : \frac{1}{2} :: ca : cm :: \sqrt{2} = 1.414 : 1.0605 :: 1.414W : 1.0605W.$$

Similarly it may be shown that the oblique thrust of the brace bc is $0.3535W = \frac{1}{2}$ of the thrust of ac .

Putting the weight W equal 1,000 lbs., the thrust in the direction of the brace ac will be 1,060.5 lbs., of the brace bc 353.5 lbs., and the tension upon the chord 750 lbs.

At e place another weight of 1,000 lbs., and the two weights will counter-balance each other. The weight at c will be wholly supported by the brace ac , and the weight at e will be sustained by the brace bc .

Each brace will be subjected to an oblique strain of $1,060.5 \text{ lbs.} + 353.5 = 1,414 \text{ lbs.} = 1,000 \text{ lbs.} \times \sqrt{2}$, and to a horizontal thrust of 1,000 lbs., for

$$1 : 1 :: W : W :: 1,000 : 1,000.$$

A third weight of 1,000 lbs., at d , will depend for its support upon the stiffness of the straining-beam, one half bearing at c , and one-half at e .

The vertical action upon each brace will be increased to $1.5W = 1,500$ lbs.; their oblique thrusts $1.5W \times 1.414 = 2,121$ lbs., and their horizontal thrusts to $1.5W = 1,500$ lbs.

Fig. 43.



yy. For the purpose of relieving the top chord from a transverse strain, and of transferring the vertical effect of a weight at d , to the extremities of the top chord (ce), it is usual to insert the intermediate braces df , dg .

By means of these, one-half the vertical pressure at d is transmitted to g , and thence by the tension of the vertical tie (eg) to e . The other half of the pressure is in like manner transmitted to f , and thence to c .

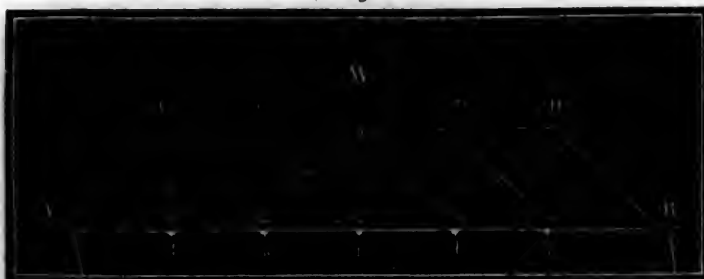
The oblique strains upon these central braces will be $\frac{1}{2}W \times 1.414 = 0.707W = 707$ lbs., or exactly $\frac{1}{2}$ of the strain upon the end braces.

The horizontal thrust of these braces will be—

$$1 : 1 :: 1.5W : 1.5W :: 500 : 500 \text{ lbs., acting only between } f \text{ and } g.$$

The horizontal strains upon the bottom chord, are between f and $g=2,000$ lbs., and between the points a and f , and b and $g=1,500$ lbs.

Fig. 44.



zz. This figure exhibits a truss of six panels, for the support of a load at five equi-distant points between the abutments. The height is $\frac{1}{3}$ of the span, and, consequently, the panels are square, or their sides are equal.

The weight ($W=1,000$ lbs.) acts directly, as in the other cases, upon the points A and B.

The total horizontal strain upon the chords, with the weight at the middle of the truss, is

$$ir : Ar :: io : mo :: 1 : 3 :: \frac{1}{4}W : \frac{3}{4}W :: 500 : 1,500 \text{ lbs.}$$

If the abutments were to be removed to g and h , the horizontal strain upon the chord, between those points would become—

$$ir : gr :: io : m'o :: 1 : 2 :: \frac{1}{4}W : W :: 500 : 1,000 \text{ lbs.}$$

Again, supposing the abutments to be removed to k and l , the horizontal strain, between k and l , will be—

$$ir : kr :: io : m'o :: 1 : 1 :: \frac{1}{4}W : \frac{1}{4}W :: 500 : 500 \text{ lbs.}$$

With the abutments at A and B the horizontal thrust in the direction rA is 1,500 lbs., which is equally balanced by a corresponding thrust (§ 78) in the direction rB . The effect of transferring the weight to g and h through the intervention of the intermediate braces, is to intercept, between those points, 1,000 lbs. of that total thrust. That is, of the 1,500 lbs. acting upon A in consequence of the strain in the direction of B, 1,000 lbs. are counteracted by the thrust of the braces ik and eg in the direction of A.

Of the 1,000 lbs. acting between g and h , 500 lbs. are intercepted between k and l ; so that the horizontal strains upon the several portions of the chord are as follows:

$$\begin{aligned} \text{Between } k \text{ and } l & \dots \dots \dots 500 + (1,000 - 500) + (1,500 - 1,000) = 1,500, \\ \text{" } g \text{ " } k \text{ and } l \text{ and } h & (1,000 - 500) + (1,500 - 1,000) = 1,000, \\ \text{" } A \text{ " } g \text{ " } h \text{ " } B & (1,500 - 1,000) = 500. \end{aligned}$$

The horizontal strains upon the portions Ag , gk and kr , are, therefore, directly as the distances Ag , gk and kr , from the abutment A. The weight (W) being at the middle of the truss, the oblique thrust of the braces will be uniform, or equal to each other, as will be seen on another view of the pressures produced by that weight.

It has been found that while the horizontal strains vary as mo , $m'o$ and $m''o$, the vertical pressures (io) remain constant.

The horizontal thrust of the brace ik is $m'o = \frac{1}{4}W = 500$ lbs. The vertical $\frac{1}{4}W$ is transferred to e , and the horizontal thrust of the brace eg is $m'm' = m'm' = (m'o - m'o) = 500$ lbs. The $\frac{1}{4}W$ is again transferred to C, and the horizontal thrust of the brace CA, is $mm' = (mo - m'o) = 500$ lbs.

Fig. 45.



aaa. This is a truss of seven square panels with $\frac{1}{6}$ of the whole weight ($\frac{1}{6}W$) applied at each vertical tie.

The vertical pressures at a and b will be, of the—

$$\begin{aligned} \frac{1}{6}W \text{ at } ci, \quad \frac{6}{7} \times \frac{1}{6}W &= \frac{6}{42}W \text{ at } a \text{ and } \frac{1}{7} \times \frac{1}{6}W = \frac{1}{42}W \text{ at } b, \\ \frac{1}{6}W \text{ at } el, \quad \frac{5}{7} \times \frac{1}{6}W &= \frac{5}{42}W \text{ " " " } \frac{2}{7} \times \frac{1}{6}W = \frac{2}{42}W \text{ " " " } \\ \frac{1}{6}W \text{ at } gn, \quad \frac{4}{7} \times \frac{1}{6}W &= \frac{4}{42}W \text{ " " " } \frac{3}{7} \times \frac{1}{6}W = \frac{3}{42}W \text{ " " " } \\ \frac{1}{6}W \text{ at } ho, \quad \frac{3}{7} \times \frac{1}{6}W &= \frac{3}{42}W \text{ " " " } \frac{4}{7} \times \frac{1}{6}W = \frac{4}{42}W \text{ " " " } \\ \frac{1}{6}W \text{ at } fm, \quad \frac{2}{7} \times \frac{1}{6}W &= \frac{2}{42}W \text{ " " " } \frac{5}{7} \times \frac{1}{6}W = \frac{5}{42}W \text{ " " " } \\ \frac{1}{6}W \text{ at } dk, \quad \frac{1}{7} \times \frac{1}{6}W &= \frac{1}{42}W \text{ " " " } \frac{6}{7} \times \frac{1}{6}W = \frac{6}{42}W \text{ " " " } \end{aligned}$$

$$\text{Total } W \quad 3 \times \frac{1}{6}W = \frac{1}{2}W \text{ at } a \text{ and } 3 \times \frac{1}{6}W = \frac{1}{2}W \text{ at } b.$$

The panels being square the horizontal thrust of each brace will be equal to the vertical pressure upon it. The oblique strains will be $\sqrt{2}=1.414$ times the vertical pressure.

Assuming 60,000 lbs. as the whole weight (W) upon the truss, or 10,000 lbs. ($\frac{1}{6}W$) applied at each vertical tie, the pressures upon the braces, taken in pairs, will be

$$\begin{aligned} \text{Vertical on } gl \text{ and } hm, & 10,000 \text{ lbs. each,} \\ \text{" " } ei \text{ " } fk, & 20,000 \text{ " " } \\ \text{" " } ca \text{ " } db, & 30,000 \text{ " " } \end{aligned}$$

and the horizontal and oblique strains, or thrusts of the braces will be, on

$$\begin{aligned} gl \text{ and } hm & 10,000 \text{ lbs. horizontal and } 14,140 \text{ oblique,} \\ ei \text{ " } fk & 20,000 \text{ " " " } 28,280 \text{ " } \\ ca \text{ " } db & 30,000 \text{ " " " } 42,420 \text{ " } \end{aligned}$$

The horizontal strain upon the bottom chord will be between

$$\begin{aligned} a \text{ and } i \text{ and between } b \text{ and } k, & 30,000 \text{ lbs.} \\ i \text{ " } l \text{ " " } k \text{ " } m, & 50,000 \text{ " } \\ l \text{ " } m & \dots \dots \dots 60,000 \text{ " } \end{aligned}$$

These six weights act upon the middle of the truss with an energy equal to $\frac{2}{7} + \frac{4}{7} + \frac{6}{7} + \frac{6}{7} + \frac{4}{7} + \frac{2}{7} = \frac{24}{7}$ of one of them, or $\frac{4}{7}$ of the entire weight $= 34,285\frac{1}{2}$ lbs, then $4 : 7 :: 34,285\frac{1}{2} : 60,000$; or,

$$2 : 7 :: \frac{34,285\frac{1}{2}}{2} : 60,000 \text{ lbs.}$$

By applying an additional weight of 5,000 lbs. at one fourth of the width of a panel from a , and another weight of 5,000 lbs. at the same distance from b , they will act upon the middle with $\frac{1}{4}$ of their weight equal to 714 $\frac{3}{4}$ lbs.

The whole weight will then be 70,000 lbs.

The pressures at the middle will be $34,285\frac{1}{2} + 714\frac{3}{4} = 35,000$ lbs. and the truss may be considered as uniformly loaded. The horizontal strain will become $2 : 7 :: \frac{35,000}{2} : 61,250$ lbs.

Fig. 46.



bbb. This figure represents a truss of the same span and middle height as in Fig. 45. The other heights (el and ci) are 0.9, and 0.7 the middle height.

With the same vertical pressures as in the last case the horizontal thrust of the braces will be,

$$\begin{aligned} 1 : 1 :: 10,000 : 10,000 \text{ lbs. horizontal thrust brace } gb, \\ .9 : 1 :: 20,000 : 22,222 \text{ " " " } ei, \\ .7 : 1 :: 30,000 : 42,857 \text{ " " " } ca. \end{aligned}$$

The horizontal strain on the bottom chord will be—

Between *a* and *i* and between *b* and *k*, 42,857 lbs.
 " *i* " *l* " " *k* " *m*, 65,079 "
 " *l* " *m*.....75,079 "

The oblique thrusts of the braces will be—

1: $\sqrt{2}=1.414 :: 10,000 : 14,140$ lbs.
 .9: $\sqrt{(1^2+.9^2)}=1.345 :: 20,000 : 26,900$ lbs.
 .7: $\sqrt{(1^2+.7^2)}=1.220 :: 30,000 : 36,600$ "
 (To be continued.)

Hannibal and St. Joseph Railroad.

This road commences at Hannibal, Mo., on the west bank of the Mississippi river, a few miles south of Quincy, Ill., and runs thence, via Palmyra and Hudson, to St. Joseph, on the Missouri river. At its eastern terminus a connection is formed with the Quincy and Chicago line by a steamer between Hannibal and Quincy. Upon the completion of the Quincy and Palmyra railroad, a still more direct route will be obtained, as the river terminus of the latter road will be directly opposite that of the Chicago line. The Mississippi terminus of the Peoria and Hannibal railroad, and the Great Western railroad of Illinois is directly opposite Hannibal. Upon the completion of these roads, a connection will be made through the former, with the Peoria and Oquawka, and the Bureau Valley and Rock Island roads; and through the latter with the Toledo and Western road to Toledo, the main line and branch of the Illinois Central, the Lafayette and Indianapolis, Pittsburg, Fort Wayne and Chicago, etc., etc. A direct connection is also made at Hudson with the North Missouri road, running thence to St. Louis; and at St. Joseph with steamers, for Kansas City, Council Bluffs, Nebraska City, Leavenworth, Lecompton, etc.

In the report of this company made to the Board of Public Works of Missouri in December last, the total length of the road is given at 206.8 miles. The higher gradients on the road reach 80, 90, 100, 110 and 122 feet per mile; the grade of 122 feet extends over .05 of a mile.

The capital stock authorized by the charter is 50,000 shares of \$100 each. The whole amount taken is 19,630 shares—upon which there has been paid in cash upon 10,980 shares, \$336,061 20; in county bonds \$82,000; 3,510 shares have been issued to contractors, and 3,140 shares to the Fiscal agency to be applied in settlement with the contractors—leaving to be paid, when assessed and called for, \$879,938 80.

The lands granted by Congress to the State of Missouri to aid in the construction of this road amount to about 600,000 acres. These lands have been mortgaged to secure the payment of bonds to the amount of \$5,000,000. These bonds are dated April 1, 1856, and are payable July 1, 1881, bearing 7 per cent. interest, payable semi-annually. These bonds were sold at a discount of \$1,649,000—the whole net proceeds being \$3,351,000. The interest to be paid by the company on these bonds is \$350,000 per annum.

The company has also authorized a further issue of its own bonds to the amount of \$1,500,000, secured by a second mortgage upon these lands, dated July 1, 1858, and upon the road and its appurtenances. Of these bonds, 757 have been issued, of which 447 have been sold, netting to the company \$268,200—the discount being \$178,800. The balance is to be applied in settlement with the contractors.

The whole number of State bonds authorized and issued to this company is 3,000—upon which the discount and commissions amount to \$567,301.94, the whole amount of net proceeds being \$2,432,698 06.

RECAPITULATION

Cash paid on stock subscriptions...	\$336,061 20
" proceeds of land bonds.....	3,351,000 00
" " convertible bonds.....	268,200 00
" " State bonds.....	2,432,698 06
	\$6,387,959 26
Discount, commission and exchange—	
On State bonds.....	\$567,301 94
On land bonds.....	1,649,000 00
On convertible bonds.....	178,800 00
	\$2,395,101 94
Whole number of shares taken 19,630.....	\$1,963,000 00
Received in cash upon	
10,980.....	\$336,061 20
In county bonds upon	
2,000.....	82,000 00
Issued to contractors	
3,510.....	351,000 00
Issued to Fiscal agency	
3,140.....	314,000 00
	\$1,083,061 20
Amount uncollected.....	\$879,938 80
Interest on 3,000 State bonds.....	\$180,000 00
" " 5,000 land bonds.....	350,000 00
" " 447 convertible bonds....	31,290 00
" " 11 plain bonds.....	770 00
State sinking fund on 20 years' bonds.....	37,500 00
" " " 30 " ".....	22,500 00
	\$622,060 00

GENERAL STATEMENT.

Receipts:

From stockholders.....	\$1,083,061 20
" State of Missouri in bonds....	3,000,000 00
" company mortgage bonds....	3,550,000 00
" plain bonds.....	11,000 00
" operating account.....	14,679 98
" land, rents, damages, etc.....	964 10
	\$7,659,705 28

Expenditures:

For engineering.....	\$177,513 94
" interest, discount, exchange, etc	2,006,260 45
" depot grounds.....	42,255 06
" land department.....	43,007 44
" construction.....	4,209,092 58
" depot building.....	90,102 04
" sinking fund on State bonds....	1,900 00
" fencing.....	6,271 41
" right of way, land damages, etc	54,061 55
" equipment.....	291,312 83
" expenses and contingencies....	244,144 87
County bonds in treasury.....	\$20,000 00
Cash in treasury.....	109,780 23
Balance Fiscal agency account.....	357,093 76
Balance contractors.....	6,939 12
	493,813 11
	\$7,659,705 28

OFFICERS.

J. W. BROOKS, Chairman of the board, and of the fiscal agency.

R. S. WATSON, Treasurer of the fiscal agency.

C. D. APPLETON, Secretary of the fiscal agency, and clerk of the board.

J. L. LATHROP, Secretary and Treasurer of the company.

JOSIAH HUNT, Chief Engineer, and Auditor.

J. T. K. HAYWOOD, General agent of the Company, and commissioner of land department.

WM. CARSON, Secretary of the land department.

Memphis and Charleston Railroad.

The Memphis Appeal furnishes the following in relation to this road and its Southern and Eastern connections:

The road has contracted for eleven new locomotives, twelve first class and five second class passenger cars, four baggage and mail cars, and eight through baggage-cars, all of which are now coming on the road, preparatory to running the double daily train on the 1st of July next. The most approved night-sleeping cars have been contracted for, and will be delivered and put on the road on the 1st of July next. The company have already commenced letting out permanent stone culverts, and filling in their trestle-work, in order that the road shall finally be a solid road-bed from one end to the other, and capable of as high a rate of speed as is obtained on any first-class road in this or any other country.

On and after the 1st of June next two daily trains will leave this city on this road. Arrangements have been perfected to put on a double daily train upon the Great Southern mail line between New Orleans and New York, via Grand Junction and the Memphis and Charleston railroad, through East Tennessee and Virginia, on the first day of June next, without fail. The convention of the line meets at Chattanooga, May 2, to perfect the schedule for this purpose. The Cleveland branch will be finished by or before that time, taking out one stop, reducing the distance twenty-eight miles, and saving several hours' time. The Mississippi Central is now laying track rapidly, and will every week reduce the staging till the connection is closed between Grand Junction and New Orleans, which will be done certainly by November or December next. By the same time it is confidently believed that the Orange and Alexandria road will be completed from Charlottesville to Lynchburg, thereby saving one hundred and twenty miles more line and three changes. The finishing of these cut-offs, which will be done this year, completes the great Southern mail-line between New Orleans, Memphis and New York, Philadelphia, Baltimore, Washington, Richmond, Charleston, and the entire Atlantic seaboard, by the shortest and most practicable route that a line of road of its length can ever be built. This line will then be reduced to the following distances and time, and will defy all competition, say:

	Miles.
New Orleans to Grand Junction.....	194
Grand Junction to Chattanooga.....	257
Chattanooga to Bristol.....	240
Bristol to Lynchburg.....	204
Lynchburg to Washington.....	174

Total.....1,259

Making the distance from New Orleans to Washington city only 1,259 miles, which, at twenty miles per hour, (certainly moderate speed for good roads,) will only require *sixty-four hours!* The distance between Memphis and Washington will be reduced to 929 miles, which, at the same rate per mile, will be run in less than forty-eight hours.

The earnings of the Memphis and Charleston road for the month of March were as follows:—From passengers, \$58,318; freight, \$42,657; express, \$1,651; mails, \$4,597; total, \$107,225. The expenses for the month were \$45,000, leaving a net profit of \$62,217. This shows an increase on the business of the road for the last nine months, from July 1 to April 1, of \$1,015,000, and a net profit of \$650,000—a handsome show for a road costing with its equipments less than \$6,500,000.

Memphis, Clarksville and Louisville R. R.

We learn from the Memphis Avalanche, that track laying has been commenced on this road between Clarksville and the tunnel. The iron has been laid down five miles south of Bowling Green, and by the 1st of October the calculation is that the rails will meet at the tunnel, with the exception of which the entire track through will be completed.

Journal of Railroad Law.**LIABILITY OF RAILROAD COMPANY FOR CONSEQUENCES OF STRIKE AMONG ITS EMPLOYEES.**

About the 19th of June 1854, one Blackstock delivered a quantity of potatoes to the New York and Erie Railroad Company, at Hornelsville and vicinity, to be carried to New York. The potatoes were not delivered at New York until about the 10th of July following. They were then found to be decayed and rotten, resulting from their having been kept too long during hot weather in the packages in which they were put up to be forwarded. In the usual course of business on the line of the New York and Erie railroad they would have gone through in three or four days, instead of which they were detained eighteen or twenty.

Blackstock sued the company for the damages thus sustained. In defence they showed that the delay was owing to a strike on the part of the engineers, and their refusal, for a period of about two weeks, to work. It appeared that the company had adopted a new rule for the management of the road, which was beneficial and salutary in its operation as respects the public, but gave offence to the engineers employed on the road, so much so that one hundred and forty out of one hundred and sixty-eight engineers in the employment of the company, stopped work, and thus for about a fortnight the regular running of the trains was prevented. The defendants did all in their power to resume running as soon as possible.

The New York Superior Court before which the cause was argued on appeal, held this was not a defence to the action, but the company were liable for their failure to carry the potatoes promptly. The following is an abstract of the reasons assigned by the court.

WOODRUFF J.—after citing and explaining some authorities to the general rule, that in respect to the time of delivering goods a common carrier is only bound to use due diligence; and is not liable for delays occurring without his fault.

The liability of the master for a neglect of duty by the servant exists independently of the question whether there is any fault in the master himself. True, the master is sometimes held liable for the employment of an improper or unskilful servant, but he is often liable when no blame attaches to himself personally. And, for the same reason, he may not excuse himself for a failure to perform a duty which he owes to third persons, by showing that his servant, who was charged with its performance, neglected or refused to do it. The master, assuming to perform the duty, assumed also the hazard of the competency and fidelity of the servants whom he employs.

The same rule must be applied to corporations. Their operations are, necessarily, conducted by the instrumentality of agents, and to say that the want of fidelity on the part of their servants excuses them from the performance of any duty which they owe to third persons, would be practically, to exempt them from any negligence, or any misfeasance, which was not the immediate or necessary consequence of a corporate act.

The present case is, undoubtedly, one of some hardship. It cannot, for a moment, be claimed that a combination, resulting in a refusal to work, by one hundred and forty out of one hundred and sixty-eight men of skill, whose services were indispensable to the conduct of the defendants business, ought to have been foreseen, when there was

no just cause for such a refusal: and it was probably impossible by any ordinary means to have supplied their places on the day on which their refusal took effect; indeed, on so short a notice as the defendants received, it may be regarded as quite impossible. Nevertheless we must regard the hazard of such an occurrence as resting upon the employers. They alone had it in their power to secure, by proper contracts, indemnity against the consequences of misconduct by the employee. The owner of goods has no control, or right of interference in the matter, and we perceive no ground on which to relieve the defendants from the hazard to which the nature of their business, and the vast extent to which it involves the employment of assistants, necessarily subject them. And although they are, in a degree, placed within the power of extensive combinations among their servants, that, we think, furnishes no legal reasons for visiting the consequence upon third persons. Practically, the defendants in such circumstances may suffer by the misconduct of their servants, without redress, but the law imposes no such hardships, on the contrary it will hold the unfaithful servant liable for the direct and immediate consequences of his own fault, and this will, so far as the law can do so, give to the master indemnity.

It ought not to be doubted, and probably would not be doubted, that if, by the negligence of a single engineer in charge of a train, or by his perverse refusal to perform his duty, his train was unnecessarily detained, the company would be liable for the delay. When the delay is said to be excused if it happen without their "fault," the term is not used as imputing personal blame, but it means without fault on their part, in their servants or otherwise.

If this be so it is difficult to perceive how, in principle the rule of liability is affected by increasing the number of servants who are guilty.

An individual carrier may be so conducting his business, that it is only necessary for him to employ one servant to drive one of his wagons; suppose that servant, when at a distance on his journey, abandons the wagon, and days elapse before the carrier hears of its non-arrival, or learns the cause. In such case, assuming that there was no want of care or judgment in selecting his servant, the delay was as to the master personally, without his fault, and in a sense unavoidable, and yet he cannot be held excused. The fidelity of the servant was at his risk,—the fault of his servant is, in a legal sense, his fault.

We cannot think the rule would be otherwise if his business require him to employ a hundred servants, and they all prove unfaithful; such a case is, of course extraordinary, and may create a hardship, but we do not perceive that any new rule is to be prescribed for that reason. If it may be, what number of servants must combine to call for its application? No answer to this question suggest itself to our minds.

We apprehend the rule then to be that the causes of delay, which will excuse a carrier from the performance of his duty to carry within the usual or ordinary period required for the transportation he undertakes, must be those only which occur without his fault, or the fault of his agents, servants or employees.

And a hinderance caused by the tortious act of

third persons, over whom the carrier has no control, and to whom he stands in no relation involving responsibility for their acts or defaults, will excuse his delay, according to the cases above referred to. Unless then the defendants were in the present case hindered in transporting the goods, without their fault, or that of their agents, or servants, they are liable in this action.

Their answer in terms avers that the delay was caused by the wrongful refusal of their engineers, agents and employees, to perform their duty, or to obey the defendants just and necessary rules, etc. And the referee has found that the delay was occasioned by a strike of the defendants engineers, and their refusal to work.

If the views above expressed are correct, and we do not doubt that they are, then upon this finding, and this statement in the answer, the defendants are liable.

Ashtabula and New Lisbon Railroad.

We learn from the Youngstown Register, that the Board of directors of this company, recently in session at Canfield, Ohio, have decided to resume the prosecution of the work, from that place to the Pittsburg, Fort Wayne and Chicago road immediately, and finish the grading and have the road-bed ready for the iron by fall; and to have it ironed and in running order as soon thereafter as it can be done. A resolution was passed to apply all the stock subscribed in Canfield and Greene townships to accomplish the grading, and there is probably enough subscribed to do it, if it shall all be promptly paid up. Arrangements, we understand, are in progress, to obtain the iron, and have it in readiness as soon as the grading is finished. Efforts will also be made to construct the road north to Niles as rapidly as possible.

Weston and Atchison Railroad.

The St. Louis Republican states that a company was organized a few weeks since, under the general railroad law, styled "The Weston and Atchison railroad company," for the purpose of building a road on the most direct route connecting with the Atchison and St. Joseph road.

Pennsylvania Central Railroad.

The Board of directors of this road have declared a dividend of three per cent. on the capital stock of the company, clear of State tax, payable on and after the 15th of May next.

Railway Premium for a Steam Plow.

There being already, at the discretion of the Agricultural Society of Illinois, a premium of \$3,000 for the best practical and acceptable Steam Plow, the Executive committee of the Illinois Central railroad have added \$1,500 more, as follows:

Resolved, That the Central Railroad company offer \$1,500 as a premium for the best steam engine for plowing and other farm work; the simplicity and economy of its construction, and its practicability of application to farm uses shall be such that it can successfully compete with animal power for farm purposes; the award to be made by the Executive committee of the State Agricultural Society, in connection with three scientific machinists to be selected by that body. Before any party shall claim the payment of said award, he shall exhibit the practical working of said engine at three points on the line of the Illinois Central railroad, to be designated by the Vice President of the company; the said company agreeing to transport said engine to or from such points, free of expense to said party.

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$338,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	90	96
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	75	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1858		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1859		
Central Ohio	1,250,000	1st mort. conv. east sec.	7	Divers	"	1861-64	60	70
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	40	42
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	84	96
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1860	82	82½
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1865		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862		
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August.	"	1860	65	70
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August.	"	1863	60	67
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1863	75	80
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August.	"	1862-72	30	50
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	30	50
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1867	60	65
Covington and Lexington	400,000	Do. do.	6	April, October	"	1863	47	55
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1875	87	89
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1861	77	78
Florida Free Land	1,500,000	Do. not convertible	7	March, Sept.	"	1873	65	72½
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1863	93	94
Ga. and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August.	"	1875	90½	92
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1868		
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	84	88
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1873		
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1866		
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1860-61	70	80
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1866	87	90
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1874	75	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1865	71	73
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August.	"	1883	83	85
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1860	95	97
Michigan Central	1,000,000	No mortgage, convertible	6	April, October	Bost.	1869	92	93
Do. do.	600,000	Do. do.	8	March, Sept.	"	1862		
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1868		
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1877	67	72½
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1868-62		
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1864-75		
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1873		
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1867	70	75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1865-66	70	77½
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1872	57	62
Do. do.	2,000,000	Income, convertible	7	April, October	"	1880	100½	101½
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1875		
Racine and Mississippi	650,000	Do. conv. sink'g f'd	8	Feb'y, August.	N.Y.	1861		
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1865		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1866		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1862-77½	68	72
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"			

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	84	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	80½	81
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1883	69½	70
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1880	47½	49½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1876	20	23
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August.	"	1871	20	21
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	20	22
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	103	104
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	95	95½
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	79½	7½
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	88½	90
Do. (Free Land)	3,000,000	Mfg \$345,000 acrs—priv. 7 shar's	7	March, Sept.	"	1860	95	96
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	84	87
New York and Harlem	1,250,000	Do. do.	7	May, Novemb.	"	1861-72	94½	95
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1859-60	96	99
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	94	94½
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	81	83
Do. (Coush Branch)	1,500,000	Do. do.	8	Feb'y, August.	"	1868	71½	72
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1883	94	95
Do. do.	3,000,000	on m'g conv. from June 57-59	7	15 June, 15 Dec.	"	1864	101	104½
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	114	
Do. 2d do	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,000,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	85	85½
Do. do.	3,469,000	Do. inconvertible	6	April, October	"	1866	76	76½

CITY SECURITIES.	Int't payable.	Off'd	Ask'd	CITY SECURITIES	Int't payable.	Off'd	Ask'd
New York, 5 per ct. ....1858-60	{ May, August, November.	98½	99	Milwaukee, 7 per ct coup. X	Divers	45	70
Do. 5 do. ....1870-75		93	94½	New Orleans, 6 per ct. cp. R.R. X	Do.	75	80
Do. 6 do. ....1883		103	103½	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	87½	91
Do. 5 do. ....1890-98		92	92½	Philadelphia, 6 per ct. ....1876-98	Jan'y, July	100	100½
Albany, 6 per ct. coup. ....1871-81 X	Feb'y, August.	99	101	Pittsburgh, 6 per ct. coup. ....1873 X	Divers	46	50
Allegheny, 6 per ct. coup. ....1873-78 X	Jan'y, July	97	100	Quincy, 8 per ct. coup. ....1868 X	Jan'y, July	87	75
Baltimore, 6 per ct. ....1879-90	Quarterly.	97½	100	Racine, 7 per ct. coup. ....1873 X	10 Feb'y, Aug		80
Boston, 6 per ct. coup. ....1873-78 X	April October	101	102	Rochester, 6 per cent. coup. X	Divers	90	97½
Brooklyn, 6 per ct. coup. ....Long X	Jan'y, July	102½	103	St. Louis, 6 per ct. coup. ....Long X	Do.	84	85
Clev'd, 7 per ct. cp. W.W. 1879 X	Do. do.	100	103	Do. do. Municipal X	Do.	86	87
Cincinnati, 6 per ct. coup. ....1880 X	Divers	92½	95	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	35	40
Chicago, 6 per ct. coup. ....1873-77 X	Jan'y, July	93	96	S. Francisco, 7 p. ct. cp. 1865, pay. N.Y. X	May, Novemb.	60	70
Do. 7 per ct. coup. ....1880 X	Jan'y, July	97½	99½	Do. 10 p. ct. cp. ....1871 X	Do. do.	90	91
Detroit, 7 per ct. cp. W.W. 1873-78 X	Feb'y, August.	100	102	Do. 10 do. pay. N.Y. X	Jan'y, July		
Dubuque, 8 per ct. cp. ....Long X	March, Sept.		100	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	56	61
Forney City, 6 p. ct. cp. W.W. 1877 X	Jan'y, July	89	101	Wheeling, 6 per ct. coup. X	Divers	50	50
Indianapolis, 6 per ct. cp. ....1880-83 X	Divers	72	72½	Do. 6 p. ct. cp. Mun. ....1874 X	March, Sept.	80	81½
Memphis, 6 per ct. coup. ....1882 X	Jan'y July	61	70	Zanesville, 7 do. X	April, October		

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending April 25, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6½	
Covington and Lexington, 1st Mortgage	6½	
Do. do. 2d do.	7½	50
Do. do. Income	10½	
Ohio & Miss., E. D., Construction	7½	
Cinc. Ham. and Dayton, 1st Mortgage	7½	
Do. do. 2d do.	7½	83
Indianap. & Cincinnati, do. do.	7½	83½
STOCKS.		
Cincinnati, Hamilton & Dayton	66	
Columbus and Xenia	88	
Indianapolis & Cincinnati	66	
Little Miami	90	
Ohio and Mississippi (E. D.)	3	

Railroad Earnings.

Traffic of the Great Western Railroad, for the week ending April 15, 1859.

Passengers	\$23,020 97
Freight and live stock	12,369 37½
Mails and sundries	1,540 08½

Total \$36,930 40

Corresponding week of last year... \$53,483 34

The following is a statement of the earnings and expenses of the Connecticut River Railroad in the first quarter of 1858 and 1859:—

Total receipts	1858. \$41,501	1859. \$49,486
Operating expenses	23,765	27,732

Net earnings.....\$17,736 \$21,754

Net gain in 1859.....\$4,018

The receipts of the Grand Trunk Railway of Canada for the week ending April 9, were.....\$49,068 19

Week ending April 10, 1858 47,839 08

Increase\$1,229 11

Total traffic from July 1st.....\$1,769,117 22

Same period last year 1,847,962 65

Decrease\$78,845 33

The following is a comparative statement of the earnings of the Northern Central Railroad Company for the month of March.

	1859.	1858.	Increase.
Passengers	\$22,820 88	\$14,551 01	\$8,269 87
Freight	53,491 73	50,425 67	3,066 06
Mail	2,425 00	1,467 50	957 50
Sundries	140 62		140 62

\$78,878 23 \$66,464 18 \$12,414 05

Wilmington and Weldon Railroad.

The following is the semi-annual statement of this Company for six months ending March 31, 1859:

Gross receipts	\$256,845 48
Expenditures	106,482 77

Net receipts.....\$150,362 71

Less interest on debt\$30,000

" Sinking fund..... 25,000

55,000 00

\$95,362 71

Less semi-annual div. 4 per cent. 53,200 00

Leaving a surplus of \$42,162 71

The receipts for corresponding period of last year, were.....\$237,675 01

And the expenditures..... 113,697 99

Leaving net receipts.....\$123,977 02

—net gain, \$26,385 69.

Virginia and Tennessee Railroad.

This road is 204 miles in length, and cost about \$7,000,000. In 1850 the taxable value of the land in the counties through which it passes, as taken from the census, was \$28,952,627; and in 1856

the State assessment makes it \$53,917,229; or an increase in six years of \$25,365,558. This sudden increase is alone the result of an internal improvement which has cost only \$7,000,000.

American Railroad Journal.

Saturday, April 30, 1859.

Competition Between the Four Great Lines.

The recent compact between the four great railroads, has given place to an excessive competition for a business (which, unfortunately, at the present time is a very meagre one,)—to command the traffic, without any reference to the cost of transportation. The contest is for freight between New York and distant points in the west. Rates for passenger and local traffic of all kinds, are at present well maintained; so that the contest, as we shall hereafter show, is not so entirely destructive to the income of the several roads, as might, at first sight, be imagined.

How this matter is to end, we do not now see. We suppose it may be taken for granted that the position now assumed by the New York Central will not be receded from. This position is, as we understand it, that this company will not enter into any arrangement or agreement whereby it precludes itself from transporting merchandise over its line between New York and any points in the west, which may be said to be common to the four lines, at the same rates charged between the cities of Philadelphia and Baltimore and the same points, over their respective roads. Whatever may have been the prior agreements and understandings on this subject, and whoever may have been at fault in their rupture, the issue now presented seems reduced to the simple terms stated.

We certainly do not desire to be partial to any of the interests or parties to the present embittered controversy, although it is always difficult to escape from leaning in favor of one's neighbors, and of those with whom one comes in daily contact. But we will try to state the grounds of the action of the Central fairly, as they put it out to the public. The managers of this road deny that the Philadelphia and Baltimore, or their respective railroads as avenues of trade possess, any advantage of geographical position over New York, or its railroad for the trade of the west—They claim that two elements enter into the cost of transportation—lineal distance, and the character of the route. Practically, the shorter road is often the longer of the two. Over a level road an engine will take twice the number of cars as over a one having inclinations of 20 foot to the mile. Now we know that the disadvantages, in an economical point of view, of heavy grades are often overrated; still they are positive, and capable of being pretty accurately estimated. From the advantages, therefore, that Philadelphia and Baltimore possess on the score of proximity to the West, should be deducted the inferior character of the routes of their respective railroads. It manifestly cost more to transport merchandise for a distance of two hundred and ninety-eight miles, (the distance between Albany and Buffalo,) over the Baltimore and Ohio and Pennsylvania lines than over their New York rival. The latter has little more to do than to overcome the elevation between Albany and Buffalo. Its western termi-

nus at Buffalo is nearly, if not quite, as high as any point on the whole road. The more southern lines, including the New York and Erie, have the Alleghany Mountains to ascend at elevations of 1,600, 1,900 and 2,600 feet above the sea level, and many hundred feet above their western termini. An estimate of the advantage of position, as measured by lineal distance, should certainly be qualified by a comparison of the character of the routes. Whether the assumed, (by us,) superiority of the New York Central route was taken into consideration in the late compact between the four great companies, we are not informed.

A great advantage claimed by the Central over all the competing lines is in the lesser distance by rail over it, between New York and most of the leading points in the West, than between Philadelphia and Baltimore and the same points. Take Indianapolis, for illustration. The distance between this point and New York is as follows:

	Miles.
New York to Albany by water	150
Albany to Buffalo	298
Buffalo to Toledo by water	275
Toledo to Indianapolis by rail	223

Total

The distance from Philadelphia to the same point, all rail, is as follows:

	Miles.
Philadelphia to Pittsburg	353
Pittsburg to Crestline	187
Crestline to Indianapolis	206
Total	746

The comparative statement shows a difference of 200 miles in favor of Philadelphia. But 425 miles of the N. Y. route is by water, leaving 541 as the railroad portion of the northern route, or 224 miles less than from Philadelphia. The charge for transporting merchandise from New York to Albany is \$1 per ton; from Buffalo to Toledo, the same. Allowing two cents per ton per mile for the railroad portion of the route, the total charge from New York to Indianapolis would be \$12 42 per ton. At the same rate per mile by rail, from Philadelphia to Indianapolis, 746 miles, the cost would be \$14 92 per ton. These rates may not be absolutely correct, but they are approximately so, and are put forth by the Central to show that none of the roads competing for the western trade have an advantage of position over the Central, taking New York and Philadelphia as the points.

Another motive that exerted great influence on the action of the Central, was the representation of the New York merchants. They claimed that the arrangements between the four companies were injurious to their trade. There was undoubtedly great force in their arguments. Had the discrimination been against Philadelphia and Baltimore, we think the merchants of those cities would not have been very quiet under a fancied or real loss of trade. Their respective roads were constructed expressly for the purpose of increasing it. To have them discriminating against it, and in favor of a rival, would have been a little too much for their equanimity. They must judge of New York merchants by a similar standard.

For the reasons stated, we presume the Central will not recede from the position it has taken. It claims to be in a position to maintain itself successfully in the present contest, no matter to what extent it may be carried. We see no solution of

the difficulty, unless New York, Philadelphia, and Baltimore, be placed in the same relations in reference to the western trade—or unless the four companies agree upon a geographical division of territory between them.

It is some comfort, however, to know that the competition now going on is less injurious to the interests of the companies than has generally been supposed, from the noise that has been made about it in the public press. Taking all the lines, we do not believe that one-sixth of the western business going to and from New York, is properly a subject for competition. The total amount of through freight traffic on all the lines for 1858, was as follows:

	Through tonnage East.	Through tonnage West.	Receipts from through freight.
N. Y. Central	\$229,275	\$83,183	\$2,125,726
N. Y. and Erie	157,828	80,271	2,145,324
Pennsylvania	141,265	79,944	1,912,949
Baltimore and Ohio	170,084	54,779	1,678,416
Total	\$698,462	\$298,127	\$7,862,415

The proportion of receipts from through freight to the aggregate from all sources, for the past year, was as follows:

	Total Earnings.	Do. from through fr't.
N. Y. Central	\$6,528,412	\$2,125,726
N. Y. and Erie	5,151,616	2,145,324
Penn.	5,185,330	1,912,949
Balt. and Ohio	4,104,489	1,678,416
Totals	\$20,969,847	\$7,862,415
Total through	7,862,415	

Freight and passengers .. \$13,107,432

Assuming that one-sixth of the through business of the respective routes are a proper subject for competition, the entire prize contended for is about \$1,300,000, or about one-sixteenth part of their entire traffic. In this point of view, although the present competition is sufficiently injurious, it is certainly not so fatal in its results as has been supposed, nor does it threaten to destroy entirely the productiveness of the competing lines.

Location of the Trunk Line of Georgia.

The line of this road has been located from Savannah to Bainbridge on Flint river. The following is a statement of the lengths of the several divisions of the road:

	Miles. Feet.
The distance from Savannah to the Little Satilla river is	72,
From the Little Satilla river to Thomasville	126,240
From Thomasville to Bainbridge (Flint River)	37, 920
Total	236,3,160

Thus making the distance from Savannah to Bainbridge 236 3-5 miles nearly.

The highest elevation attained on the ridge dividing the waters of Flint and Ocklockonee rivers is 316 feet above tide water at Savannah. The ridge is eight miles east of Bainbridge. Bainbridge is 120 feet above tide water at Savannah, and the surface water of the Flint is 78 feet above the same.

San Antonio and Mexican Gulf Railroad.

This property has been transferred to the new purchasers, Messrs. J. A. Paschal, of San Antonio, J. O. Wheeler, of Victoria, and Z. K. Fulton of Lavaca—representing, besides, other parties—and they have promised to finish the road soon to Victoria, and at no distant day to San Antonio,

Savannah and Gulf Railroad.

This work is now completed to the village of Blacksley, ninety-three miles from Savannah. The road is graded for the iron some fifteen miles further on. The *Republican* thinks that the next crop of Brooks, Lowndes, Clutch, Echols and Berrien, if not Thomas, will be sent to market over this road.

We invite attention to the advertisement of Messrs. TAW & BEERS, in another column. They are the sole manufacturers of "Taw's Railroad Car Grease," and "Hinekley's Engine and Burning Oils." We have received a circular, giving a list of some twenty Companies now using their car grease—together with testimonials from the superintendents of several prominent roads at the South and West—all of whom concur in pronouncing it both economical and durable. The superintendent of the N. A. & S. R. R., says, he saves 25 per cent. on first cost, and fully 10 per cent. on stopping and wastage of the boxes. The superintendent of the M. & C. R. R. has been using the soft white grease entirely on passenger and freight cars, and finds it an excellent and cheap lubricator. The C. & S. C. company, have used the yellow grease on their road for six or eight years, and consider it the best of anything they have tried. The Master of Machinery on this road states that he has run boxes packed with it over a month at a time without heating or gumming in the least. This celebrated grease has been in use upwards of ten years, by our railroad and coal companies, mill owners, carriage builders, etc. Address Messrs. TAW & BEERS, 18 South Water street, Philadelphia, Penn.

Messrs. JAMES JEFFRIES & SONS, still continue the manufacture of *Locomotive, Car and Tank Springs* at their old stand, rear of Girard House, Philadelphia. In their advertisement in another column, reference is made to some of our most prominent railroad officers, and locomotive and car builders, as well as to all the roads where their springs are in use. Companies wishing to try their durability and elasticity, will be furnished with a set, by stating the length, width, curve over all, and the weight which they are to bear. Address Messrs. JAMES JEFFRIES & SONS, Philadelphia, Pa.

The principal "Engineer's, Architect and Draftsman's Stationery Emporium" is to be found at No. 107 Chestnut street, Philadelphia. At this establishment pretty much everything required by the engineer in his office, by the merchant in his counting room, or by the editor in his sanctum, can be obtained at the shortest notice, and on the most reasonable terms. An advertisement, enumerating a few of the articles, may be found in its appropriate place. Orders from a distance are promptly filled, the goods packed with care, and forwarded to any part of country. Address JOSEPH HUFTY, Esq., No. 107 Chestnut street, Philadelphia.

Amboy, Lansing and Traverse Bay Railroad.

We learn that the contract for building this road between Jonesville and Saginaw—including a portion of the route between Lansing and Owosso—has been taken by Messrs. Beckel and Jones. Mr. Innis still continues as chief engineer of the whole route. The work is to be commenced immediately, and completed in good running order on or before the 1st day of December next.

Albany and Susquehanna Railroad.

This road is to connect with the New York and Erie at Binghamton. Work on the line was resumed last fall. Fifty-five miles were placed under contract, and the work of grading has been prosecuted on the heavier sections of the work during the past winter. Six sections, comprising about one-half the line under contract, are being worked with a daily average force of 300 men. The road is being built without any outside influence, by the inhabitants along the line; the usual appliances for getting up an impression in favor of the line have not been resorted to by the present management. The directors are mostly plain country men, who have embarked in the enterprise for the benefit of the now isolated section through which it passes. They mean to build such a line as will answer the demands of the local traffic, and accommodate such through trade as its connections with the Eastern and Western lines will bring to it.

Osage Valley and Southern Kansas R. R.

A meeting of the stockholders of this company was held in Chinton, Henry Co., Mo., on the 4th inst., at which a board of directors was elected. The board subsequently met and elected the following officers: Col. A. M. Tutt, President; Col. James M. Cogswell, Vice President; D. G. Boone, Secretary; John G. Thornton, Auditor; Dr. J. A. Rogers, Treasurer; W. A. Eja, Chief Engineer and General Land Agent.

This road will commence somewhere between Tipton and Ottumville, on the Pacific road; and run thence through the counties of Morgan, Benton, Henry and Bates, to the western borders of the State. The survey has already been commenced; and it is contemplated to put the road under contract during the coming fall. This route leads directly to the best part of southern Kansas. The company are sanguine, from the liberal spirit already manifested, that stock enough will be subscribed in lands to grade the road through the State to its place of termination in Kansas.

Knightstown and Shelbyville Railroad.

We understand that this work is going forward and will soon be vigorously prosecuted to an early completion. Some delays have impeded its progress, owing to the failure of receiving the iron as was contemplated and contracted for. The company determining not to delay the work longer, have purchased a portion of the iron outside of the original contract, which is now being delivered and have assurance that the balance will be supplied in a few days, so that further detention will not occur. The bridge for Little Blue River is nearly ready to be placed upon the abutments. The contract for laying the entire line is in the hands of Messrs. Prindle & Robinson, of North Madison, aided by Samuel Higgie, of Columbus, bridge builder.

Cincinnati, Wilmington and Zanesville R. R.

A decree for the foreclosure of the mortgages on this road was taken in the U. S. Circuit Court in Cincinnati, with an accompanying argument, between all parties in interest, that all proceedings under the decree should be delayed for the term of three years and a half. This stay of proceedings under foreclosure is for the purpose of giving the stockholding organization the opportunity

to build the Glendale extension of the road and thereby secure the means to resume payment on the bonded indebtedness of the Cincinnati, Wilmington and Zanesville company. The Board is confident of being able to complete the extension within the next year, and to realize such returns as shall secure the entire line of road to the stockholders.

Railroads of Connecticut.

We give on the succeeding pages statements showing the result of the operations of the railroads of Connecticut from the opening of the first road to the present time. The aggregate result may be stated as follows: Total investment, (the cost of the several years being added together,) \$245,377,737; total earnings, \$30,536,182; expenses of operating roads, \$7,732,718; net earnings, \$12,803,464. The per centage of gross earnings to cost has been 12½ per cent.; net, do., 5¼; operating expenses, 7¼.

The operating expenses are increased by the amounts paid by the New York and New Haven, and Hartford and New Haven Railroads, on the lease of the New Haven and Northampton Railroad, which have averaged, since 1849, \$33,193 over the earnings of this road. Toward this excess the Hartford and New Haven Railroad has contributed \$12,000 annually, and the New York and New Haven Railroad, \$21,193 annually. The sum charged annually to expenses has been further increased by the amount paid by the Housatonic Railroad to the Berkshire, the Stockbridge and Pittsfield, and the West Stockbridge Railroads, leased by it, and amounting to the sum of \$845,606, in the aggregate. Three-fourths of this amount has probably been lost to the Housatonic Railroad. The amount now annually paid it for its leased lines, has averaged for nine years past \$74,212. The leases are perpetual, and are the great drawback to the success of the Housatonic road.

RECAPITULATION.

Year.	Length, Miles.	Cost.	Earnings.	Expenses.	Net Earnings.
1839.....	18	\$729,606	\$81,988	\$11,500	\$22,438
1840.....	95	2,628,592	181,654	75,655	106,000
1841.....	95	8,023,873	246,566	108,075	138,491
1842.....	169	4,840,983	330,485	151,782	178,703
1843.....	169	4,379,615	376,798	206,207	169,591
1844.....	169	4,938,206	273,607	206,115	167,492
1845.....	195	5,268,591	552,781	252,338	300,448
1846.....	195	5,422,888	650,794	387,848	262,946
1847.....	195	5,918,418	802,915	453,435	349,480
1848.....	195	6,042,642	922,509	429,010	502,589
1849.....	262	8,331,060	1,010,657	459,237	551,420
1850.....	351	14,591,975	1,828,629	1,002,057	826,572
1851.....	445	15,745,500	2,254,064	1,194,081	1,060,983
1852.....	435	18,486,373	2,350,335	1,304,122	1,046,213
1853.....	569	22,466,727	2,791,915	1,604,397	1,187,518
1854.....	569	23,653,759	3,172,833	1,909,002	1,263,831
1855.....	641	23,991,265	3,115,672	1,877,622	1,237,950
1856.....	641	23,940,817	3,186,555	2,010,721	1,175,834
1857.....	641	24,727,688	3,431,905	2,095,285	1,336,536
1858.....	641	24,759,649	2,932,090	1,862,254	1,069,836
Total.....	6,760	\$245,377,737	\$30,536,182	\$17,732,718	\$12,803,464

RAILROADS IN CONNECTICUT.

Statement showing the cost, earnings, etc., etc., of all the Railroads of Connecticut, from the opening of the first road to the present time.

Name of Road.	Length.	Cost.	Gross receipts.	Current expenses.	Net receipts.	Rec'd from pass'gers.	Rec'd from freight.	Do. Miscellaneous.	Dividend.
1839.									
Hartford and New Haven	18	\$729,606	\$31,933	\$11,500	\$20,433	.....	.....	.....	..
1840.									
Hartford and New Haven	36	\$851,121	\$65,147	\$23,152	\$41,995	.....	.....	.....	..
Norwich and Worcester	59	1,777,471	116,547	52,503	64,014	\$78,889	\$28,232	\$3,844	..
Total	95	\$2,628,592	\$181,664	\$75,655	\$106,009				
1841.									
Hartford and New Haven	36	\$866,336	\$91,305	\$29,270	\$62,035	.....	.....	.....	3
Norwich and Worcester	59	2,157,037	155,261	78,805	76,456	\$99,332	\$52,594	\$3,335	..
Total	95	\$3,023,373	\$246,566	\$108,075	\$138,491				
1842.									
Hartford and New Haven	36	\$960,963	\$90,760	\$30,429	\$60,331	.....	.....	.....	4
Norwich and Worcester	59	2,158,561	157,358	75,195	82,163	\$94,342	\$50,419	\$12,596	..
Housatonic	74	1,221,460	92,317	46,158	46,159	.....	.....	.....	..
Total	169	\$4,340,983	\$340,435	\$151,782	\$188,653				
1843.									
Hartford and New Haven	36	\$969,049	\$89,294	\$32,808	\$56,486	.....	.....	.....	3
Housatonic	74	1,244,600	124,160	87,500	36,669	.....	.....	.....	..
Norwich and Worcester	59	2,166,566	162,335	85,899	76,436	\$95,856	\$51,102	\$15,376	..
Total	169	\$4,379,615	\$375,798	\$206,207	\$169,591				
1844.									
Hartford and New Haven	36	\$1,368,921	\$99,632	\$32,733	\$66,899	.....	.....	.....	4
Housatonic	74	1,398,920	149,506	93,000	56,506	.....	.....	.....	..
Norwich and Worcester	59	2,170,365	230,674	80,412	150,262	\$135,654	\$78,788	\$16,231	3
Total	169	\$4,938,206	\$479,812	\$206,145	\$273,667				
1845.									
Hartford and New Haven	62	\$1,621,720	\$183,834	\$62,712	\$121,122	.....	.....	.....	6
Housatonic	74	1,476,380	164,639	100,000	64,639	.....	.....	.....	..
Norwich and Worcester	59	2,170,491	204,308	89,621	114,687	\$116,201	\$77,665	\$10,441	3
Total	195	\$5,268,591	\$552,781	\$252,333	\$300,448				
1846.									
Hartford and New Haven	62	\$1,690,260	\$228,611	\$89,187	\$139,424	.....	.....	.....	8
Housatonic	74	1,553,840	180,274	180,274	.....	.....	.....	.....	..
Norwich and Worcester	59	2,178,788	241,909	118,387	123,522	\$118,909	\$110,750	\$12,250	..
Total	195	\$5,422,888	\$650,794	\$387,848	\$262,946				
1847.									
Hartford and New Haven	62	\$2,109,865	\$324,725	\$130,426	\$194,299	.....	.....	.....	8
Housatonic	74	1,631,304	243,325	181,626	61,699	\$90,105	\$161,226	\$5,627	8
Norwich and Worcester	59	2,187,249	234,895	141,433	93,462	114,310	108,003	12,582	..
Total	195	\$5,928,418	\$802,945	\$453,485	\$349,460	\$204,415	\$269,229	\$18,209	
1848.									
Hartford and New Haven	72	\$2,354,813	\$430,212	\$145,668	\$284,544	.....	.....	.....	8
Housatonic	74	2,500,000	274,314	181,558	92,756	\$98,322	\$175,047	\$5,933	8
Norwich and Worcester	59	2,187,829	218,073	92,784	125,289	100,271	99,959	17,841	..
Total	205	\$7,042,642	\$922,599	\$420,010	\$502,589	\$193,593	\$225,006	\$23,773	
1849.									
Hartford and New Haven	72	\$2,405,313	\$432,803	\$142,401	\$290,402	.....	.....	.....	8
Housatonic	74	2,500,000	287,184	176,797	110,387	\$111,322	\$165,394	\$10,278	8
Naugatuck	57	1,333,249	54,473	25,170	29,303	22,129	31,146	1,197	..
Norwich and Worcester	59	2,095,508	236,197	114,869	121,328	104,398	114,144	17,654	..
Total	262	\$8,334,060	\$1,010,657	\$459,237	\$551,420	\$237,849	\$310,684	\$29,129	
1850.									
Hartford and New Haven	72	\$2,631,541	\$490,930	\$196,454	\$294,476	.....	.....	.....	10
Housatonic	74	2,500,000	310,063	261,569	48,494	\$126,988	\$170,080	\$12,991	4
Naugatuck	57	1,335,000	230,862	136,273	94,589	94,735	130,259	5,868	..
New Haven and Northampton	27	750,000	76,453	40,000	36,463	.....	.....	.....	..
New London, Willimantic and Palmer	66	1,335,000	80,900	40,700	40,200	54,000	25,400	1,500	4
New York and New Haven	62	3,441,920	378,162	199,748	-178,414	354,484	9,649	14,029	7
Norwich and Worcester	59	2,598,514	261,259	126,313	133,946	110,109	134,382	16,766	2½
Total	417	\$14,591,975	\$1,828,629	\$1,002,059	\$826,572	\$740,316	\$469,770	\$51,154	
1851.									
Hartford and New Haven	72	\$2,742,245	\$556,004	\$235,011	\$320,993	.....	.....	.....	10
Housatonic	74	2,500,000	329,041	240,227	88,814	\$130,428	\$183,786	\$14,834	..
Naugatuck	57	1,368,151	190,227	85,287	104,940	72,307	114,052	3,867	..
New Haven and Northampton	55	1,400,000	120,380	50,148	70,232	.....	.....	.....	4
New London, Willimantic and Palmer	66	1,450,000	111,057	56,197	54,860	60,643	37,966	2,448	..
New York and New Haven	62	3,700,000	617,306	388,661	258,645	564,355	71,266	11,685	7
Norwich and Worcester	59	2,585,104	270,049	138,550	131,499	117,606	137,573	14,870	4
Total	445	\$15,745,500	\$2,224,064	\$1,194,081	\$1,029,983	\$945,339	\$543,643	\$47,704	

1852.									
Hartford and New Haven	72	\$2,906,589	\$600,408	\$268,185	\$332,223	\$396,383	\$172,547	\$31,478	10
Housatonic	74	2,500,000	301,166	301,166	.....	94,146	178,894	14,741	..
New Haven and Northampton	55	1,400,000	120,380	50,148	70,232	.....	.....	.....	4
Naugatuck	57	1,409,508	210,984	95,203	115,781	79,641	127,071	4,272	7
New York and New Haven	62	4,800,000	679,653	424,899	254,754	555,215	113,005	11,433	7
New London, Willimantic and Palmer	66	1,511,111	114,410	62,509	51,901	61,609	44,238	8,564	..
New Haven and New London	50	1,362,677	55,973	35,266	20,707	52,512	2,522	989	..
Norwich and Worcester	59	2,596,488	267,561	156,746	110,815	112,933	139,009	15,618	4½
Total	495	\$18,486,373	\$2,350,535	\$1,394,122	\$956,413	\$1,352,439	\$777,286	\$87,047	..
1853.									
Danbury and Norwalk	24	\$369,738	\$48,830	\$23,157	\$20,673	\$28,758	\$17,772	\$2,300	6
Hartford and New Haven	72	3,164,833	639,528	304,180	335,348	405,173	200,154	34,201	10
Hartford, Providence and Fishkill	50	3,008,214	98,941	40,251	58,690	.....	.....	.....	..
Housatonic	74	2,507,819	324,990	320,359	4,631	103,861	207,402	13,727	..
Naugatuck	57	1,530,907	246,687	122,059	124,628	91,467	150,586	4,634	8
New Haven and Northampton	55	1,400,000	147,606	51,457	96,149	.....	.....	.....	4
New Haven and New London	50	1,375,912	96,138	56,463	39,675	88,000	6,000	2,138	..
New York and New Haven	62	4,978,487	739,434	437,826	301,608	610,550	108,877	20,007	..
New London, Willimantic and Palmer	66	1,524,329	128,715	73,821	64,894	64,097	57,164	7,454	..
Norwich and Worcester	59	2,596,488	321,046	169,824	151,222	138,294	159,326	23,426	4
Total	569	\$22,456,727	\$2,791,915	\$1,604,397	\$1,187,518	\$1,530,200	\$907,381	\$107,787	..
1854.									
Danbury and Norwalk	24	\$371,504	\$48,664	\$35,653	\$13,011	\$28,758	\$17,628	\$2,378	..
Hartford and New Haven	72	3,339,366	757,651	398,760	358,891	476,174	243,643	37,834	10
Hartford, Providence and Fishkill	50	3,751,726	179,048	63,550	115,498	98,031	72,314	8,703	..
Housatonic	74	2,507,819	330,792	300,408	30,384	108,521	207,793	14,478	..
Naugatuck	57	1,577,167	269,743	269,743	.....	99,971	164,821	4,952	4
New Haven and New London	50	1,450,384	103,986	59,618	44,368	87,607	9,326	7,053	..
New Haven and Northampton	55	1,400,000	147,606	56,200	91,406	.....	.....	.....	4
New London, Willimantic and Palmer	66	1,527,827	137,066	65,357	71,709	63,331	63,696	10,039	..
New York and New Haven	62	5,131,488	875,523	528,512	347,011	716,436	127,340	31,749	..
Norwich and Worcester	59	2,596,488	322,754	191,201	131,553	138,374	161,268	23,112	6
Total	569	\$23,653,769	\$3,172,833	\$1,969,002	\$1,203,831	\$1,817,203	\$1,067,829	\$140,298	..
1855.									
Danbury and Norwalk	24	\$373,460	\$54,241	\$34,340	\$19,901	\$28,816	\$25,270	\$2,155	5
Hartford and New Haven	72	3,565,018	730,012	377,213	352,799	444,239	250,039	35,734	10
Hartford, Providence and Fishkill	122	3,936,734	258,685	139,074	119,611	166,626	82,224	9,835	..
Housatonic	74	2,507,819	339,196	239,371	99,825	110,461	215,424	13,312	..
Naugatuck	57	1,580,723	188,982	124,503	63,979	70,680	112,967	5,335	..
New Haven and New London	50	1,455,569	88,007	57,688	30,319	70,208	11,061	6,738	..
New Haven and Northampton	55	1,400,000	147,606	62,460	85,146	.....	.....	.....	4
New London, Willimantic and Palmer	66	1,594,382	124,043	57,712	66,331	58,999	55,641	13,303	..
New York and New Haven	62	4,980,407	882,742	571,584	311,158	685,056	131,217	66,409	..
Norwich and Worcester	59	2,597,153	304,235	215,777	88,381	125,998	155,592	22,045	2½
Total	641	\$23,991,265	\$3,115,749	\$1,877,722	\$1,238,027	\$1,760,183	\$1,039,433	\$175,526	..
1856.									
Danbury and Norwalk	24	\$377,460	\$61,134	\$35,098	\$26,036	\$30,852	\$27,936	\$2,346	3
Hartford and New Haven	72	3,329,337	730,794	393,555	337,239	430,447	264,667	35,670	15
Hartford, Providence and Fishkill	122	4,030,349	340,586	171,160	169,426	190,555	137,301	12,730	..
Housatonic	72	2,507,819	329,297	256,870	72,427	104,637	207,861	16,799	..
Naugatuck	57	1,576,926	237,416	109,848	127,568	84,866	146,828	5,722	..
New Haven and New London	50	1,455,040	88,007	57,688	30,319	70,208	11,061	6,738	..
New Haven and Northampton	55	1,400,000	173,954	81,427	92,527	.....	.....	.....	4
New London, Willimantic and Palmer	66	1,603,230	120,571	93,731	26,840	51,522	59,559	9,490	..
New York and New Haven	62	5,070,979	881,394	577,649	303,745	685,064	152,048	44,282	..
Norwich and Worcester	59	2,598,677	323,402	233,695	89,707	134,197	170,851	18,354	..
Total	641	\$23,949,817	\$3,186,555	\$2,010,721	\$1,175,834	\$1,748,248	\$1,106,257	\$153,641	..
1857.									
Danbury and Norwalk	24	\$383,010	\$61,544	\$34,532	\$27,012	\$28,439	\$30,379	\$2,726	6
Hartford and New Haven	72	3,773,547	769,065	372,807	396,258	455,036	274,662	39,367	10
Hartford, Providence and Fishkill	122	4,123,964	367,894	201,732	166,162	206,563	148,377	12,954	..
Housatonic	72	2,623,820	318,475	284,556	33,919	102,860	196,114	19,501	..
Naugatuck	57	1,576,926	237,416	109,848	127,568	84,866	146,828	5,722	..
New Haven and New London	50	1,454,040	157,657	109,935	47,722	126,842	18,136	12,679	..
New Haven and Northampton	55	1,400,000	172,368	82,081	90,287	.....	.....	.....	5
New London, Willimantic and Palmer	66	1,603,230	115,803	77,541	38,262	50,999	54,976	9,828	..
Naugatuck	57	1,578,301	209,555	119,222	90,833	78,187	119,606	11,761	..
New York and New Haven	62	5,170,915	971,708	569,744	401,964	749,324	175,937	46,447	3
Norwich and Worcester	59	2,616,811	287,756	243,139	44,617	124,554	150,328	12,874	..
Total	641	\$24,727,688	\$3,431,905	\$2,095,239	\$1,336,536	\$1,922,804	\$1,168,515	\$168,137	..
1858.									
Danbury and Norwalk	24	\$383,010	\$61,544	\$34,532	\$27,012	\$28,439	\$30,379	\$2,726	..
Hartford and New Haven	72	3,773,597	628,845	306,854	321,391	371,906	215,557	40,782	10
Hartford, Providence and Fishkill	122	4,119,431	273,427	161,102	112,325	.....	.....	.....	..
Housatonic	74	2,555,837	271,918	204,135	67,923	90,929	158,918	21,426	..
New Haven and New London	50	1,473,317	76,758	66,548	10,210	59,970	8,823	7,960	..
New Haven and Northampton	55	1,400,000	156,057	75,707	80,350	.....	.....	.....	4
New London, Willimantic and Palmer	66	1,603,230	115,803	77,541	38,262	50,999	55,976	9,990	..
Naugatuck	57	1,578,301	209,555	119,222	90,333	78,187	119,606	5,722	..
New York and New Haven	62	5,258,232	855,994	623,425	231,569	623,149	138,084	53,761	..
Norwich and Worcester	59	2,613,634	183,187	183,189	100,367	111,230	157,871	14,455	..
Total	641	\$24,768,649	\$2,832,090	\$1,552,254	\$979,836	\$1,414,809	\$691,214	\$156,472	..

Maryland Institute.

The annual meeting of the Maryland Institute for the election of officers, was held on the 20th inst., at the Institute Building, and was quite numerously attended. The election resulted as follows:—President, Samuel Sands; Vice President, John F. Meredith and James M. Auderson; Recording Secretary, G. H. Hunt; Corresponding Secretary, S. Morris Cochrane; Treasurer, Hugh Bolton. Board of Managers, William Keyser, Thomas Trimble, S. S. Mills, Thomas J. Lovegrove, John Jones, W. W. Maughlin, J. Mowton Saunders, N. H. Thayer, Ezra Whitman, C. W. Bentley, James McNab, D. L. Bartlett, J. Crawford Neilson, Adam Denmeale, William H. Young, V. O. Eareckson, Samuel Hindes, James Stirratt, John H. Tegmeyer, W. Henry Johnson, Abram G. Mott, George H. Rogers, Thomas Stow, James Young.

From the report of the Committee on Finance the following extract is taken:

On account of	Total	Amount
	Receipts.	Paid.
Exhibition	\$8,018 83	\$1,863 27
Library	275 95	1,421 83
Male school	617 00	3,576 28
Female school dept'	383 24	1,048 95
Hall	3,037 23	3,584 66
Chemical	5 25	920 16
Lecture department	132 50	660 58
Education	124 00	158 44
Miscellaneous	12,662 00	9,039 39

Total

On account of.	Amount	Amount	On account
	against	in favor	on account
	Institute.	Institute.	preceding
			years.
Exhibition	\$444 50	\$3,155 56	\$.....
Male school	1,352 53	.....	701 37
Female do	601 97	.....	1,606 75
Hall	96 01	.....	63 74
Chemical	467 61	.....	451 42
Lecture dept'	404 19	.....	447 29
Education .....	.....	5 06	123 89
Miscellaneous	3,622 61	.....	39 50
Total	\$3,366 81	\$6,783 23	1,247 44
		3,366 81	

Leaving in favor of the In-
Institute

Long Island Railroad.

The Long Island railroad commences at Jamaica, and extends, via Hempstead, Hicksville, Farmingdale, and River Head, to Greenport, on the eastern end of Long Island, a distance of 84 miles. The Brooklyn and Jamaica railroad, which is leased and operated by the Long Island company, and by which they reach their present terminus at South Ferry, Brooklyn, is 11 miles in length—making a total of 95 miles. By the terms of this lease, 11 per cent. of the gross receipts of both roads are paid to the Brooklyn and Jamaica company as rent, with a proviso that the amount shall not be less than \$21,000, nor greater than \$33,300 in any one year. The maximum has been reached, and will doubtless so continue.

The company have determined to change the terminus of the road from Atlantic street, Brooklyn, to Hunter's Point, which will be effected during the present year. This new route will be furnished as follows: The Flushing railroad, eight miles in length, extending from Hunter's Point, to Flushing, is to be purchased. A new road is to be built, diverging from the Flushing road at Winfield, (3.65 miles from Hunter's Point,) to the Brooklyn and Jamaica railroad, three-fourths of a mile west of Jamaica—and both the Flushing road and the new road, together with the right of

way for two tracks over the Brooklyn and Jamaica road, from the end of the new road to Jamaica, to be conveyed to the Long Island railroad company—together with half the equipment now on the Flushing road—for the sum of \$337,000, payable \$62,000 in cash, and \$275,000 in 7 per cent. mortgage bonds on the Flushing and new road, having 30 years to run, interest and principal payable by the Long Island railroad company. By the new route, the distance by rail will be lessened 1.49 miles. The distance by boat from Hunter's Point to Fulton street New York, is about four miles—being an increase of three miles over the present ferryage.

In order to do this the company require to be relieved of their present lease of the Brooklyn and Jamaica road, and the depot grounds at South Ferry. This done, the annual saving in rent, depot expenses, flagman and horses will be \$37,800—sufficient to pay interest on the cost of the new road, wages of flag and draw bridge men, amounting in all to \$26,840—leaving a balance annually of \$10,960. The receipts of the Flushing road have been about \$40,000 per annum; the operating expenses \$20,000; and the ferry expenses \$20,000—leaving no surplus, but contributing \$20,000 towards sustaining the ferry. If to this be added the \$10,960, and \$12,000 additional which will be contributed to it by the Long Island railroad, will make a total ferry fund of \$42,960.

In the report of the company for the fiscal year ending March 31, 1859 the following statement is made of the receipts, expenditures and net earnings, viz:

Receipts:	
From passengers	\$189,988 36
" freight	140,051 47
" mails	8,225 00
" unloading freight, etc	5,770 30
	\$334,038 13

Expenses:	
Operating road	\$180,514 57
Interest paid	32,920 00
Rent of Brooklyn and Jamaica and Cold Spring Branch roads, and depot at South Ferry	41,334 62
Equipment	658 00
	255,427 19

Net surplus

The receipts show an increase, as compared with the previous year, of \$8,725—the difference being made up wholly from an increase of freight business. The expenses were less by \$13,699 81; and the net surplus \$12,424 81 more. This surplus is greater than that of any previous year. The report speaks most encouragingly of the freight business. The total receipts from business connected with the dairy alone yielding \$18,513.49. There is also a steadily increased freightage from vegetables and fruit.

The company have 19 locomotives, 34 passengers, 4 mail, 3 horse, and 156 freight cars, with 16 cranes and 6 snow ploughs. The value of the company's property exclusive of wood, cross-ties and depot lots, is given at \$227,885 75.

The capital stock of the company is 66,000 shares—the par value of which is \$3,000,000.

The funded debt, consisting of mortgage bonds of 1850, due in 1870, is \$500,000. The other liabilities of the company amount to \$144,566 07—making a total of \$3,644,566 07. The total re-

ceipts during the year, including balance from previous year, were \$340,227 65; and the disbursements \$282,817 51—leaving a balance of cash on hand April 1, 1859, of \$57,410 14.

The officers are—Wm. E. Morris, *President and Superintendent*; Wm. S. S. Russell, *Secretary and Treasurer*.

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April 9, 1859.

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B. W. JONES,
Chief Engineer.

4t16

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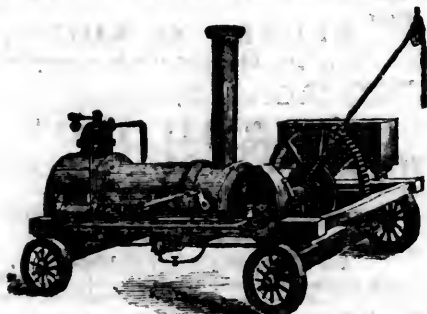
T. D. STETSON, Agent for procuring patents, No. 5 Tryon Row, (near City Hall). A circular with full information sent free by mail.
American correspondent *Prac. Mechanics' Jour* from 1844.

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WILL BE MADE BY THE UNDERSIGNED, **THEODORE DEHON,**
 10 Wall st., near Broadway, New York.
 500 tons T rails on hand 54 to 57 lbs. per linear yard.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER,
 6m35 BALTIMORE.
 And 17 Nassau st., NEW YORK.

IRON BOILER FLUES.

Lap-Welded Boiler Flues, 1 1/2 to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes, From 1/8 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

Warehouse—209 South Third st.,
PHILADELPHIA.

STEPHEN MORRIS, **CHAS. WHEELER, JR.,**
THOS. T. TASKER, JR. **STEPHEN P. M. TASKER.**

RAILROAD IRON AND COMMON BARS.

THE UNDERSIGNED,
 Sole Agents to Messrs. GUEST & CO.,
 The Proprietors of the Downside Iron Works,
 Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAXIN, 70 Broad st.

MORRIS & JONES & CO.,
IRON MERCHANTS,
 MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL

IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
 BOILER RIVETS, RAILROAD IRON,
 OUT NAILS and SPIKES, PIG IRON, &c.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854

1783

American Railroad Iron.

THE undersigned is prepared to contract for delivery of American Railroad Iron at points on the Mississippi, Ohio and Tennessee Rivers. Rails can be furnished 27 to 30 feet long when required.

JAMES HENDERSON,
 13 Old st., New York.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address
N. WILKINSON, Sec'y,
 WHEELING, VA.

THE
RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,
 MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH.

President of the Incorporation.

February, 1853.

RAILROAD IRON.
WOOD, MORRELL & CO.,

Having leased the extensive Works of the

Cambria Iron Company,

Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

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THE
ROUND OAK IRON WORKS,
STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
 Agents for the United States,
 12 SOUTH CHARLES STREET,
 BALTIMORE.

6m35

And 17 NASSAU STREET, NEW YORK.

RAILROAD IRON.
THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
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New York Agency:

BUSSING, CROCKER & DODGE,
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LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

BY the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnetic Ores from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of Iron not surpassed.

These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per linear yard, viz:—25, 30, 35, 40, 45, 50, 55, 60, 62, and 75 lbs.

Samples of Rails and Merchant Iron may be seen at the office of the Company, 45 Exchange Place, New York.

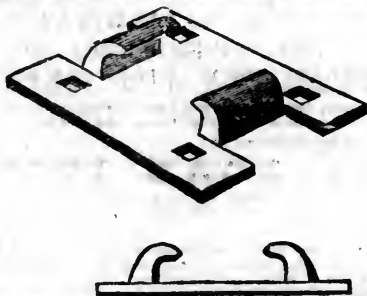
Address **J. H. SCRANTON, President,**

SCRANTON, PA.

or **THEO. STURGES, Treasurer,**
 45 Exchange Place,
 NEW YORK.

4017

NEW YORK
RAILROAD CHAIR WORKS.
J. B. GREEN & CO., Proprietors.
SUCCESSORS TO THE
New York Wrought Iron Railroad Chair Company.
Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late New York Wrought Iron Railroad Chair Company, and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our Chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Our manufacture of Chairs are used on a large number of Roads, of which the following list comprises some of them, viz

Galena and Chicago Union Railroad Company,
North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company.

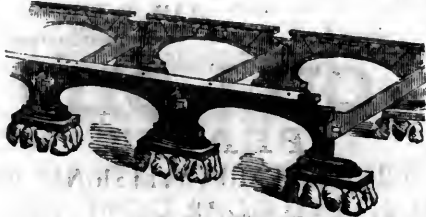
Messrs. M. K. JESUP & CO., 44 Exchange Place, New York, are the only parties authorized to act as our Agents.

BEERS'
CAST-IRON ENDLESS RAIL,
FOR CITY RAILROAD;

Now being laid in Philadelphia and elsewhere;

THIS road is exclusively of cast iron, without tie, string-piece, or chair; it is 65 to 80 lbs. per yard; it is laid four feet over the present rails, with 65 lbs. groove rail: And with a saving on first cost; effecting a reduction in current yearly repairs, and delays, of at least \$1,000 per mile.

Also,--



BEERS'
ELASTIC IRON RAILWAY,
FOR LOCOMOTIVE USE;

This road can be built and equipped, without additional cost over a road with 56 lbs. T rail; saving not less than 60 per cent. on motive power, 50 per cent. on dead weight, and 80 per cent. on repairs of way; thus reducing the yearly expenses from \$1,500, to \$2,000, per mile. For full particulars, with drawings, relating to both roads, see a recent Treatise, entitled Railroads, their construction and management, with the remedy, from twenty-five years experience, by S. A. BEERS, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The underigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

S. A. BEERS.

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SUCCESSOR TO
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PHILADELPHIA
RAILWAY SUPPLY AGENCY,
No. 123 WALNUT STREET,
PHILADELPHIA.

Railroad Materials, Locomotive and Car Findings,
MACHINERY and MACHINISTS' TOOLS,
MINERS' TOOLS, ETC.

COTTON WASTE.
WHITE and YELLOW CAR GREASE,
LOCOMOTIVE BRASS WORK,
Baggage Checks, Barrows, etc., etc.,

RAILROAD LANTERNS, SIGNAL LIGHTS,
STEAM GAUGES, COOKS and WHISTLES,
INDIA RUBBER HOSE PACKINGS, ETC.

LANTERNS OF ALL DESCRIPTIONS,
ENGINE, STATION, and SIGNAL BELLS,

Superior Car Upholstery, etc.

AGENCY OF THE KEROSENE OIL COMPANY.

Orders solicited, promptly filled, and forwarded with despatch and care at the manufacturers' lowest prices.

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MANUFACTURERS AND DEALERS
IN
RAILROAD & STEAMBOAT
SUPPLIES,
5 WATER ST., BOSTON.
LOCOMOTIVES and CARS.

Rails, Sleepers, Chairs, Spikes, Wheels, Axles and Tires.

BOILER TUBES and FETTING.

BOLTS, NUTS & WASHERS.

CAR, SHIP and BRIDGE BOLTS.

Locomotive, Hand and Ship Lanterns; Car Trimmings of all descriptions. Steam and Water Gauges; Signal Bells, etc., etc.

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Orders filled with despatch and at the lowest prices.

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ARE agents for, and prepared to furnish at manufacturers' prices,

RAILROAD IRON,
LOCOMOTIVE ENGINES,
RAILROAD CARS,
CAR WHEELS,
AXLES, CHAIRS,
SPIKES, TOOLS,
ETC., ETC.

All inquiries in reference to the above articles will receive immediate attention.
New York, January, 1859.

S. B. BOWLES,
MANUFACTURER AND DEALER IN
RAILROAD SUPPLIES,
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(Between PLATT and MAIDEN LANE),
NEW YORK.

RAILROAD SUPPLIES.
WILLIAMS & PAGE,
No. 44 Water, between Congress and Kilby Streets,
Boston, Mass.

Iron Rails, Chairs, & Spikes,
FREIGHT AND COAL CARS,

(on hand or made at short notice.)

Wheels and Axles of all kinds,
LOWMOOR, AMES, BOWLING and NASHUA TIRES,
IRON AND STEEL,

Of all kinds for Ships and Tracks.

Car Trimmings, Paints, Oil, Varnish, Car and Switch Locks, Ventilators, Lanterns, Head-Lights, Gauges, Rubber Springs, Chairs, Hose and Belting, Ash, Pine and other Timber, and ALL MATERIALS used in Equipment and Repairs of Railroads, Engines and Cars, at lowest prices.

THOS. S. WILLIAMS. **PHILIP S. PAGE,**
Late Sup't Boston & Maine R. R. Late PAGE, ALDEN & Co.

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Boston and Maine R. R.
Capt. WM. H. SWIFT, Boston.
Lawrence STONE & Co. do.
S. M. FELTON, Pres't Phila. W. & B. R. R.
PHELPS, DODGE & Co., N. Y.
CLOPPER, HEWITT & Co., do.
REEVES, BOCK & Co., Phila.
E. S. CHESBROUGH, Chicago.

A. BRIDGES & CO.,
MANUFACTURERS AND DEALERS IN
RAILROAD AND CAR
FINDINGS,
OF EVERY DESCRIPTION,
64 COURTLANDT ST., NEW YORK.

RAILROAD AXLES, WHEELS and CHAIRS,
SPIKES, BOLTS,
NUTS, WASHERS,
CAR, SHIP and BRIDGE BOLTS.
IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.
STEEL AND RUBBER SPRINGS,
LOCOMOTIVE and HAND LANTERNS,
PORTABLE FORGES and JACK SCREWS,
COTTON DUCK FOR CAR COVERS,
BRASS and SILVER TRIMMINGS.

Also, Sole Agents for the Manufacturers of Car Head Linings.

Orders for the purchase of goods on commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES. **JOEL C. LANE.**

MORRIS K. JESUP. JOHN KENNEDY. GILBERT A. SMITH.

M. K. JESUP & CO.,
RAILWAY AGENTS AND BANKERS,
44 EXCHANGE PLACE,
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AGENTS FOR THE SALE OF
FOREIGN AND AMERICAN RAILROAD IRON
AND ALL MATERIALS NECESSARY FOR THE

Construction, Equipment & Operating of Railways.
RAILWAY AND OTHER SECURITIES
BOUGHT AND SOLD
Either privately or at the Board of Brokers.

A. S. & A. G. WHITON
72 PINE ST., NEW YORK,
DEALERS IN

RAILROAD IRON,
CHAIRS AND SPIKES,
LOCOMOTIVES,
PASSENGER AND FREIGHT CARS.
MANUFACTURERS' AGENTS

FOR Gilber's Iron Turn Tables, Dingle's Patent Blower, Gardiner's Volute Car Springs and

RAILWAY SUPPLIES GENERALLY.

ALSO
NEGOTIATORS OF SECURITIES.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
CASWELL & PERKINS,
 Brokers, 69 Wall st.
 New York, January 1, 1859.

Boston Locomotive Works,
 Late Hinkley & Drury,
 No. 380 HARRISON AVENUE,
BOSTON.

LOCOMOTIVE AND STATIONARY
STEAM ENGINES;
BOILERS;
 Iron, Brass, Copper and Composition Castings;
COPPERSMITH'S WORK,
 AND ALL KINDS OF RAILROAD MACHINERY
 FURNISHED AT SHORT NOTICE.

ALSO



**VAN KURAN'S IMPROVED
 RAILROAD WHEEL,**

PATENTED MAY 1, 1849.

Manufactured under the Personal Superintendence
 of the PATENTEE, as above.



ORDERS for any quantity of Wheels executed with dispatch, and Wheels and Axles fitted in the very best manner, and at the lowest rates.

Address **DANIEL F. CHILD,**
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**THE JERSEY CITY
 LOCOMOTIVE WORKS,**

SUCCESSORS TO

BREESE, KNEELAND & CO.,
JERSEY CITY, N. J.

MANUFACTURE COAL or WOOD BURNING
 LOCOMOTIVES, Steam Fire Engines,
 PORTABLE ENGINES and BOILERS, Cast Steel
 SPRINGS for Engines, Tenders, Passenger or Freight
 Cars, SHAFTING and ALL KINDS OF RAIL-
 WAY MACHINERY.

They also furnish to order TYRES, DRIVING WHEELS
 and AXLES, CASTINGS and FORGINGS.

Boiler Work furnished with dispatch.

G. M. WHEELER, **C. KNEELAND,**
 PRESIDENT. SECRETY & TREASUR.

W. G. HAMILTON, V. P. & Eng'r.
 OFFICE IN NEW YORK—49 WILLIAM ST.

UNION WORKS, BALTIMORE.

POOLE & HUNT,

Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials
 and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TYRES, equal
 to any produced in the country.

WHEELS AND AXLES fitted for use,
 HYDRAULIC PRESSES for expressing Oils and for
 other purposes.

MACHINERY of the most approved construction for Flour-
 ing and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings
 of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or
 description. SHAFTING, PULLEYS and HANGERS.

**THE ROGERS
 Locomotive & Machine
 WORKS,**

SUCCESSORS TO

ROGERS, KETCHUM & GROSVENOR,

PATERSON, N. J.,

HAVING extensive facilities, are now prepared to furnish
 promptly of the best and most improved description, either
 COAL or WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER VARIETIES OF

RAILROAD MACHINERY.

J. S. ROGERS, Pres't, **Paterson, N. J.**
WM. S. HUDSON, Sup't,
M. K. JESUP, Vice Pres't.
L. P. STARR, Sec'y and Treas'r.
 44 Exchange Place, New York.

Locomotive Engines.
DANFORTH, COOK & CO.,
PATERSON, N. J.,

HAVING erected an extensive Shop, with the most ap-
 proved Machinery and Tools, are prepared to execute
 orders for the various classes of Freight and Passenger Loco-
 motive Engines and Tenders, in the best manner and on the
 most favorable terms.

Also, Stationary Engines, and the various Tools suitable for
 furnishing Repair Shops.

The business of Machine making, heretofore carried on by
 Charles Danforth & Co., is continued by the present firm, and
 all orders will receive prompt attention. 1749

**THE SCHENECTADY
 LOCOMOTIVE WORKS,**
SCHENECTADY, N. Y.,

HAVING large facilities, are prepared to receive and ex-
 ecute orders for

LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and
 dispatch.

BRASS and IRON CASTINGS; LOCOMOTIVE TYRES
 welded and blocked to exact sizes, and every thing connected
 with the building or repairing of Locomotives furnished on
 short notice.

These Works being located on the New York Central Rail-
 road, near the centre of the State, possess superior facilities
 for forwarding their work to any part of the country, without
 delay.

JOHN ELLIS, Agent.
WALTER McQUEEN, Superintendent.

RICHARD NORRIS. HENRY LATIMER NORRIS.
RICHARD NORRIS & SON,
LOCOMOTIVE STEAM ENGINE
BUILDERS,
 SEVENTEENTH STREET, ABOVE CALLOWHILL,
PHILADELPHIA,

ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

LOCOMOTIVES,
RAILWAY TOOLS AND
MACHINERY.

MANUFACTURE to order, Locomotives of any Arrange-
 ment, Weight or Capacity. In Design, Material and
 Workmanship, the Locomotives produced at these Works,
 are equal to, and not excelled by any.

WEST POINT FOUNDRY.

R. P. PARROT, Lessee.

Manufacturer of Marine and Stationary
ENGINES,

Sugar Mills, Saw Mills, Iron Bridges, Cannon,
 WATER PIPES, BOILERS, IRON BUILDINGS,
 CASTINGS & FORGINGS OF ALL KINDS.

WM. KEMBLE, **Agents**
CHAS. J. NOURSE, 26 Broadway.

MACHINERY OIL.

REFINED NEAT'S FOOT OIL

WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all
 kinds of machinery use.

PETER COOPER,
 17 Daring Slip,
 New York.

**THE IMPERIAL
 LUBRICATING OIL,**

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON.)

108, 110, 112, 114, 116 and 118 CHURCH ST.,

NEW YORK.

FOR RAILROADS,

STEAMSHIPS, MILLS, MACHINE SHOPS, ETC.

THIS OIL, having been before the public for a long time,
 and having been extensively used in different parts of the
 country, and on each occasion meeting with unqualified ap-
 proval, renders the manufacturers confident when making the
 following claims:—

1st. Its first cost is vastly less than that of any Oil in use,
 of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any
 journal or bearing, all the gum in the Oil being entirely decom-
 posed.

3rd. It will keep all journals and bearings cool, clean
 and bright as new, thus not only saving wear and tear, but
 saving also no inconsiderable amount of motive
 power.

4th. It is fully as durable as any Oil in the market, and
 consumers are invited to make their experiments on such jour-
 nals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all
 odor or unpleasant smell.

Also,—

J. C. HULL & SONS'
REFINED BURNING OIL.

Buyers are requested to give this OIL a trial, as it is be-
 lieved that it will be found the

**CHEAPEST, CLEANEST AND BEST
 OIL FOR BURNING,**

(all things considered), in the market.

CERTIFICATES from a large number of Railroad
 and Steamboat officers, also, prominent Manufacturers
 and Machine Builders, can be seen by application as above.

TAW & BEERS,

DEALERS IN

Sperm, Whale and Elephant Oils,

Adamantine Car and other Candles,

AND MANUFACTURERS OF

**TAW'S LUBRICATING
 GREASE**

**FOR RAILROAD CARS
 AND HEAVY MACHINERY.**

THIS celebrated GREASE has been in use upwards of
 Ten years; and is in the opinion of FORTY RAIL-
 ROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or descrip-
 tion of machinery.

TAW & BEERS,
 18 SOUTH WATER ST.,
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OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of
 Thousands of Gallons, prove this Oil to be superior
 for Burning, and TWENTY-FIVE per cent. more
 durable than Sperm Oil, for Lubricating, and the only Oil
 that is in all cases reliable, that will keep bearings cool,
 and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after
 testing this Oil, pronounce it superior to any other for Lu-
 bricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filed for any part of the United States or
 Europe.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 19.]

SATURDAY, MAY 7, 1859.

[WHOLE No. 1,203, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, May 7, 1859.

Lehigh Coal and Navigation Company.

The annual meeting of the stockholders of this corporation, was held in Philadelphia, on the 3d. inst. The report of the board of managers was presented, of which the following is a synopsis: The shipments of coal were 908,999 tons, of which 114,537 tons were consumed on the line of the canal, 281,950 tons passed into the Morris Canal and 512,512 tons entered the Delaware Division Canal. The lumber trade was nearly thirty-six millions of feet. The freight of all descriptions, descending and ascending, was 1,126,760 tons. The profits of the year, \$595,856, against \$593,290 for the preceding year. The balance at the close of the year, \$343,863, against \$304,811 the end of 1857, being equal to nearly 14 per cent. on the capital stock. The contingent fund, the whole of which is securely invested, was, on the 1st of January last, \$1,099,889. Of the funded debt, \$301,416 were paid off, while the floating debt was reduced by the sum of \$53,561, making an aggregate reduction of \$354,977 in the general indebtedness of the company. At the close of the year 1858, the liabilities of the company, including the capital stock, funded debt and pecuniary obliga-

tions of every kind, and including also their own loans held in trust, subject to the orders of the board, were \$6,391,103. Deducting therefrom the last item, there remained \$6,057,243, as the sum total of the company's liabilities, showing a very decided improvement in the financial position of the company. Alluding to the material reductions made from the rates of toll on coal to tide, the report says results have justified the anticipations of the managers, the shipments to the present time being largely in advance of the shipments for the corresponding period of last year.

The officers elected for the ensuing year were:

President, JAMES COX.

Managers, Erskine Hazard, George Abbott, John Farnum, Henry J. Boller, Richard Richardson, Alexander Fullerton, Andrew Manderson, James S. Cox, Edward Yarnall and Jacob P. Jones.

Treasurer, EDWIN WALTER.

New London, Willimantic and Palmer R. R.

The income of this corporation from operations of their road during the fiscal year terminating November 1, 1858, was:

From passengers	\$42,297 68
" freight	53,194 19
" mail, express and rents	8,972 39

\$104,464 26

The expenses for same time were:

Repairs of road, etc.	\$12,650 09
Do. engines & cars.	5,856 51
Conducting transportation, including salaries, etc.	24,038 34
Wood, coal, oil, etc.	11,088 29
Miscellaneous	3,602 23

57,235 46

Net earnings	\$47,228 80
Paid for renewals and relaying super-structure	\$16,386 98
Interest on 7 per ct. bonds.	16,987 34
Do. city bonds	6,000 00
Do. mortgages	81 16

39,445 48

Leaving a balance of.....\$7,773 32
A statement is given in the report, showing the receipts, expenses and interest paid during each of the nine years that the road has been in operation; the aggregate receipts have been \$1,013,529 23; the expenses, (including \$53,271 11 for construction and renewals) were \$594,573 82; the

interest paid \$413,605 10. The company has no floating debt. The current expenses of the road are paid punctually every month. There is one and a-half year's interest on the first mortgage bonds unpaid, besides three year's interest on the second and income bonds.

The number of miles run by all the trains is 91,134, against 109,772 in 1857; the number of passengers carried, 77,409 against 92,147.

GENERAL STATEMENT.

Capital stock	\$510,900 00
Seven per cent. bonds	500,000 00
Six " " "	300,000 00
" " " income and con. bonds	152,000 00
" " " N. L. City	100,000 00
Original mort. on W. Neck property ..	3,600 00
Unpaid accounts	271 91
Profit and Loss	8,375 39

\$1,575,147 30

Cost of road and property	\$1,561,241 66
Norwich Junction	5,452 68
Uncollected accounts	1,871 08
Notes receivable	1,623 14
Materials on hand	1,989 83
Cash	2,968 90

\$1,575,147 30

OFFICERS:

THOMAS W. WILLIAMS, *President.*

JOHN DICKINSON, *Treasurer.*

W. R. STORES, *Superintendent*

Louisville and Nashville Railroad.

We learn from the *Bowling Green Gazette*, that the work on this road is progressing at that place as rapidly as the weather and other circumstances will admit. The track is laid south as far as Foster's farm, a distance of five or six miles, and with fair weather and a full corps of hands will be pushed forward at a rate of about half a mile per day.

East Tennessee and Georgia Railroad.

The following is a statement of the earnings of this road for the nine months ending March 31st, 1859:

Received from passengers	\$135,927 77
" " freight	86,950 18
" " mail service	16,500 00

\$239,377 95

Estimate expenses chargeable to same 95,874 08

Approximate net earnings..\$143,503 87

T R E A T I S E

ON THE

PRINCIPLES OF CIVIL ENGINEERING

AS APPLIED TO THE

CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, *Civil Engineer,*
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 277.)

§ 80. The vertical pressures upon the abutments will, always, be equal to the weight; but the vertical strains upon the braces may much exceed that weight. The oblique strains, or those in the direction of the braces, will then be correspondingly increased.

Fig. 47.



ccc. Suppose the height of the truss (Fig. 47) to be one-sixth of the span. The weight (W) is supported at the middle by one pair of braces. These braces are $\sqrt{3^2+1^2}=3.162$ times the height, and if the weight (W) be taken at 10,000 lbs., the crushing tendency, in the direction of each brace, will be (§ 79, pp.) 15,810 lbs.

Now, if the chord be a white pine beam, 12 feet long, 12 inches deep and 6 inches in breadth, a deflection of $\frac{1}{16}$ of an inch, per foot, will be produced by 6,164 lbs. at the middle (§ 41).

By shortening the tie-rod (cd) $\frac{1}{16}$ or $\frac{1}{10}$ of an inch, producing a camber upon the chord to that extent, the braces will be subjected to an increased vertical strain of 6,164 lbs., and a total vertical pressure of 16 164 lbs. The force in the direction of the braces will now become 25,555 lbs.

The weight of the material composing a bridge, may be considered as weight uniformly distributed throughout the length of the trusses.

§ 81. It is customary in most forms of bridges, to extend the top chord to the same length as the bottom one, and to connect them firmly at the ends by means of posts, as represented in Fig. 48.

Fig. 48.



§ 82. Loading this truss uniformly, and observing the effect of flexure upon it, a tendency is seen to convert the rectangular panels into oblique-angled parallelograms.

This tendency is counter-acted by the oblique struts, and, being wholly vertical, may be measured by the reduction which will take place in the relative heights of opposite angles of the panels when the braces are omitted.

The greatest obliquity will occur in the end panels, and the least in the middle ones. The ratio of obliquity of the intermediate panels will depend upon the nature of the curve which the truss will assume. If the curve be regarded as a parabola, the obliquities will be as the squares of the distances from the middle, and are easily determined.

Fig. 49.



ddd. Let this figure represent the truss without its braces, and in a state of flexure conforming to a parabola. Put the depth of the truss equal $\frac{1}{6}$ its length, and the total deflection at the middle, $Ht=Em=Fn$.

The ordinates Fn , Dv and fx , will be as the squares of their distances from i , the middle of the truss.

Then $(im)^2 : Em :: (iu)^2 : Cu$; or, $3^2 : 1 :: 2^2 : \frac{4}{9} = Cu$, and

$(im)^2 : Em :: (iw)^2 : ew$; or, $3^2 : 1 :: 1^2 : \frac{1}{9} = ew$.

The difference in depression of

E and C will equal $Eo=Em-Cu=1-\frac{4}{9}=\frac{5}{9}$. Of

C and e " " $Cs=Cu-ew=\frac{4}{9}-\frac{1}{9}=\frac{3}{9}$. Of

e and i " " $ew=\frac{1}{9}$.

These depressions, then, are respectively as 5, 3 and 1, and exactly in proportion to the distances of the centres of the panels from the middle of the truss.

These numbers, therefore, express the relative oblique, and vertical pressures upon the three pairs of braces in Fig. 48.

The chords of trusses, except in § 80, have been considered as affected, only by tension or by compression. But, when the chords are composed of timber, either whole, or in pieces combined in any of the usual modes, each chord is a beam, the stiffness of which will, to a greater or less extent, oppose any tendency to deflection of the truss.

If the chords were perfectly stiff, no bending or curvature would take place. On the other hand if they were perfectly flexible a uniformly distributed load would give them the curvature of a parabola.

Loading the truss, Fig. 49, with a single weight in the middle, instead of uniformly distributing it, the tendency to convert the rectangular into oblique-angled panels, will still exist. If the chords were perfectly flexible an angle would be found at the point of application of the weight, the half-chords from that point would remain straight, and the obliquity would be the same in every panel; consequently, the braces would be of equal length and be subject to equal strains.

The chords, however, are neither perfectly stiff nor perfectly flexible, and when a considerable weight is applied at the middle of the truss, curvature does take place, unless the tendency to curvature is completely counteracted by the braces.

This curvature may be called the curve of flexure. If it were a parabola, the relative strains upon the braces would be the same as when the weight was uniformly distributed.

In the absence of well-authenticated experiments to prove the nature of this curve, it is assumed to be a hyperbola.

The hyperbola is a curve which may be said to vanish into two straight lines, forming an angle, and corresponding to the flexible chord; or, into one straight line corresponding to the perfectly inflexible chord. In a similar sense the ellipse vanishes into the circle as one diameter becomes equal to the other, or it vanishes into a straight line if one diameter becomes zero.

The deflection under a given load applied at the middle, is to the deflection produced by the same load uniformly distributed, as 8 to 5, (§ 48).

If the deflection (HI) of a truss (Fig. 49) under a distributed load, be 1, it will be $\frac{8}{5}=1.6$ under the same load applied at the middle.

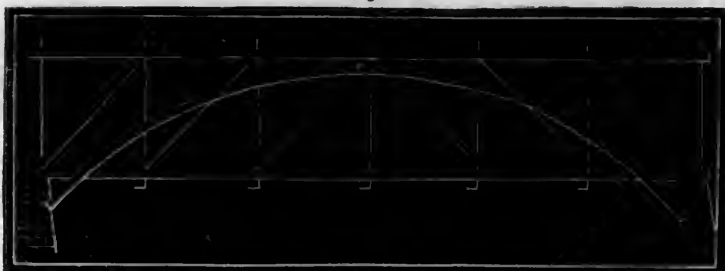
Putting the half span (im) equal 3, as before; $rw=wu=um=1$; $HI=1.6$ and the curve an equilateral hyperbola, the depressions will be $ew=0.236$, $cs=0.59$, and $Eo=0.774$.

To show more clearly the relative distortions of the panels, when the load is distributed, and when it is at the middle, suppose two trusses in every respect alike, except, that one sustains a given load uniformly distributed, and the other sustains an equal load applied at the middle. Suppose, also,

pedient by which the resistance of the abutments is made to sustain the load wherever situated between the points of support.

It is demonstrable that with a given load, a minimum quantity of material will be required, when the diagonals have an inclination of 45 degrees.

Fig. 55.



kkk. Fig. 55 represents what is known as the "Burr Truss" it being a combination of the original truss (Fig. 52) with an arch, firmly secured to the sides of the truss, and abutting against the masonry considerably below the bridge seat.

This arrangement was in general use, on common roads, previous to the introduction of railroads; and, as a natural consequence in their construction, it was at first adopted, particularly for spans of considerable length. But the difficulty or impossibility of bringing a load to bear satisfactorily upon both truss and arch at the same time, and the extreme flexibility of the structure under the rapid transit of trains, tending to weaken its connections, and speedily destroying its integrity, have led in a great measure to its abandonment, and to the invention of the "Howe Truss" proper, as represented by Fig. 56.

lll. By this arrangement it was intended to dispense, entirely, with the use of the arch and to depend, alone, upon a truss of sufficient strength. For spans of a considerable length—say from 100 to 150 feet, it has met with fair success.

But, as the weight of locomotives and trains upon railroads have increased, and as spans of greater length have become desirable, this form of truss has

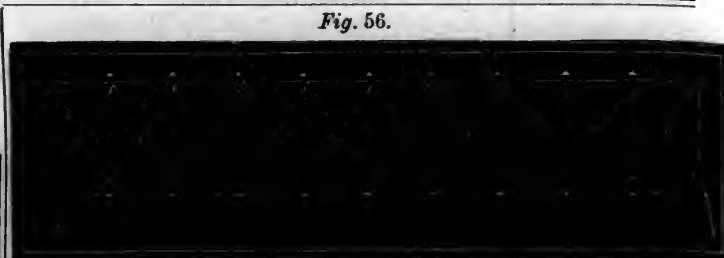


Fig. 56.

proved deficient, and the arch has again been brought into requisition, in attempted combination with this truss as shown in the next diagram.

Fig. 57.



mm. In adopting this expedient it was thought that the arch and truss would act independently, and, at the same time, in unison with each other; that the lower chord being suspended, by adjustable rods from the arch, without the latter being fastened to the side of the truss, the strain would, always, be thrown equally upon the arch and the truss.

The variations in expansion and contraction, of the iron rods employed of different lengths, making constant adjustments necessary, and the liability to mal-treatment by careless or inexperienced persons in attempting the frequent indispensable adjustments, render this plan comparatively complicated and expensive, while it does not possess any practical advantage over the "Burr" arrangement.

(To be continued.)

Journal of Railroad Law.

EMPLOYMENT OF SERVICES IN PROCURING A CONTRACT FOR BUILDING A RAILROAD. WHEN VALID.

The case of *Davison vs. Seymour*, (in 1 Bosworth's N. Y. Superior Court Reports, recently published) discusses the important and interesting question, whether an agent employed to procure the contract for constructing a railroad from the company, for his principal, can recover from the principal a bonus or commission, agreed to be paid for his services, if successful.

The facts of this case were as follows. A company had been incorporated by the State of Illinois, to construct a railroad within that State. The plaintiff, Davison, was employed by Hezekiah C. Seymour, one of the firm of H. C. Seymour & Co. and acting on behalf of that firm, to procure for that firm contracts with the railroad company for constructing their road and for furnishing and equipping it. He was to have \$10,000 for his services. In consequence of his exertions and influence, the contracts were awarded to the firm of Seymour & Co., the total contract price for the work awarded to them being nine millions of dollars. That firm, however, instead of building the road, sold out their interest in the contract for five hundred thousand dollars bonus.

It further appeared that the plaintiff recommended Seymour to one Clements, who knew nothing of him. Clements recommended Seymour to the directors of the company, in consequence of plaintiff's attestation of his qualities. Clements was employed when the company was preparing to let the road, and was to have a good commission

which was afterwards adjusted at \$10,000. Clements engaged for these considerations to use his influence, and did use it to procure the contract for Seymour; and his exertions were successful; or at least influential in attaining the object. When Clements first undertook the matter, Davison did not even name to him the intended contractors, nor did he appear openly as Seymour's agent.

The court held that upon these facts, Davison could not recover the agreed compensation; such a contract being against public policy and therefore void. The following is a brief statement of the reasons assigned.

HOFFMAN J.—after stating the facts. Undoubtedly this was the employment of Clements for a bribe, to use personal influence with the directors to secure a lucrative contract for one, of whose capacity or responsibility he was entirely ignorant. He was to use this secretly and with individuals.

The directors of this great railroad scheme, if they stood not in the capacity of public officers, owing a duty to the State, yet were trustees of the stockholders of the road and owed the best efforts to them. No one can deny, that a stipulation for any personal advantage or profit which might attend and influence the discharge of their trust to the stockholders, would be a violation of duty; and no engagement given to them, or contract made with them for that object, could bear the scrutiny of the law. If one of their officers, empowered to negotiate and finally to settle the contract with Seymour, had received an obligation for the payment of a sum of money for his ser-

vices, it could never have been enforced. Does the present case fall within the principle which would avoid such agreements.

[After citing and examining numerous authorities bearing upon this question, his Honor proceeds as follows.]

I am led to the conclusion, that it would be impossible to allow Clements to sustain an action upon the agreement with him. There was in it most of those elements of a vicious contract, which have avoided similar obligations in the leading cases cited. There were secrecy, applications to individuals, a concealed promise of compensation, and utter ignorance and recklessness as to the competency of the party whose cause he was promoting, and whose reward he was to receive.

If, then, the claim of Clements would be promptly rejected, does the present plaintiff stand in a better position? His original employment might have been consistent with an open avowed agency—with an intent, or instructions, to make it known; and thus be free from all objection. But we are left in ignorance of what the terms of such original agreement were, and how far they extended. All is indefinite, except merely an employment. He engages Clements; and here again that employment may have been perfectly free from censure on the plaintiff's part. But we cannot separate the acts of Clements from the acts of the plaintiff. There is a legal identity between them for the purpose of this action. The plaintiff must be held to have employed Clements to do what he did do, or to have been bound to superintend his

proceedings, and free them from what was illegal. It is impossible to permit him to profit by the misdeeds of his own agent, however ignorant and exempt from them himself. His ignorance, when knowledge was a duty, becomes equivalent to a fault.

New York and Erie Railroad Circular.

We have been requested to publish the following circular in reference to the unsecured indebtedness of the New York and Erie railroad:—

The finances of the New York and Erie Railroad Company have become too cloudy for the public to comprehend, or the stockholders and unsecured bondholders to judge of the proper course to pursue in protecting their own interest, or by concert of action to restore former values. Therefore the writer submits the following remarks for perusal.

The policy of not renewing the bonds which fell due in March last, which could only be done at an enormous sacrifice, will be more justly appreciated at some future day, when the results will be more palpable. A part of the increased debt of latter years has arisen from the enormous sums paid for funding floating debts, as in previous years from renewing matured loans. If we take as view of the earnings and expenses of the last four years we shall find a large portion of the surplus earnings was expended on the Long Dock Investment, which will eventually prove to be the salvation of the company, as when all the works are completed, the company's revenue must be greatly increased.

In 1855 the earnings were.....	\$5,488,093 37
In 1856 the earnings were.....	6,348,990 15
In 1857 the earnings were.....	5,742,606 51
In 1858 the earnings were.....	5,151,606 43 \$22,732,206 46
In 1855 the expenses were.....	\$2,861,875 21
In 1856 the expenses were.....	3,201,996 42
In 1857 the expenses were.....	4,054,631 35
In 1858 the expenses were.....	3,871,908 69
Four years' interest on total debt.....	7,840,000 00 \$21,830,411 67

Surplus..... \$901,794 79

This surplus represents the amount expended on the Long Dock property at Jersey City.

The present amount of bonds issued, secured by mortgages, are \$17,000,000, and of the unsecured \$8,000,000, (with convertible stock privileges) and balance \$11,000,000 representing the capital stock.

The progress of the company's business is seen strikingly in the following table:

	Passenger business or number carried per mile.	Freight business or tons carried per mile.
1850.....	26,224,147	17,536,090
1851.....	52,213,002	34,790,480
1852.....	81,179,554	96,697,695
1853.....	98,432,361	101,626,522
1854.....	96,663,709	130,808,034
1855.....	84,069,398	150,673,997
1856.....	101,108,220	183,458,043
1857.....	85,362,657	165,100,850
1858.....	64,931,456	165,895,635

The entire indebtedness of the company was on the 30th September, 1854, \$25,126,282 95, but had increased by the 30th of September, 1858, to \$26,386,952 80, showing an increase of \$1,260,669 85 in four years, which represents the loss of \$800,000 in 1855 in funding the income bonds and floating debt, and the balance charges on construction account.

It is worthy of remark that the expense of

wood per cord and the total cost per mile are less than on the New York Central or on the Hudson River railroads, also the shortest distance by 12 miles to Buffalo. The grade of track of the Erie is also more favorable for business than those of the Pennsylvania or the Baltimore roads. The Erie railroad possesses also other advantages in the steady increase of the products of the fields and the forests along its track. The annual increase of freight alone from this source is very great. The year 1858 showed a falling off in the passenger business alone, and none at all in the freight, and the decrease in 1857 arose from accidental and temporary causes well known, by which the whole country and all interests suffered, and from which they are now rapidly recovering. The New York Central has had for all the time of its existence a dense population to draw revenue from, but the Erie road has had a business to build up; and having no canal running parallel with it, will continue to have an exclusive monopoly of the annual increased local freights. It has been the means of bringing extensive fields into cultivation for agricultural purposes, and brought forests within reach of a market for their timber. These results are progressing constantly. With its air line of iron reaching from the ocean to the lakes of the interior, transporting and interchanging the commerce of the East and West, no limit can be assigned to the future earnings of this national thoroughfare. It is the natural outlet for the transportation of the millions of produce from the millions of acres lying on the borders of our upper Western lakes, yet only partially brought under the plough. The annual increase of population will create a great additional traffic, and the wants of this industrial population, yearly adding largely to its wealth, must cause a large increase of freight, carrying upwards the handiwork of nations and the luxuries imported from abroad, the products of every soil and clime, and bringing down the grain, the timber, the beef, the pork, the mutton, the wool, the cattle, which the teeming earth has been made instrumental in producing.

Economy of management is more essential now than ever, as one means of restoring the finances of the road. The express trains should be discontinued, and only two passenger trains each way per day be run, and these only at a rate of speed not exceeding twenty miles per hour. This would permit the track, the engines and the cars to be kept in good repair at a much reduced cost. The increase of friction and wasteful wear and tear, arising from an undue speed, such as is at present used, would be avoided. The race is not to the swift nor the battle to the strong; and this has been proved in many a railroad enterprise. Tact and wisdom are far more essential provisions for success than mere speed and strength. The cost of great speed cannot be repaid by the amount of business done. The safety also from a moderate speed saves much expense from accidents and damages incurred, which always attend great speed. The through passenger receipts are about three hundred thousand dollars, the through freight receipts about two millions of dollars, and the balance of receipts, from three to four millions, is made up from the local passenger and freight business. All railroad property represents mechanical labor and mechanism. The owners should have directors and officers of competent mechanical skill, and with honesty branded on their antecedent acts. The conductors, superintendents, and even laborers, should be in proper degrees skilled to keep the road in perfect order, as the mechanism of a good watch we carry in our pockets. The running of trains at a moderate or slow speed gives larger profits out of the receipts, and quick trains do not add to the net receipts out of the expenses. Probably fifty to sixty per cent. profit might be obtained, whereby only twenty or thirty per cent is now realized, from a less destructive speed being substituted for the present costly rate. It is not only the expense of steam but the waste from the destruction of property.

Express trains on railroads are about as profitable

to the stockholders as the merchants' trotting horses and carriages are when compared with the draft horses and carts at the warehouses. Therefore speed in both instances are alike destructive and ruinous, unless the amount of profitable business justifies the extra expense. In a word, the local business and through freight receipts are the only reliable sources to derive revenue and profit from.

The public now look upon railroad investments with the same kind of dread as they did upon mercantile notes and obligations in the panic month of 1857. If business prospers generally, railroads must prosper—as the passenger cars are used as hotels, and freight cars as warehouses to an extent only measured by the amount of business done by our domestic and foreign commerce. And the iron rails are not only extended arms for carrying merchandise etc., but ploughs for extending the culture of fields, the produce of which they bring within reach of market. The progress we have made in the last ten years, in the uses and adaptations of machinery, must convince all reflecting minds that if financial and mechanical ideas are not combined, the two motive powers of gold and coal are only used and wasted at the expense of the railroad stockholders. The owners of the Erie railroad must, we think, have become fully convinced, that the only legitimate sources from which profitable receipts are to be derived, is first from freights and local passenger traffic, and secondly to lessen the expense or cost of transport, by diminishing the friction and speed, saving consumption of steam and fuel, keeping down the wear and tear, and so lessening the cost of repairs. The cost of extreme speed is great, while not a fraction of revenue in business is obtained thereby, and if a small increase were obtained it would not repay the increased outlay. The true policy is, therefore, to run all the trains slowly, and to keep the track and machinery in perfect order.—The through passenger receipts are mere shadows of profit, reflecting out the loss in transporting the substance, that is the balance of the business.—Now that we have ceased to be a nation of floating speculators in unproductive lands, for the panic has done one good thing in clearing out all moonshine or bogus ventures, we find that agricultural industry, and manufacturing industry excite more attention; and the revival of these will soon provide increased freight for our railroads, which are a permanent addition to the wealth of the nation.

The Erie railroad is a necessary outlet for the trade and commerce of New York. The merchants and traders subscribed liberally at first to the capital stock, in order to increase their trade by opening up large tracts of land for culture, and to connect the vast interior of the Western States directly with New York. On the completion of the Long Dock at Jersey City, the Erie railroad company will be able to control the through freighting business by having there provided warehouses, and cattle yards, for the storing of railroad receipts of merchandise and live stock for safe keeping; either for shipment to foreign ports, or a better home market. The writer is fully satisfied, on a thorough investigation, that the funded securities of the Erie railroad company are unduly depressed, arising from the large floating debt from the abuse of its former credits in the shape of acceptances, and the past villainous management of all railroad corporations.—Therefore now is the time for the stockholders, and others who may be interested, to purchase the unsecured bonds, which can be bought at a large discount, on which a large profit is certain to be soon derived by conversion into the fourth mortgage bonds, and will relieve the company of its embarrassment, which as the road works on, will regain its old commanding position. The fourth mortgage bonds are well secured; being purchasable to the extent of one-half by the unsecured bonds, these last are rendered valuable; and when the panic respecting railroad investments passes away, and the public recovers from its present torpor respecting them, they must bear a price commensurate with their real value. Also

the efforts of those persons to sustain this present original corporation, will feel amply rewarded for their labors in protecting their own property in common with others, in preventing this great and necessary work of art from passing into the hands of those whose fortunes will be made at our expense.

On reflection, you will come to but one conclusion, and that is: that while the general business of the United States is depressed, that the laws of trade "supply and demand," produce excessive competition followed by low rates on the through passenger and freight business, and that the profits only are derived from the local business of the road, and that even the present receipts from that source alone, is a sufficient guarantee that if the company's obligations were funded, that interest could be promptly paid on a much larger mortgage debt.

In giving the following figures (of the average for the past four years) from the official reports of the two most speculative English railways on the London Stock Exchange, and the two largest American railroad corporations on the New York Stock Exchange, we find the following startling results in favor of our roads.

American Rail-roads.	Miles.	Cost per mile.	Average annual receipts.	Present price of stock.
N. Y. & Erie....	460	80,000	5,700,000	9½
N. Y. Central....	300	133,000	7,000,000	72½
English Rail-roads.				

Great Western....	466	250,000	7,500,000	57½
Midland.....	614	170,000	8,500,000	100½

The writer now hopes that after presenting the above figures and truthful remarks, showing the ability of the road to derive a larger annual revenue, based on the shortest existing route to Lake Erie from New York, and representing less capital, a good grade, cheap fuel, yearly increase of production, traffic and population, now urges the immediate subscription to the balance of the fourth mortgage bonds, of which over two millions of dollars remain untaken. All persons wishing to subscribe, *conditionally on the whole being taken*, (which will immediately advance the market price twenty per cent.,) and on the terms proposed by the directors, namely, half payable in cash, or in the company's acceptances, and half in the unsecured bonds or coupons, will please forward their names by letter (postage paid) to

WASHINGTON MILLS,
43 Exchange Place, New York.
New York, April 25, 1859.

Texas Railroads.

The Galveston and Houston road now runs tri-weekly trains from Virginia Point to Houston merely for freighting purposes. We note but few passengers yet coming over the road. The bridge across the bay is being built as fast as possible.—It is said that a thousand feet of it is already done. The Brazoria road is doing a regular business to Arcola, and has brought in several good loads of sugar, cotton and molasses within the past week. The grading is being pushed rapidly ahead beyond Columbia, and fully five miles of it is already done, as well as the timbers for the bridges and culverts on the ground.

The R. B., B. and C. road is at present stopping on the Bernard river, though we are informed the bridge will now very soon be done, when it will be pushed ahead fifteen miles further with all convenient speed. We learn that the directors of the W. C. road have contracted for their bridge across the Brazos. The contractors on the Central road are pushing their work through with heavy gangs of laborers, and expect to come within the terms of their contract. Other enterprises are quietly working along, among which we mention that of the New Orleans road, concerning which we shall very soon be able to publish some very satisfactory news, wind and tide permitting.—*Houston Telegraph.*

Richmond Machinery.

A few days since the barque William Mason, sailed from Richmond for New Orleans with nineteen steam engines and saw mills on board, all the manufacture of Richmond machine shops—fifteen of them being from Mr. P. Rahm's, three from Messrs Talbott's and one from Messrs. Anderson and Co's. The saws were also made in Richmond by Messrs. Burger & Boyle. The cargo of the barque was completed with bar iron from the rolling mills of Messrs. Anderson & Co.

This is the fifth vessel that has left our wharves for New Orleans within the last few months, loaded from our machine shops.

The demand upon Richmond from the farther South is not confined to saw mills, but includes every kind of machinery made in our establishments.

Very extended preparations have been made by several of our establishments in this line to do a large business, and to enable them to fill promptly any orders committed to them.—*Richmond Enquirer.*

Immigration into the United States.

The following statement will show the annual migration from foreign countries into the United States, from the foundation of the Government to the present times, and the sex and nationalities of the emigrants.

PROGRESS OF IMMIGRATION.

Arrivals from 1790 to 1843.

Years.	Arrivals.	Years.	Arrivals.
1790 to 1800....	50,000	1830-31.....	23,074
1800 to 1810....	70,000	1831-32.....	45,278
1810 to 1820....	114,000	1832-33.....	56,547
1820-21.....	5,998	1833-34.....	65,335
1821-22.....	7,829	1834-35.....	52,899
1822-23.....	6,749	1835-36.....	62,473
1823-24.....	7,088	1836-37.....	78,083
1824-25.....	8,532	1837-38.....	59,363
1825-26.....	10,151	1838-39.....	62,163
1826-27.....	12,418	1839-40.....	84,146
1827-28.....	26,114	1840-41.....	83,504
1828-29.....	24,459	1841-42.....	101,107
1829-30.....	27,153	1842-43.....	75,159
Total 1790-1843.....	1,209,126		

Arrivals from 1843 to 1858.

	No. of Males.	No. of Females.	Sex not stated.	Total Arrivals.
30 Sept., 1844..	48,897	35,867	...	84,764
" 1845..	69,179	49,311	1,406	119,896
" 1846..	90,974	66,778	897	158,649
" 1847..	139,167	99,353	990	239,482
" 1848..	136,128	92,883	472	229,483
" 1849..	179,256	119,916	512	299,683
" 1850..	200,904	113,392	1,038	315,234
3 mths, 1850..	38,282	27,197	181	65,570
31 Dec., 1851..	245,017	163,745	66	408,828
" 1852..	235,731	160,174	1,438	397,343
" 1853..	236,732	164,178	72	460,982
" 1854..	284,887	175,587	...	430,474
" 1855..	140,181	90,283	12	230,476
" 1856..	135,308	89,188	...	224,496
" 1857..	162,538	109,020	...	271,558
" 1858..	89,648	54,704	300	144,652
Total... 2,432,829	1,611,467	7,384	4,051,670	
Total from 1790 to 1843	1,209,126			

GRAND TOTAL from 1790 to 1858... 5,260,796

ORIGIN OF IMMIGRANTS, 1820-1850. (Exclusive of Americans returned from abroad.)				
Countries.	1820 to 1835.	1836 to 1850.	Total	In U. S. Census of 1850.
England...	21,595	33,945	55,540	278,676
Wales.....	347	1,269	1,616	29,868
Scotland...	5,658	3,901	9,559	70,555
Ireland....	50,304	168,322	218,626	961,719
Not stated.	108,362	1,019,078	1,127,440	.....
U. Kingd....	186,266	1,226,515	1,412,781	1,340,812

France.....	26,688	105,076	131,714	54,069
Spain.....	3,565	43,385	6,950	3,113
Portugal....	891	668	1,559	1,274
Belgium....	33	5,091	5,124	1,313
Prussia.....	433	16,092	16,525	10,549
Germany....	52,868	525,396	578,264	574,171
Holland.....	1,757	9,036	10,790	9,848
Denmark....	467	1,324	1,791	1,838
Swed. & Nor.	509	14,689	15,198	16,237
Poland.....	164	331	495	See Russia.
Russia.....	325	592	917	1,414
Turkey.....	23	64	87	106
Switzerland.	6,020	6,702	12,722	13,358
Greece.....	29	56	85	86
Italy & Malta	2,339	2,336	4,675	2,679
Other Countries of Continental Europe.....	2	51	53	....

Total Continental.	96,063	690,886	786,949	691,055
B. America...	6,677	51,156	57,833	147,711
S. America...	1,004	3,973	4,977	1,543
Gen'l Amer..	147	372	519	141
Mexico.....	9,033	5,655	14,688	13,317
West Indies.	9,528	20,299	29,827	8,772

Tot. America.	26,889	81,455	107,844	168,484
Asia.....	46	99	145	1,135
Africa and Oceania...	546	500	1,046	1,139
All other ...	....	....	....	8,214
Tot. Asia, etc.	592	599	1,191	10,488

Recapitulation, 1820-1850.

U. King'm.	186,266	1,226,515	1,412,781	1,340,812
Continent ..	96,063	690,886	786,949	691,055
Europe.....	282,329	1,917,401	2,199,730	2,031,867
America...	26,389	81,455	107,844	168,484
Asia, etc. ...	592	599	1,191	10,488

Grand Tot., 309,310 1,999,455 2,308,765 2,210,839

The total immigration of aliens to the end of 1858 has been:

Countries.	to 1850.	to 1858.	to 1858.
England.....	55,540	220,298	275,838
Wales.....	1,616	5,377	6,993
Scotland.....	9,559	34,425	43,984
Ireland.....	218,626	664,887	883,513
Unclassed.....	1,127,440	273,353	1,400,793

United King'm, 1,412,781 1,198,340 2,611,121

France.....	131,714	63,818	195,532
Spain.....	6,950	6,983	13,933
Portugal.....	1,559	887	2,446
Belgium.....	5,124	4,664	9,788
Prussia.....	16,525	37,673	54,198
Germany.....	578,264	817,619	1,395,883
Holland.....	10,790	10,148	20,938
Denmark.....	1,791	2,709	4,499
Sweden & Norw.	15,198	19,562	34,760
Poland.....	495	976	1,471
Russia.....	917	301	1,218
Turkey.....	87	69	156
Switzerland....	12,722	23,265	35,987
Greece.....	85	29	114
Italy and Malta.	4,675	7,284	11,959
Other Countries.	53	...	53

Contin'l Europe. 786,948 995,986 1,782,935

British America.	57,833	50,632	108,465
South America..	4,977	861	5,838
Central America,	519	437	956
Mexico.....	14,688	2,584	17,272
West Indies....	29,827	8,397	38,224
America.....	107,844	62,911	170,755
Asia.....	145	32,518	32,663
Africa & Ocean'a	1,046	2,516	8,562
All other C'tries	....	22,234	22,234
Grand Total.	2,308,765	2,314,505	4,623,270

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$833,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	85
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1866	90	90
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	75	75
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1868	---	---
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August	"	1869	---	---
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1865	40	42
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	94	96
Do. do.	485,000	2d do. do.	7	May, Novemb.	"	1860	82	82½
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868	---	---
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	---	---
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August	"	1861	97	100
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August	"	1860	65	70
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	60	67
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1857	7	April, October	"	1862-72	30	50
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	30	50
Covington and Lexington	400,000	Do. do.	6	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1863	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1876	87	89
Florida Freehold	1,500,000	Do. not convertible	7	March, Sept.	"	1891	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	65	72½
Galena and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August	"	1863	93	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876	90½	92
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	84	88
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	---	---
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	---	---
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	86	86
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianap. & Cin'ti (for Lawb. & U.M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	87	90
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August	"	1865	71	78
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	83	85
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	95	97
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	92	93
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	---	---
Do. do.	650,000	Do. 2d do.	8	April, October	"	1863	77½	77½
Do. do.	1,250,000	Do. 3d do.	8	June, Decemb.	"	1877	67	72½
New Albany and Salem	600,000	Do. 1st section	10	April, October	"	1858-62	---	---
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-76	---	---
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	75	75
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August	"	1867	70	75
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1866-66	70	77½
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	57	62
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	100½	101½
Racine and Mississippi	630,000	Do. conv. sink'g'd	8	Feb'y, August	N.Y.	1875	---	---
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	---	---
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1866	---	---
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	---	---
Terre Haute and Altoona	1,000,000	Do. do.	7	Feb'y, August	"	1862-77	68	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	85	88
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	94	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	80½	81
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	69½	70
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1860	47½	49½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August	"	1875	20	23
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August	"	1871	20	21
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	20	22
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August	"	1869-70	103	104
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	95	95½
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	79½	79½
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	88½	90
Do. (Free Land)	8,000,000	M'gs 345,000 acres-priv. 7 shars	7	March, Sept.	"	1860	95	95½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	84	87
New York and Harlem	1,300,000	Do. do.	7	May, Novemb.	"	1861-72	94½	95
New York and New Haven	1,750,000	No mortgage, do.	7	June, Decemb.	"	1865-66	98	99
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	94	94½
Northern Indiana	1,600,000	Do. do.	7	Feb'y, August	"	1861	81	83
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August	"	1868	71½	72
New York Central	8,287,000	N. mortgage, do.	8	May, Novemb.	"	1863	94	95
Do. do.	8,000,000	om'g conv. from June 57-59	7	16 June, 16 Dec.	"	1864	104	104½
Panama, 1st issue	900,000	Convertible till 1858	7	Jan'y, July	"	1866	114	114
Do. 2d do.	1,470,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,000,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	---	---
Do. do.	3,469,000	Do. convertible	6	Jan'y, July	"	1870	85	85½
Do. do.	---	Do. inconvertible	6	April, October	"	1866	76	76½

CITY SECURITIES.	Int'l payable.	Off'd Ask.	CITY SECURITIES.	Int'l payable.	Off'd Ask.
New York, 5 per ct. ....1858-'60	{ May, 98½ August, 93 and November, 103	99	Milwaukee, 7 per ct. coup. X	Divers	45 70
Do. 5 do. ....1870-'76		94	New Orleans, 6 per ct. cp. R.R. X	Do.	75 80
Do. 5 do. ....1883		103½	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	87½ 91
Do. 5 do. ....1890-98		92½	Philadelphia, 6 per ct. ....1876-'98	Jan'y, July	100 100½
Albany, 6 per ct. coup. ....1871-'81 X	Feb'y, August, 99	101	Pittsburgh, 6 per ct. coup.	Divers	46 50
Alleghany, 6 per ct. coup. X	Jan'y, July	99	Quincy, 8 per ct. coup. ....1868	Jan'y, July	67 76
Baltimore, 6 per ct. ....1878-'90	Jan'y, July	100	Racine, 7 per ct. coup. ....1873 X	10 Feb'y, Aug	80
Brooklyn, 6 per ct. coup. ....Long X	April, October, 101	102	Rochester, 6 per cent. coup. X	Divers	90 97½
Clev'rd, 7 per ct. cp. W.W. 1879 X	Jan'y, July	102½	St. Louis, 6 per ct. coup. ....Long X	Do.	84 85
Cincinnati, 6 per ct. coup. X	Do do	100	Do. do. Municipal. X	Do.	86 87
Chicago, 6 per ct. coup. ....1873-'77 X	Divers	92½	Sacramento, 10 p. ct. cp. 1862-'74 X	Do.	35 40
Do. 7 per ct. coup. ....1880 X	Jan'y, July	85	S. Francisco, 7 p. ct. cp. 1865, pay. N.Y. X	May, Novemb.	60 70
Detroit, 7 per ct. cp. W.W. 1878-'78 X	Jan'y, July	97½	Do. 10 p. ct. cp. ....1871 X	Do. do.	90 91
Dubuque, 8 per ct. cp. ....Long X	Feb'y, August, 100	102	Do. 10 do. pay. N. Y. X	Jan'y, July	56 61
Jersey City, 6 p. ot. cp. W.W. 1877 X	March, Sept.	100	Do. 6 per ct. pay. N.Y. 1875 X	Do. do.	56 61
Louisville, 6 per ct. cp. ....1880-'83 X	Jan'y, July	99	Wheeling, 6 per ct. coupon X	Divers	50 51
Memphis, 6 per ct. coup. ....1882 X	Divers	72	Do. 6 p. ot. cp. Mun. 1874 X	March, Sept.	80 81½
	Jan'y, July	64	Zanesville, 7 do. X	April, October	

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending May 3, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	68½	---
Covington and Lexington, 1st Mortgage	68	---
Do. do. 2d do.	78	80
Do. do. Income	10	---
Ohio & Miss., E. D., Construction	75	---
Cinc. Ham. and Dayton, 1st Mortgage	75	---
Do. do. 2d do.	75	85
Indianap. & Cincinnati, do.	75	85

STOCKS.

Cincinnati, Hamilton & Dayton	60
Columbus and Xenia	68
Indianapolis & Cincinnati	64
Little Miami	90
Ohio and Mississippi (E. D.)	---

Great Western (Ca.) Railway.

ABSTRACT OF THE HALF YEARLY REPORT.

The total amount of share capital which the company has been authorized to raise is £5,301,369 16s. 2d. sterling, under six acts of the Provincial Parliament. The company has received on capital account, up to the 31st January, 1859, £4,840,548 1s. sterling.

The total expenditure of the company on capital account, up to the 31st January, 1859, has been £4,803,934 17s. 5d. sterling.

The balance of the revenue account, after adding the surplus from last half-year, and deducting interest upon loans, amounts to £58,613 11s. 11d., which is equal to a dividend at the rate of 4 per cent. per annum on the share capital. It is not proposed, however, to declare that rate of dividend, as the sum of £11,049 1s. 4d., standing at the debit of the Desjardins Canal accident account has to be written off, leaving the available balance £47,564 10s. 7d. out of which the directors recommend the payment of a dividend at the rate of 3 per cent. per annum. This will absorb £44,214 11s. 9d., and leave £3,349 18s. 10d., to the credit of the current half-year.

The traffic of the Great Western Railway proper during the past half-year shows a decrease, as compared with the corresponding six months (Jan. 31, 1858) of £43,098 9s. 4d. sterling, which is equal to nearly 17 per cent.

The average weekly earnings were £8,067 2s. 2d. equal to £27 10s. 4d. per mile per week.

The working expenses, inclusive of renewals, have amounted to £105,801 14s. 11d., or equivalent to 50.05 per cent. of gross receipts, showing a reduction; as compared with the corresponding period of last year, of £27,807 14s. 6d. equal to 20.84 per cent.

The traffic as compared with the previous half-year (31st July, 1858), shows a decrease of only £1,759 19s. 8d., being little more than 1 per cent.; and the working expenses, exclusive of renewals, show the large reduction of £11,209 16s. 2d. or 9.46 per cent.

The cost of maintenance has been reduced by £4,890 7s. 1d., equal to a reduction of more than £17 9s. 4d. sterling a mile, as compared with the charge during the corresponding half-year.

The report from the engineer shows the line to be in a sound and satisfactory state.

The cost of the locomotive service has been reduced by £12,507 4s. 2d., as compared with the corresponding half-year. The miles run by engines on traffic account have been also reduced from 758,300 to 681,560, or rather more than 10 per cent. and the rate per mile from 0.323 dol. to 0.270 dols.

The stock is in excellent condition.

The working of the Galt and Guelph line has again resulted in a loss, but only to about half the amount of the previous six months—viz: £420 10s. 10d. sterling, against £802 2s. 3d. This line, however brings a considerable accession of traffic to the main line, which could not otherwise reach it; and it is now fairly to be expected that a good harvest, and the consequent improvement in the trade of the country, would enable it to earn not only its working expenses, but also a profit.

The Sarnia Extension was opened for traffic on the 27th December, 1858, and one train each way has been run upon it since that date. The traffic was not expected to be much during the

winter; but it has more than paid expenses, and is improving and adding to the traffic of the main line.

The Detroit and Milwaukee railroad will this spring come into effective operation as a thorough line; and the directors have unabated confidence that it will prove a valuable feeder to the traffic of this company.

American Railroad Journal.

Saturday, May 7, 1859.

Railroad Competition.—New York and Erie Railroad.

We were a little too fast last week in saying that the competition between the four great lines was for the *through* freight to New York from points in the West common to them all. The Erie and the Central, not content with the general row, are having a very pretty quarrel of their own. Between all points and the city of New York common to these lines, a most vigorous competition is going on, which has reduced charges upon freight to merely nominal rates. We have it from good authority that the Central company are desirous of putting an end to this suicidal strife, but that the Erie will listen to no propositions of the kind. This company is, we believe, persisting in its present course, for the purpose of punishing the Central for alleged misdeeds by that company. Very likely the Central is seriously injured, but it is plain to see that if the controversy goes on much longer, the Erie must quit the field from sheer exhaustion. It is already in default in considerable amounts on the interest due on its bonds. Strikes from non-payment of wages, or from dissatisfaction from one cause or another, seem to be a chronic condition of the road. The public press ignores its existence altogether, or if they refer to it at all, it is only by way of censure or sneer. The public follow the lead of the press. A confirmed quarrel has succeeded the recent hollow truce between the four lines. Were one party to be believed all others are a very bad set. We should certainly be unwilling to repeat the language which the managers of one road habitually use about others. In fine it is hard to imagine so many unfortunate circumstances as are now concurring to impair the prosperity and usefulness of our great roads; and what is worse than all, we see no immediate prospect of improvement.

This then is the millenium to which the extraordinary measures inaugurated by the Erie Railroad Company, and pushed with so much pertinacity, have brought us to. If the conclusion be so unfortunate, may not the inference be fairly drawn that the measures that lead to it were injudicious and ill-advised. We have the greatest respect for the motives, character and general capacity of the chief executive of this company; but we suggest, that when he differs so widely, as he often does from others equally disinterested, and in equally favorable positions for forming correct opinions, whether a certain degree of respect for their opinions should not abate in some small degree, the emphasis which he usually gives to his own. It is certainly clear that the Erie cannot long go on as at present, and sustain itself. We should feel it a great misfortune to have the company lose Mr. Moran, provided he would adopt such a line of policy as will give to his services their full value, and at the same time bring to his

aid such other influences and co-operation as we deem essential to the success of the road.

Morris Canal and Banking Company.

The time of closing the financial year of this company has been changed from December 31st, to February 28th. This was deemed expedient by the board, as it would more nearly embrace the period of the income and disbursements, from the commencement of navigation of one year to that of the succeeding year. Consequently the report just issued by them covers a period of fourteen months—and includes all the expenditures for repairs, etc., during that time, without a corresponding revenue from business—the canal having been opened for business about the 1st of April, and closed the second week in December.

Notwithstanding the general depression of business, the income of the company from all sources has been sufficient to defray all current expenses, to keep the canal in repair, to pay the interest on their bonded debt, the usual dividend of 10 per cent. on their preferred stock, and \$1 50 per share on the common or consolidated stock.

The income from tolls, etc., were.....	\$275,019 44
Repairs of canal and works.....	\$73,760 02
Operating canal.....	37,033 20
Salaries.....	10,623 46
Interest.....	1,829 43
Miscellaneous.....	9,124 43
	132,370 54
Profits of the business.....	\$142,648 90
Balance December 31, 1857.....	86,837 03
Receipts from other sources.....	4,552 83
	\$234,038 76

Disbursed as follows, viz:

Dividends.....	\$168,784 69
Interest on mortgage bonds.....	26,640 90
Discount on mortgage bonds.....	3,910 00
Depreciation of boats etc.	3,311 64
Old claims settled.....	12,372 54
	215,019 77

Surplus, February 28, 1859..... \$19,018 99

The income from tolls and other sources in each of the following years has been—

1845.....	\$18,997 45	1852.....	\$140,202 28
1846.....	51,212 39	1853.....	187,449 71
1847.....	67,687 09	1854.....	245,431 55
1848.....	65,531 75	1855.....	272,125 23
1849.....	90,220 48	1856.....	313,026 15
1850.....	98,224 25	1857.....	286,668 61
1851.....	110,730 56	1858.....	275,019 44

The total tonnage of the canal for each of the following years has been—

1845.....	58,259	1852.....	358,797
1846.....	109,505	1853.....	467,288
1847.....	155,559	1854.....	543,269
1848.....	204,682	1855.....	553,204
1849.....	234,305	1856.....	563,386
1850.....	239,682	1857.....	536,862
1851.....	281,707	1858.....	554,034

BALANCE SHEET.

Capital stock—Common.....	\$11,000 00
" " Consolidated.....	1,014,000 00
" " Preferred.....	1,051,400 00
Funded debt—7 per cent. mortgage bonds.....	250 00
Funded debt—6 per cent. mortgage bonds.....	465,500 00
Liabilities—bills payable, etc.....	113,272 60
Profit and loss.....	19,018 99

\$2,674,442 59

Cost of canal and appurtenances.....	\$2,603,295 91
Cash.....	13,981 68
Bills receivable.....	1,391 24
Individual accounts.....	55,773 76

\$2,674,442 59

OFFICERS.

EPHRAIM MARSH, *President*.
WM. H. TALCOTT, *Superintendent and Engineer*.
LEWIS N. CONDIT, *Secretary*.

A New Turn-Table.

In another column will be found an advertisement of a new turn-table, entitled "Ward's Patent Self-Centering Turn-Table."

The peculiarity of this table is in the use of hollow iron balls, running in circular grooved tracks, instead of wheels or trucks, thereby getting rid of all friction, not necessarily incident to the rolling of a circular body.

We understand that the table described has been used with success. The idea is an ingenious one, and will undoubtedly receive attention from railroad companies.

Bellefontaine Line.

The line is made up of the Bellefontaine and Indiana and the Indianapolis, Pittsburg and Cleveland roads, extending from Indianapolis to Crestline, 206 miles.

The annual report of the first named road, recently issued, states that the business of this road shows a decrease, as compared with 1857, in passenger and express earnings, and an increase on freight traffic. The reduction of working expenses, when taken into account, present an increase of net earnings over the previous year. The figures are as follows:

BUSINESS FOR THE YEAR 1858.

Earnings—From passengers.....	\$114,564 00
From freights.....	192,525 53
From mail.....	17,850 00
From express.....	7,287 17

Total..... \$332,226 70

Working expenses..... \$185,414 24

Interest on bonds..... 90,328 00

Taxes..... 8,261,11—\$284,004 35

Balance net..... \$48,222 35

The working expenses are a fraction over 56 per cent.

COMPARISON WITH PREVIOUS YEAR.

Earnings for 1857.....	\$348,351 83
Earnings for 1858.....	332,226 70

Decrease in 1858..... \$16,125 13

Which is divided as follows:

Decrease on passengers.....	\$30,047 07
Decrease on express.....	2,982 95

Total..... \$33,030 02

Increase on freight..... 16,904 89—\$16,125 13

Working expenses of 1857..... 227,515 59

Working expenses of 1858..... 185,414 24

Decrease in 1858..... \$42,101 35

Deduct decrease of earnings..... 16,125 13

Net increase for 1858..... \$25,976 22

Except what is termed the car loan, explained in the last report, the company has no floating debt.

An arrangement to extend the income bonds due 1st February 1859 to 1870 has been made, and a sinking fund of \$20,000 per annum established for them. The Directors recommend another sinking fund for the bonds due in 1866.

The apparent earnings of the road are about $3\frac{1}{2}$ per cent. on the stock.

The gross earnings of the Indianapolis, Pittsburgh and Cleveland railroad for 1858 present about a corresponding decrease with those of B. and O. The figures are as follows:

BUSINESS OF THE YEAR.

Earnings—From passengers.....	\$99,740 09
From freights.....	115,225 93
From mail.....	12,750 00
From express.....	5,189 43

Total.....	\$232,905 45
Transportation expenses.....	\$134,069 14
Interest and taxes.....	72,364 13
Interest and cost of floating debt.....	2,746 74
Ballast amount.....	5,977 22
	\$215,157 23

Balance net.....\$17,748 22

The working expenses proper are a fraction over 57 per cent., with nearly 50 per cent. of gross earnings from freight transportation, at, during a portion of the year, very low rates.

The amount of bonds and stock on the 1st of January, 1859, stood as follows:

First mortgage bonds.....	\$656,000
Second mortgage bonds.....	169,500
Income bonds.....	166,500
Domestic bonds.....	35,200
Capital stock.....	\$1,025,200 00
	835,961 26

Total bonds and stocks.....\$1,861,171 26

FLOATING DEBT.

The amount of floating debt reported as due the first of January, 1858 was.....	\$34,578 85
Amount 1st of January, 1859.....	19,718 65

Reduction during the year.....\$14,860 20

Of the amount due 1st of January, 1859, the sum of \$3,194 59 had since been paid, leaving floating debt at this time \$16,524 06. Three hundred thousand dollars of the first mortgage bonds will mature 1st January, 1860, of which \$30,000 are in the sinking fund. These bonds, it will be necessary to extend.

Railroad Earnings.

The following is a statement of the Ohio and Mississippi railroad for March:

	1858.	1859.
Passengers.....	\$74,309 00	\$85,426 14
Freights.....	52,873 20	59,958 72
Mail.....	5,150 00	6,633 33

Totals.....	\$132,332 20	\$152,018 19
Increase.....		\$19,685 99

The receipts of the Grand Trunk Railway of Canada for the week ending April 16, were.....\$46,963 46

Week ending April 17, 1858.....49,356 39

Increase.....\$2,392 93

Total traffic from July 1st.....\$1,816,080 68

Same period last year.....1,897,319 04

Decrease.....\$81,238 36

The earnings of the New York and New Haven Railroad for April were:

From passengers, &c.....	\$84,651 86
" freight.....	15,500 00

Total.....	\$100,151 86
Less due other roads.....	22,291 34

Balance.....\$77,860 52

For April, 1855.....\$67,068 40

For April, 1856.....72,811 97

For April, 1857.....76,212 51

For April, 1858.....68,595 19

Gain over last year, \$9,265 53.

The earnings of the Brooklyn City railroad in

April, 1859 were.....	\$37,319 18
April, 1858.....	30,195 24

Increase.....\$7,123 94

The business of the Connecticut River Railroad for the three months ending April 1, was as follows:

	1858.	1859.
Gross receipts.....	\$60,445 49	\$73,876 59
Operating expenses.....	32,202 26	38,891 89

Net earnings.....\$28,243 23

Increase in net earnings.....6,741 47

Traffic of the Great Western Railroad, for the week ending April 22, 1859.

Passengers.....	\$22,884 53
Freight and live stock.....	12,950 90
Mails and sundries.....	1,290 22

Total.....\$37,125 65

Corresponding week of last year.....\$50,460 88

The Hudson River Railroad receipts for April, were.....\$121,123 24

For April, 1858.....112,614 60

Increase, this season.....\$8,508 04

We invite attention to the advertisement, in another column, of Messrs. JAMES ANDERSON & Co. They are the sole agents for the Troy Bell Foundry, the proprietors of which are prepared to furnish bells of all descriptions, cast and hung on an entirely new principle, from 20 to 20,000 lbs, which are warranted superior in quality of tone, prolongation of sound, and durability, to those made by any other establishment. Their new mode of casting bells, in Metallic casings, is an improvement not to be surpassed. Bells made in this way far excel those cast in the ordinary way. This was tested in competition with different bell founders' at the Fair of the Merchants' Metropolitan Institute, held at Washington in February, 1853; at the State Fair, held at Saratoga Springs, in September, 1853; at the Fairs of the American Institute, held in New York, in October 1853, and 1855; and at the exhibition of all Nations, held at the Crystal Palace in January, 1854—the latter in competition with those of Europe, and several from this country. The Troy Bell Foundry are prepared to fill orders for Church, Steamboat, Ship and Locomotive Bells; also, Fire Alarm bells, chimes of bells, etc., etc. Address Messrs. JAMES ANDERSON & Co., agents, Nos. 23 and 25 Dey street, New York.

Greenville and Columbia Railroad.

At the annual meeting of the stockholders of this company recently held, the following gentlemen were elected directors, viz: Hon. T. C. Perrin, Hon. J. B. O'Neill, Simeon Fair, T. M. Cox, D. Blake, C. G. Memminger, J. P. Reed, J. M. Allen, V. McBee, Hon. J. N. Whitner, J. F. Livingston, C. Smith, R. Stewart.

Street Railroads.

The Philadelphia Inquirer says that the leading street railroads of that city can no longer be regarded as an experiment. They are in the full tide of success; and, while they afford extraordinary facilities to the community at large, they are likely to yield a very handsome interest on the sums that have been invested in their construction.

New London, Willimantic and Palmer R. R.

The trustees of the first mortgage bondholders of this road, have obtained a decree of foreclosure in the New London County Supreme Court, against the company and the subsequent mortgages. The indebtedness of the road was \$500,000 upon the first mortgage bonds, \$300,000 on the second, and \$100,000 to New London city. The court decreed a foreclosure in favor of the petitioners, limiting the right of redemption for the corporation to the second Monday of October next, and for the city of New London to the fourth Monday of October next. It is said that the trustees will apply to the Legislature for an act of incorporation under which to operate the road.

Post on Wooden Bridges.

We have been frequently applied to by letter for copies of Mr. Post's work on "Bridges." We can only supply it through the columns of the JOURNAL where it is first published from the original manuscript.

Pennsylvania Railroad.

We have received the Twelfth Annual Report of the President and Directors of this company, for the fiscal year ending December 31, 1858, which was presented to the stockholders at their annual meeting held in Philadelphia February 7th.

From the tabular statements of the accounting department accompanying the report we learn that the earnings of the railroad for the year were:

From transportation of freights.....	\$3,536,206 31
" " " passengers.....	1,298,142 33
" " " emigrants.....	74,095 02
" " " mails.....	74,489 04
" " " Adams' Express.....	75,120 00
" rents of workmen's houses, etc.....	29,698 95
" individuals and companies.....	56,899 08
" sundry sources.....	40,679 95

\$5,185,330 68

The total expenses were as follows:

Conducting transportation, including tolls paid the Harrisburg and Lancaster, and Northern Central railroads, (\$270,181 57) and tax on tonnage paid the State, (\$240,754 65).....	\$1,280,798 33
Motive power depart.....	915,278 05
Maintenance of way.....	560,278 18
" " cars.....	192,377 60
General expenses.....	73,152 87
	3,021,885 04

Leaving net earnings.....\$2,163,445 64

The earnings of the road from passengers show a decrease from the previous year of \$75,213 for first class, and \$7,073 for emigrants—a total decrease in this department of \$82,286. When it is considered that the number of immigrants that arrived at our ports in 1858, was less than half the number that arrived in 1857, the percentage of diminution in that branch by business will be deemed small.

The total number of first class passengers carried over the road during the year was 1,012,803, viz: on the Philadelphia division (Philadelphia to Columbia), 169,379; on the Harrisburg and Lancaster railroad, 109,481; on the Columbia Branch, 27,749; and on the Pennsylvania railroad, between Harrisburg and Pittsburg, 119,358. In addition to which there were 16,216 emigrants transported from Philadelphia to Pittsburg, and 606 to points on the line of the road east of Pittsburg.

Of the gross earnings for freight, \$3,260,727 49 was for freight carried in the cars of the company,

and \$275,478 82 for tolls and motive power in the cars of individuals.

The freight transported in the cars of the company was 221,210 tons through, and 365,075 way (including coal); and in the cars of individuals, 460,622—making a total of 1,046,889 tons moved.

If to this be added 90,300 tons of coal, etc., for the use of the company, it gives 1,137,189 tons as the entire freight moved upon the road. This exhibits an increase in the tonnage moved of 43,614 tons (omitting the supplies for the road); and an increase in freight earnings of \$159,690 05 over the previous year. The through freight in the cars of the company shows an increase of 49,317 tons; and the way freight an increase of 6,710 tons—while that in the cars of individual transporters shows a decrease of 12,233 tons, below that of 1857.

The total claims for goods lost, damaged or delayed, was but \$8,054.

The amount of coal delivered in Pittsburg during the year was 99,540 tons—being 1,921 more than in 1857. The total number of tons of coal carried in the cars of the company was 140,007, and 200,531 in the cars of individuals.

An increase in the number of cars for the accommodation of live stock, coal and lumber, will be required. In other respects the equipment is deemed sufficient for the business of the ensuing year. It consists of the following, viz: 209 freight and passenger locomotives; 56 eight-wheeled wide, and 12 narrow passenger cars; 81 emigrant, 27 baggage and 8 express cars; 1,809 eight-wheeled house, stock and platform cars; and 591 four-wheeled freight, coal and hand cars.

Work upon the double track has not been prosecuted during the past year. The number of miles still remaining to complete it throughout is about 87.

In view of the increased business anticipated from the completion of the Pittsburg, Fort Wayne and Chicago road, and the extension of their own road to the Delaware river, the board recommend the completion of the double track between Pittsburg and Lockport on the west of the mountains, and between Tyrone and Mill Creek, on the east, amounting together to less than 28 miles.

The alteration of tracks required to pass the wide cars of the company from the station in Philadelphia to that in Pittsburg was finished in August last, and passengers now travel between these cities without change of cars. The Cleveland, Chicago, Indianapolis and Cincinnati trains now leave the station on this company in Pittsburg—thus avoiding the cost and inconvenience arising from the use of drays and omnibuses, in the transfer of passengers and freight in that city.

Measures are now in progress which give reasonable assurance of the completion of the Pittsburg and Stuebenville railroad within the next year. The company will thus secure a route 24 miles shorter than the present one to all the south-west.

Application having been made to this company for aid towards furnishing the rails to complete the Tyrone and Clearfield railroad, the board have agreed to receive in payment of passenger fares and dues for freight that may accrue for transportation to and from that road, and passing on the Pennsylvania road 60 per cent. in cash, and 40 per cent. in the 1st mortgage bonds of that company;

provided the amount of the 1st mortgage, which is not to exceed \$200,000, shall complete the road from Tyrone to Phillipsburg.

The board has withheld the payment of the tonnage duty claimed as due in December, with a view if the legislature fails to remove this enormous burden upon the trade between the east and west, to test the constitutionality of the impost before the courts. Under the operation of this and other tax laws, this company would pay for the year 1858, \$319,020 66.

The floating or unfunded debt existing at the date of the last annual report, has been reduced below three per cent. upon the paid capital of the company—indeed it may be said to have been practically extinguished, as the resources of the company immediately available are ample to meet it at any time.

By reference to the annexed statement of the treasurer, it will be seen that the amount of the original subscription to the Marietta and Cincinnati railroad, and the income bonds received as interest from that company, together with the subscription originally made to the Springfield, Mount Vernon and Pittsburg railroad, have been charged to profit and loss account. In regard to the aid rendered by this company to the Pittsburg, Fort Wayne and Chicago, and the Steubenville and Indiana railroad companies, the report says:

The business of neither of these companies yields a direct return for the amount invested in them, yet the increased traffic drawn to the Pennsylvania railroad by the connections thus formed with the north-west and the south-west, has afforded a fair equivalent for the outlay, while it has at the same time secured great commercial advantages to this city. We do not apprehend any material loss, other than the interest for a few years, upon the investments in these enterprises. The additional assistance given by this company to the Pittsburg, Fort Wayne and Chicago railroad company during the past year, has enabled it to extend its road from Plymouth into the city of Chicago, a distance of 82 miles. This aid consisted mainly of iron rails removed from the Portage railroad, purchased by this company from the Commonwealth, and no longer used by it in consequence of its occupying practically the same ground with the Pennsylvania railroad across the Alleghany Mountain. The whole amount of cash expended for removing rails from the Portage road, and for new rails, spikes and chairs, amounted to \$239,075 21. For this advance, and the value of the iron furnished from the Portage road, the Pennsylvania railroad company is amply secured by a pledge of \$650,000 of the first mortgage bonds of the Pittsburg, Fort Wayne and Chicago railroad company, together with a general oversight of that work until this advance is returned. This road was opened through to Chicago on the 25th of December last. It still requires a considerable outlay to place it in a condition to compete upon equal terms with its rivals. This will be made during the ensuing spring and summer.

The earnings of the entire line of canal, 276 miles in length, for the year 1858, amounted to \$179,100 08. And the expense of operating and maintaining it for the same time was 124,058 82

Leaving the net earnings. \$55,041 76

The transportation of coal and lumber from the Broad Top and Alleghany regions may hereafter make the lower Juniata Division, from Huntingdon to the junction, yield an income at least equal to its expenditures, when the depth of water shall have been increased to five feet; but that portion of the canal west of Huntingdon must continue to be unremunerative.

The conditions of the purchase of the Main Line from the State require that the upper Juniata and lower Western divisions shall be kept in navigable order. In reference to the upper Western division no such requirement exists, and as there is no local interest that would be injuriously affected by closing this part of the line, it is not proposed to incur in future any considerable expense in its preservation.

The board has directed the Engineer to proceed at once to deepen that portion of the canal from Columbia to the south bank of the Juniata, so as to admit of five feet depth of water, to accommodate the growing coal and lumber traffic of the Susquehanna Valley. This improvement, which is essential to the maintenance of this canal as a profitable avenue, with the rebuilding of several aqueducts on the Juniata, (all of which are in a dilapidated condition,) will about absorb the profits of the canal for the past year. After these improvements and renewals are completed, the Canal Department, under the economical system adopted for its management, will, we trust, yield an interest at five per cent. on one and a half millions of dollars incurred in the purchase of the Main Line.

The following is a condensed exhibit of the earnings and expenses, together with net earnings for each month during the year:

	Gross earnings.	Expenses.	Net earnings.
Jan....	\$342,776 42	\$220,776 72	\$121,999 70
Feb. ...	312,403 18	202,857 12	109,546 06
March..	516,553 24	248,226 36	268,326 88
April... 550,595 54	270,609 20	277,986 34	
May ... 481,906 62	260,778 29	221,128 33	
June ... 399,436 08	274,897 04	124,538 99	
July ... 384,070 36	249,314 37	134,755 99	
Aug.... 431,846 97	240,488 44	191,358 53	
Sept.... 451,704 33	260,140 99	191,563 34	
Oct.... 463,222 34	271,502 64	191,719 70	
Nov.... 439,844 59	259,048 41	180,796 18	
Dec. ... 410,971 06	263,245 46	147,725 60	
Total...	\$5,185,330 68	3,021,885 04	2,163,445 64

GENERAL STATEMENT.		
Capital stock		\$13,240,225 00
Bond account, viz:—		
First mortg. six per cent. dollar bonds, payable 1880	4,905,000 00	
Second do. do. payable 1875 ..	1,928,000 00	
Do. do. do. sterling do. 1875 ..	1,639,840 00	
Bonds due the State, bearing 5 per cent. interest	7,400,000 00	
Mortgages and ground rents on real estate	321,611 11	
Bills payable	254,164 60	
Accounts payable	222,438 12	
Contingent fund	138,763 58	
Interest and dividends unpaid	25,664 66	
State tax on bonds and dividends unpaid	58,239 79	
Balance to credit of profit and loss, after charging to this account the original subscription to the Marietta and Cincinnati Railroad, (\$750,000,) and to the Springfield, Mount Vernon and Pittsburg Railroad, (100,000,) and the income bonds received as interest from the Marietta and Cincinnati Railroad Company, (\$97,500); also, discount upon Company's dollar b'ds, (\$224,484 95,) and sundry other items, (11,000,) the whole amounting to \$1,182,984 95	185,050 81	

Amount	\$30,168,987 17
Receipts from the business of the road for 1858	\$5,114,925 34
Receipts from the business of the canals for 1858 ...	181,541 88
	5,296,467 22
	\$35,465,454 89

Cost of road, from Harrisburg to
Pittsburg\$16,443,135 39
Less profits of road, after paying
interest to stockholders up to
Nov. 1, 1855, credited to cost of
construction, as required by the
charter 589,185 79

\$15,853,949 60

Cost of Philadelphia and
Columbia Railroad ...\$6,000,000
Cost of Canals & Portage
Railroad 1,500,000
7,500,000 00
Cost of equipment 2,828,529 27
Cost of real estate 1,540,381 05
Cost of telegraph line 45,264 28
Extension of Pennsylvania R. R. to
Steubenville and Pittsburg R. R. 4,547 72
Amount of stock of the Pittsburg,
Fort Wayne & Chicago R. R. Co. 816,050 00
Bonds of municipal and railroad
corporations 50,752 50
Bills and accounts receivable 790,546 51
Balance in hands of agents 206,992 37
Balance in hands of Treasurer, De-
cember 31, 1858 531,973 87

Amount\$30,168,987 17
Transportation expenses, tolls paid
other roads, interest, insurance,
general office expenses, tonnage
tax, tax on capital stock and tax
on real estate, sale of uncurrent
funds, etc.\$3,519,119 44
Expenses of canal,
(ordinary & extra-
ordinary) 129,743 84
Dividends paid to
stockholders 715,383 00
Interest on bonds ... 593,457 85
Surplus profits of road
and canals 338,763 09
5,296,467 22
\$35,465,454 39

OFFICERS.

J. EDGAR THOMSON, *President*.
WM. B. FOSTER, JR., *Vice President*.
THOMAS T. FIETH, *Treasurer*.
EDMUND SMITH, *Secretary*.
HERMAN J. LOMBAERT, *Auditor*.
THOMAS A. SCOTT, *General Superintendent*.
G. W. GREIER, *Master of Machinery*.

Cincinnati, Wilmington and Zanesville R.R.

This decree for the foreclosure and sale, in three years and a half from April 21, of the Cincinnati, Wilmington and Zanesville railroad, at the suit of the first and second bondholders, was entered upon the records of this Court yesterday. The amount of the first mortgage is \$1,300,000, upon which \$294,000 interest has accrued; the amount of the second mortgage is \$600,000, with interest accrued of something over \$135,000. The priority of the first mortgage bonds is conceded; payment on the first mortgage is postponed for three years, without the payment of any definite amount of interest. At the end of three years from this date the Company is to resume payment of interest on the first mortgage, all arrearages of interest to be funded, and draw interest at the rate of 7 per cent. for fifteen years, from 1862.

The Second mortgage bonds are recognized as next in order of priority: the payment is not deferred to any definite period, but the holders of this class of securities may at any time, the company and a majority of the third mortgagees not objecting, sell the road, subject to the first mortgage extending as above. There is a reservation in favor of the proposed extension of the Cincinnati, Wilmington and Zanesville road, from Morrow Junction to Glendale, on the Cincinnati, Hamilton and Dayton road, by which the rights of all parties in interest in that extension are to be protected. Wm. Key Bond of this city, is appointed

Receiver, at a salary of \$2,500 per annum, in place of Erasmus Gest, removed by the terms of the arrangement.

Mr. Gest's vouchers have been examined by the new receiver, and found to correspond with the disbursements.

There would now seem to be no doubt of the building of the Glendale extension of this road, which will secure a superior, as well as an independent entrance to this city, and, at the same time, a direct rail connection with the Ohio and Mississippi road, and with the coal markets of the great Miami Valley.—*Cincinnati Com.* April 26.

The Suez Canal.

We have at length an authentic statement of the results of the Suez Canal subscription, and they have certainly been such as to exceed the most sanguine expectations of the projector. The number of French subscribers, willing to hazard their money in the undertaking, amounts to 21,035; and the number of shares actually subscribed for, to 220,000. The whole number of shares is fixed at 400,000, and the company's capital at 200,000,000 francs. Out of this, France has engaged herself for 110,000,000; but the allotment made to her by the original scheme of division is only 40,000,000, so that she has nearly three times exceeded her contingent. M. de Lesseps, it will be seen, has not in vain awakened the enthusiasm or appealed to the vanity of his countrymen. How much of this success is owing to the short-sighted and illiberal opposition of England, or, rather, of Lord Palmerston and his government? for it is but just to acknowledge that every important Chamber of Commerce in the country differed with the views taken by the British Cabinet on this important question. As it is, the prestige of a vast commercial transformation, of world-wide celebrity and interest, is likely to adhere to the French nation and the reign of Napoleon III.—*Paris Cor. Phil. North Am.*

Railroad Traffic in the Interior.

Many persons are casting about them for reasons for this very sudden depression. Some lay it to the threatened war in Europe; others to the competition of rival roads, and others to general depression in business. Some few speak of the want of produce in the West to go forward. This, we think, is the great cause of the falling off in the earnings of the roads, and consequently of the depression in their stocks, although the others may also incidentally affect them.

The West is at present poor—extremely poor. We have little or nothing, comparatively, to send forward to, and next to nothing to get from, the East. We might run in debt, and create for a time an artificial prosperity, but in the end we would only make matters worse.

It is better for all parties—Eastern as well as Western men—that we should keep steadily on our course of retrenchment and economy. The more faithfully and honestly we do so, the better it will be for ourselves in the end, and the far better for our Eastern friends. * * *

Some say the roads should not take freight at low rates; but this is all nonsense. They are so many competing lines of road now, that a monopoly is not possible, or if possible, it is so only in times of great commercial prosperity. Railroads, like everything else, even to the laborer himself, are governed by the laws of supply and demand, and the strong ones will work for nothing and keep themselves, with the hope that in a short time they will be able to kill off the weak ones. Not until this is accomplished will the prices of transportation be put up again.

The Railroad Directors who the soonest make up their minds to the fact, that they can expect no permanent relief, until we have better crops in the West, and who act upon the belief by economizing their expenses as much as possible, will the soonest restore the credit of the corporation which they manage. The vitality of the West consists in its power of production. As long as this is at low ebb, the whole commercial body suffers, and no quack doctoring of any kind will

restore the lost equilibrium. What food is to a starving man, good crops are to the country, especially that country which depends almost altogether upon its agricultural resources.

Economy, then, is the true principle in commerce now-a-days, as indeed it is in politics. We are suffering on all sides, politically as well as commercially, from a system of reckless expenditure, and the sooner we come to a realizing sense of the fact, the better it will be for ourselves.—*Chicago Democrat*.

Statistics of Peruvian Guano.

TABLE OF DEPOSITS.

Southern Section.

Chipana (lat. 21° 22'S).....	280,602 tons
Huanillas (lat. 21° 18'S).....	1,912,505 "
Punta de Lobos (lat. 21° 6'S)....	1,460,790 "
Pabellon de Pica (lat. 20° 57'S)....	2,975,000 "
Puerto Ingles (lat. 20° 46'S).....	1,292,510 "

Total 7,921,407 "

Central Section: (CHINCHA ISLANDS.)

North Island	7,600,000 "
Middle Island	6,450,000 "
South Island	4,200,000 "

Total 18,250,000 "

Northern Section.

Lobos de Tiera (lat. 5° 7'S).....	477,858 "
Lobos de Fuera (lat. 7° 3'S).....	265,743 "
Guanape (lat. 8° 31'S).....	79,800 "
Ferrol (lat. 9° 7'S).....	30,700 "

Total 854,101 "

Grand total 27,026,508 "

2. ANALYSIS OF GUANO.—*

Elements.	Chincha a Guano.	Lobos Guano.	
	A B C D E		
Water.....	13 73.	9 30...	12 50.16 50.18 35
Organic matter and Ammoniacal salts.....	53 16.57 30...	22 00.23 50.36 65	
Phosphates.....	23 48.23 05...	36 90.41 23.11 76	
Alkaline salts..	7 97. 9 60...	12 25.16 27.36 74	
Sand.....	1 66. 0 75...	12 35. 2 50. 1 50	
Proportion of Ammonia.....	17 00.18 87...	4 26. 4 35. 6 42	

3.—Imported into the United States, (according to the U. S. Treasury Reports.)

1845.....	1852.....	39,567
1846.....	1853.....	25,852
1847.....	1854.....	163,662
1848.....	1855.....	15,046
1849.....	1856.....	39,078
1850.....	1857.....	64,559
1851.....	1858.....	54,057

Ohio Central Railroad.

The United States Court, sitting at Cincinnati, has granted an application to place the Ohio Central railroad in the hands of a receiver. The court appointed H. S. Jewett, the President of the road, receiver, and fixed the bond at \$20,000, which was given.

The applicant in this instance is George S. Coe, of New York, who, in his petition, represents that the Ohio Central Company had made mortgages to him, as the trustee of other parties to the amount of over \$2,000,000. On a large part of this sum interest is in arrears since the fall of 1857. His bill sets forth the existence of other mortgages, in all amounting to \$2,850,000; and also that the company is largely indebted to other parties, is greatly embarrassed, and utterly insolvent. He, therefore, asks that the road may be sold and the

* A: analysis by Anderson of Scotland; B: at the Kensington Laboratories, London; C. D. & E. by Raymondi, a chemist at Limia from different specimens. The amount of ammonia in each sample is given separately in the last line.

proceeds applied to the payment of the debts against it.

The Court, in appointing Mr. Jewett receiver, directed him to operate and protect the property of the road, as he shall deem proper, and requiring him to deposit the surplus earnings of the road in some Bank in Zanesville, or other place along the line, and to file monthly statements of the receipts, disbursements and liabilities. He is to have control over the officers and employees of the road, except the Directors, Treasurer and Secretary, and is required to give bonds in \$20,000 for the faithful discharge of the trust. The surplus earnings are to be applied as follows:

1st. To the payment of all debts due for labor, materials and supplies furnished the company within the six months prior to the date of the decree, and to balances due for construction.

2d. To the payment of all sums borrowed to pay interest upon the mortgaged debt, or for labor or materials, for the payment of which any former or present officer of the company, or any person at the instance of such officer may be liable.

3d. To the payment of any loans made in good faith by any past or present director, for such purpose.

4th. To pay Attorney's fees, &c., for services to complainants in suits pending or terminating at the filing of the bills, and for similar services for the company.

5th. To the payment of the taxes upon the road.

6th. To balances due for right of way.

7th. To discharge liabilities of any person who may have become surety at the solicitation of the complainant of the company in the prosecution or defence of suits, designed to protect the company against third parties.

8th. To refund to George Bartlett the money advanced by him, at the instance of John H. Sullivan, then President of said company, immediately before said road was put into operation; and all securities held by parties liable for claims covered by the 2d, 3d and 8th articles, to indemnify them against loss, or held by any claimant as security for the payment of his claim, are to be transferred to the Receiver, to be applied by him to the same uses to which the money would otherwise be applicable.

King's Mountain Railroad.

The following gentlemen have been elected directors of this company for the ensuing year:—Dr. J. M. Lowry, S. G. Hemphill, W. A. Latta, B. T. Wheeler, E. A. Crenshaw, H. F. Adickes, J. W. Avery, J. R. Bratton, J. S. Ryan.

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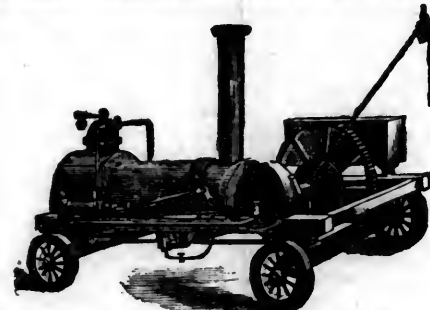
Notice to Contractors.

SEALED PROPOSALS for the grading and masonry of the extension of the ROANOKE VALLEY RAILROAD, from Clarksville to Keyville, on the Richmond and Danville Railroad, will be received at the office of the Company in Clarksville until the 12th of May. The road will be thirty miles long. Plans and specifications of the work may be seen in Clarksville on and after the 5th of May. Letters of inquiry may be addressed to Henry Wood, Esq., President Roanoke Valley Railroad, Clarksville, Va., or to me at Christiansville P. O., Mecklenburg Co., Va.

B. W. JONES,
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4t16

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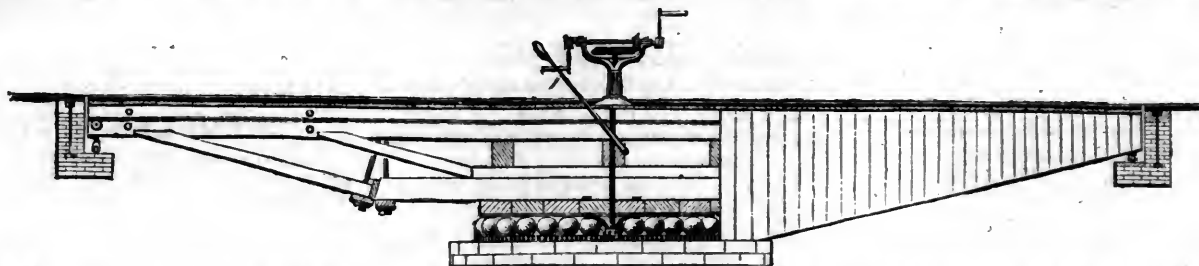
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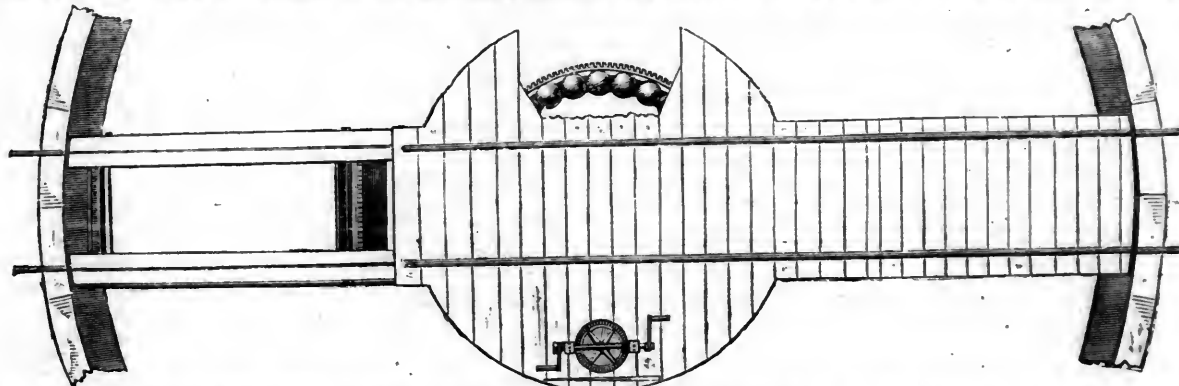
Patents for Inventions.

T. ROW, Agent for procuring patents, No. 5 Tryon Row, (near City Hall). A circular with full information sent free by mail. American correspondent *Prac. Mechanics' Jour* from 1854.

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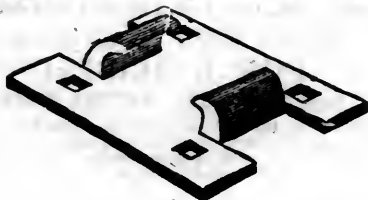
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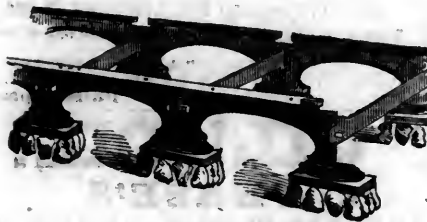
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Railroad Materials, Locomotive and Car Findings,
MACHINERY AND MACHINISTS' TOOLS,
MINERS' TOOLS, ETC.

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WHITE AND YELLOW CAR GREASE,
LOCOMOTIVE BRASS WORK,
Baggage Checks, Barrows, etc., etc.,

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STEAM GAUGES, COCKS AND WHISTLES,
INDIA RUBBER HOSE PACKINGS, ETC.
LANTERNS OF ALL DESCRIPTIONS,
ENGINE, STATION, AND SIGNAL BELLS,
☞ Superior Car Upholstery, etc. ☞

AGENCY OF THE KEROSENE OIL COMPANY.

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5 WATER ST., BOSTON.
LOCOMOTIVES AND CARS.

Rails, Sleepers, Chairs, Spikes, Wheels, Axles and Tires.

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Locomotive, Hand and Ship Lanterns; Car Trimmings of all descriptions. Steam and Water Gauges; Signal Bells, etc., etc.

AGENTS FOR CAR HEAD LININGS.

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RAILROAD IRON,
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RAILROAD CARS,
CAR WHEELS,
AXLES, CHAIRS,
SPIKES, TOOLS,
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All inquiries in reference to the above articles will receive immediate attention.
New York, January, 1859.

S. B. BOWLES,
MANUFACTURER AND DEALER IN
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Late Sup't Boston & Maine R. R. Late PAGE, ALDEN & Co.

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Capt. WM. H. SWIFT, Boston. COOPER, HEWITT & Co., do.
LAWRENCE STONE & Co., do. REEVES, BUCK & Co., Phila.
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STEEL AND RUBBER SPRINGS,
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RAILWAY AGENTS AND BANKERS,
44 EXCHANGE PLACE,
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AGENTS FOR THE SALE OF
FOREIGN AND AMERICAN RAILROAD IRON
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RAILWAY AND OTHER SECURITIES
BOUGHT AND SOLD
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MANUFACTURERS' AGENTS

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RAILWAY SUPPLIES GENERALLY.

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NEGOTIATORS OF SECURITIES.

Railroad Iron.

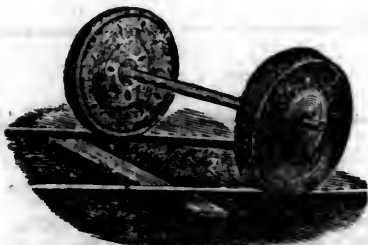
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New York, January 1, 1889.

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LOCOMOTIVE AND STATIONARY
STEAM ENGINES;
BOILERS;
 Iron, Brass, Copper and Composition Castings;
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**VAN KURAN'S IMPROVED
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PATENTED MAY 1, 1849.

Manufactured under the Personal Superintendence
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ORDERS for any quantity of Wheels executed with dispatch, and Wheels and Axles fitted in the very best manner, and at the lowest rates.

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SUCCESSORS TO

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MANUFACTURE COAL or WOOD BURNING
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 SPRINGS for Engines, Tenders, Passenger or Freight
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They also furnish to order TYRES, DRIVING WHEELS
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Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials
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Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TYRES, equal
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WHEELS AND AXLES fitted for use.
 HYDRAULIC PRESSES for expressing Oils and for
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MACHINERY of the most approved construction for Flour-
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GAS HOLDERS of any size, and Machinery and Castings
 of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or
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 WORKS,**

SUCCESSORS TO

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PATERSON, N. J.,

HAVING extensive facilities, are now prepared to furnish
 promptly of the best and most improved description, either
 COAL or WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER VARIETIES OF

RAILROAD MACHINERY.

J. S. ROGERS, Pres't.
WM. S. HUDSON, Supt. { **Pateron, N. J.**
M. K. JESUP, Vice Pres't.
L. P. STARR, Sec'y and Treas'r.

44 Exchange Place, New York.

Locomotive Engines.

**DANFORTH, COOK & CO.,
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HAVING erected an extensive Shop, with the most ap-
 proved Machinery and Tools, are prepared to execute
 orders for the various classes of Freight and Passenger Loco-
 motive Engines and Tenders, in the best manner and on the
 most favorable terms.

Also, Stationary Engines, and the various Tools suitable for
 furnishing Repair Shops.

The business of Machine making, heretofore carried on by
 Charles Danforth & Co., is continued by the present firm, and
 all orders will receive prompt attention. 1749

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 LOCOMOTIVE WORKS,
 SCHENECTADY, N. Y.,**

HAVING large facilities, are prepared to receive and ex-
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either for burning WOOD or COAL, with promptness and
 dispatch.

BRASS and IRON CASTINGS; LOCOMOTIVE TYRES
 welded and blocked to exact sizes, and every thing connected
 with the building or repairing of Locomotives furnished on
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These Works being located on the New York Central Rail-
 road, near the centre of the State, possess superior facilities
 for forwarding their work to any part of the country, without
 delay.

JOHN ELLIS, Agent.

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RICHARD NORRIS & SON,

LOCOMOTIVE STEAM ENGINE

BUILDERS,

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MANUFACTURE to order, Locomotives of any Arrange-
 ment, Weight or Capacity. In Design, Material and
 Workmanship, the Locomotives produced at these Works,
 are equal to, and not excelled by any.

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REFINED NEAT'S FOOT OIL.

WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all
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MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON.)

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THIS OIL having been before the public for a long time,
 and having been extensively used in different parts of the
 country, and on each occasion meeting with unqualified ap-
 proval, renders the manufacturers confident when making the
 following claims:—

1st. Its first cost is vastly less than that of any Oil in use,
 of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any
 journal or bearing, all the gum in the Oil being entirely decom-
 posed.

3rd. It will keep all journals and bearings cool, clean
 and bright as new, thus not only saving wear and tear, but
 saving also no inconsiderable amount of motive
 power.

4th. It is fully as durable as any Oil in the market, and
 consumers are invited to make their experiments on such jour-
 nals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all
 odor or unpleasant smell.

Also,—

**J. C. HULL & SONS'
 REFINED BURNING OIL.**

Buyers are requested to give this OIL a trial, as it is be-
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**CHEAPEST, CLEANEST AND BEST
 OIL FOR BURNING,**

(all things considered), in the market.

CERTIFICATES from a large number of Railroad
 and Steamboat officers, also, prominent Manufacturers
 and Machine Builders, can be seen by application as above.

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DEALERS IN

Sperm, Whale and Elephant Oils,

Adamantine Car and other Candles,

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**TAW'S LUBRICATING
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**FOR RAILROAD CARS
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THIS celebrated GREASE has been in use upwards of
 Ten years; and is in the opinion of FORTY RAIL-
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The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or descrip-
 tion of machinery.

TAW & BEERS,
 18 SOUTH WATER ST.,
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OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of
 Thousands of Gallons, prove this Oil to be superior
 for Burning, and TWENTY-FIVE per cent. more
 durable than Sperm Oil, for Lubricating, and the only Oil
 that is in all cases reliable, that will keep bearings cool,
 and

WILL NOT GUM

In no case has it failed to meet the approval of the consumer.

The *Scientific American* and *Manufacturer's Journal*, after
 testing this Oil, pronounce it superior to any other for Lu-
 bricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or
 Europe.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 20.]

SATURDAY, MAY 14, 1859.

[WHOLE No. 1,204, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, May 14, 1859.

See "Sale of Rolling Mill" advertisement on page 316.

The Grand Falls Bridge.

We give below from the *London Engineer*, an interesting description of a bridge over the River St. John, which fell in the early part of the winter, from the parting of the cables, or chains, which supported the truss:

I beg leave to forward to you a description of the new bridge over the Grand Falls of the river St. John, in this province, on the mail road between this city and Quebec, and an account of its destruction on the 18th inst., deeming the design to have some points of originality and novelty worthy of a better fate than has attended it.

The river St. John, the third river in point of importance in British America, rises in the north of the State of Maine, runs in a north-easterly direction to its confluence with the St. Francis, and from this point, turning southward, forms for over seventy miles the international boundary between the State of Maine and the province of New Brunswick. About three miles above the Grand Falls it enters this province, and runs almost due south 235 miles, to the harbor and city of St. John, where it finally empties itself into the Bay of Fundy. It is navigable at all seasons, when not obstructed by ice, to Fredericton, the capital,

eighty-five miles above the mouth, and in the spring and autumn months light draft steamers run 140 miles further, to the Grand Falls; above which it is again navigable for seventy miles in one direction, and in another sixty miles, to within thirty-five miles of the St. Lawrence.

The Falls themselves, though inferior in volume of water, are not surpassed in magnificence and wild picturesque grandeur by any cataract in North America. The total descent from the upper to the lower basin, only half a mile apart in a direct line, but nearly three by the river, is 140 ft., of which 75 feet is accomplished in the first perpendicular leap, and the remainder in a series of rapids and falls, in the narrow rocky gorge below. The place selected as the best site for the bridge, was immediately over the second fall, about seventy yards below the principal one, and where the rocks approach to within 190 ft. of each other. The depth to the water from the top is about 120 ft. on the west side, and nearly 80 feet on the east, which presented, however, an excellent bed of stone for building purposes, and a firm ledge of rock on which to found an abutment.

In designing the long span over the river, the impossibility of obtaining any support, however temporary, on which to rest the superstructure during the progress of the works, and the difficulty of access to the eastern side of the river, rendered any of the usual forms of truss bridges out of the question, whilst the total span to the east bank was beyond the limits of anything but a suspension bridge, which in this locality was deemed inadmissible. The reasons given against the employment of a suspension bridge, were founded principally upon the peculiar position of the structure, hanging immediately over the spray of the Falls, where every wire and rod would form the nucleus for a deposition of ice to an extent that in England cannot be appreciated, but calculated to add a destructive weight to the bridge during the five months' winter of this extremely cold locality. The contraction and expansion of the back cables doubling the length of the actual bridge, is also a serious objection in a climate where the temperature, for five months in the winter, ranges from -40 deg. to +40 deg., and in summer often runs up to over 120 deg. For these reasons, and in addition the growing disfavor of suspension bridges, due to the many serious accidents that have occurred, decided the Commissioners of Public Works to adopt the plan submitted to them by Mr. Tomlinson, a bridge builder of notoriety in these provinces, for a tension bar bridge of a somewhat novel construction.

The principal point of originality claimed, is the combination of a trussed superstructure, supported at intervals of 21 feet, by frames screwed at the bottom to two main chains passed under-

neath between the abutments, and anchored at each end to the truss work itself. The superstructure and roadway are consequently analogous to the top chord of an ordinary framed bridge, or the cellular top of the Britannia tubes, being wholly under compression, whilst the chain represents the bottom plates of the one, or the lower chord of the other, the strain being entirely tensile. At the Grand Falls, as put up, each of the main chains consisted of four bars of hammered iron, $4 \times \frac{3}{4}$ near the abutments, and $4 \times \frac{5}{8}$ in the middle, the least sectional area of each being 10 square in. in the centre, and 12 in. in area near the abutments, the length of the bars varying from 21 ft. to 22 ft. 6 in., with round eyes forged at each end, and connected by turned 2½ bolts. Each of these bolts carried a cast-iron shoe, into which the foot of an upright post, 8×8 in the middle, and 7×7 near the abutments, was properly secured, and these posts of pine timber, tied and tramed together, supported an ordinary truss bridge, at intervals of about 21 feet. This truss had a camber of 5 ft. in the middle, and the versed size of the chains in the centre being 15 ft., the supporting frames or bents, varied from 20 ft. in height to about 6 ft. for the first pair near the abutments. The extreme span was 194 ft., and to guard against the injurious effect of the accumulation of packed snow and ice that collects on the roadway of bridges during the long winter, the clear breadth between the truss work was only 15 ft., every part of the exposed woodwork being so arranged as to show as little available surface as possible for the snow to rest upon. At the time of the accident, not over one foot of snow could have been deposited, and the most liberal calculation of weight would not be over 20 tons, equally distributed over the whole length.

The bridge was completed and opened for traffic on the 1st inst., and in the morning of the 18th both main chains broke at each end, apparently at the same instant, within 5 ft. of the abutments, and the whole superstructure fell bodily, a pair of horses and two men being precipitated into the gorge beneath, a depth of over 120 feet. The accident happened about 7 a. m., the thermometer being 30 deg. below zero. The bridge gave some slight notice, as the men who were walking behind the sledge turned round and attempted to run towards the shore they had left, whilst the horses sprang into a gallop towards the opposite side. They all, however, fell with the bridge, the men clinging to the truss work till, their end of the framework striking a projecting rock, they were violently hurled forward, but still prevented by the trussed handrail from being washed off the planking. In this position they were found some hours afterwards, but, though alive, were too much injured to survive over a few hours; the men who assisted in their recovery being

themselves dangerously frozen in their philanthropic attempt. The horses were thrown by the concussion into the water, passed over the Falls, and were seen no more.

The apparent cause of the breakage is defective iron, the bars that broke showing a fracture without any appearance of fibre, and being cold-short and brittle, as if burnt in the workmanship; and short pieces of the bars are lying upon the rocks in pieces of a foot long, as if each had given way in different places at the same moment. As the bridge had been severely tested, the insistent weight at the time of the accident will not account for the effect produced, and the additional strain due to the intense cold must have been the proximate cause.

A prejudice against this description of bridge will very probably prevent others being built on the same design; but that the principle may be applied elsewhere, and that with some modifications, and perhaps stronger iron work, the details are generally correct, the experience of this bridge before the accident abundantly proved. The total cost of the 194 ft. span, exclusive of masonry, was under £2,000.

The specification, bills of timber and iron, (excepting the chains, which were enlarged subsequently,) were printed in the last report of the Board of Works, pp. 33, 54 to 70, a copy of which I sent you last mail. I trust that the above particulars may have an interest in England.

S. T. VERNON SMITH,

Engineer to the Board of Works, Province of New Brunswick.

St. John's, Dec. 27th, 1858.

Bellevue Railroad Line.

We have received the Third Joint Annual Report of the directors of the roads composing this "Line," viz: the *Bellevue and Indiana*, and the *Indianapolis, Pittsburg and Cleveland*—being the Ninth Annual Report of the former, and the Tenth of the latter company. The former extends from Indianapolis to Union, 84 miles; and the latter from Union to Crestline, 122 miles—making the entire length of the joint roads 206 miles. The business of each road for the fiscal year ending December 31st, 1858, was as follows:

BELLEVUE AND INDIANA RAILROAD.

Earnings.

	Passengers.	Freights.	Mail, etc.	Total.
Jan. .	\$6,429.20	\$14,791.19	\$1,978.38	\$23,198.57
Feb. .	6,002.05	14,647.00	1,978.38	22,627.23
March	10,556.26	20,807.55	1,978.38	33,341.99
Ap'l .	11,393.39	18,219.14	2,100.85	31,713.38
May .	9,578.50	10,834.55	1,978.18	22,391.03
June .	9,003.00	10,613.04	1,978.38	21,594.22
July .	8,143.95	10,951.08	2,081.31	21,176.34
Aug. .	10,675.39	18,611.75	2,135.91	31,423.05
Sept. .	12,388.33	18,693.53	2,188.30	33,270.16
Oct. .	12,059.73	21,537.91	2,188.20	35,785.94
Nov. .	9,499.22	18,954.67	2,188.30	30,642.19
Dec. .	8,834.98	13,864.12	2,363.50	25,062.60

Tot. \$144,564.00 192,525.53 25,137.17 332,226.70

Expenses.

Repairs of engines	\$23,750 41
" cars	13,588 76
" track	35,519 95
" build'gs, bridg's, etc.	2,314 16
Train expenses	25,158 66
Depot and station expenses	16,525 85
Wood	22,146 77
Oil and waste	5,851 36
Salaries	6,263 56
Miscellaneous	34,294 77
	185,414 24

Net earnings	\$146,812 45
Interest on bonds	\$90,828 00
Taxes	8,262 11
	98,590 11

Balance.....\$48,222 35

Compared with the previous year, the expenses show a decrease of\$42,101 35
The gross earnings a decrease of 16,125 13

The net earnings an increase of.....\$25,976 22

CONDENSED BALANCE SHEET. Dr.

Capital stock	\$1,874,370 61
First mort. 7 per ct. bonds, due 1866	791,000 00
Second " " " " 1870	140,000 00
Income " " " " 1859	199,500 00
Real estate bonds original " 1858	1,000 00
" extension " 1861	40,000 00
" " " " 1863	40,000 00
" " " " 1866	48,000 00
Div. scrip to be funded in 2d mortg. bonds	15,328 09
Bills payable	2,678 09
Car loan	11,737 29
Unpaid interest on bonds	24,613 11
Surplus earnings prior to 1858	85,242 11
Net earnings of 1858	146,712 46

\$3,370,281 67

Cr.

Cost of road and equipment	\$3,008,919 29
Real estate	84,375 08
Materials and fuel on hand	36,969 26
200 shares C. P. and I. stock	10,000 00
One bond of Marion Co., O.	1,000 00
Interest on bonds for 1858	90,328 00
Taxes paid in 1858	4,278 30
Suspense account	5,854 20
Cash and notes in hands of Real Estate Trustees	\$75,534 98
Bills receivable	42,261 88
Due from Ex. Com.	9,711 35
Cash	1,049 33

128,557 54

\$3,370,281 67

Excepting the car loan, from the C., C. & C. R. R. Co., the company has no floating debt. The original issue of Real Estate bonds was \$200,000, of which the trustees retired \$39,000—leaving a balance of \$161,000. These were taken up by the payment of \$32,200 in cash, and by Extension bonds maturing as above, which reduced the real estate bonds outstanding to the amount above stated. The Trust Fund is considered ample for the protection of these Bonds as they become due. Of the cash payment, the sum of \$25,000 was provided by the Trust Fund, and \$7,200 from the earnings of the road. Of this the Trustee has refunded \$1,188 23, leaving a balance of \$6,011 77 still due.

The directors have proposed to the holders of the income bonds, to extend them to Feb. 1, 1870, by attaching new sheets of coupons to that date—the C., C. & C. Co., having agreed to continue their guarantee, provided \$200,000 of 2d mortgage bonds are deposited with them as collateral security, and a sinking fund of \$20,000 per annum, payable quarterly, provided for their retirement. This was agreed to, and the deposit of mortgage bonds made. The first instalment to the sinking fund is to be paid on the 1st of June next. The Board entertain the hope that the proposition will be favorably considered by the holders, and that the arrangement will be consummated.

OFFICERS:

JOHN BROUGH, *President and Superintendent.*

J. M. TOWNSEND, *Secretary.*

HENRY WICK, *Treasurer.*

INDIANAPOLIS, PITTSBURG AND CLEVELAND R. R.

The gross earnings of this road for the fiscal year ending December 31, 1858, were:

	Passengers.	Freight.	Mails.	Total.
Jan. .	\$7,051.91	\$9,055.40	\$1,411.82	\$17,519.13
Feb. .	5,883.62	9,619.07	1,411.82	16,909.51
March.	9,869.38	12,230.20	1,411.82	23,011.41
April. .	8,840.00	10,919.05	1,499.15	22,258.20
May ..	7,639.61	7,178.12	1,411.82	16,229.55
June..	7,182.69	5,073.42	1,411.82	13,667.43
July .	6,498.10	6,216.47	1,485.49	14,195.06
August	8,645.61	10,794.90	1,524.09	20,964.60
Sept. .	9,029.20	12,612.43	1,561.70	23,203.13
Oct. .	11,615.70	13,022.12	1,561.70	26,209.52
Nov. .	7,964.14	10,979.34	1,561.70	20,505.18
Dec. .	9,025.12	7,520.61	1,686.50	18,232.23

Tot...\$99,740.09 115,225.93 17,939.43 232,905.45

Expenses.

Repairs of engines	\$17,864 76
" cars	9,673 39
" track	10,839 00
" bridges & structures	5,276 06
Conducting transportation	24,560 06
Fuel	20,538 26
Depots and stations	11,777 18
Oil and waste	4,165 36
Salaries	6,311 47
Miscellaneous	17,063 60
	134,069 14

Net earnings	\$98,836 31
Interest and taxes	\$72,364 13
" " cost of floating debt	5,977 22
	81,088 09

Balance

Compared with the previous year the expenses show a decrease of.....\$34,201 54
Decrease of gross earnings..... 20,613 30

Increase of net earnings.....\$13,568 24
The floating debt has been reduced to \$16,524 06.

CONDENSED BALANCE SHEET. Dr.

Capital stock	\$835,971 26
Funded debt:—	
Domestic bonds	\$34,200
First mortgage bonds	656,000
Second " "	167,000
Income bonds	166,000
	1,025,200 00
Bills payable	37,120 86
Executive Committee	17,190 52
Surplus earnings to Jan. 1, 1858	93,651 75
Net earnings of 1858	98,836 31
Sundry liabilities	1,366 45

\$2,109,336 65

Cost of road and equipment	\$1,837,624 16
Real estate	71,409 10
Bill receivable	25,264 53
C. P. & I. R. R. stock	10,000 00
Sinking fund	41,900 06
Due from other roads	14,512 13
" individuals	10,594 23
Materials on hand	19,980 82
Interest: taxes and cost of funded debt	76,610 87
Cash	1,440 75

\$2,109,336 65

The changes from last year consist in an issue of \$9,500 of 2d mortgages in adjustment of floating debt, and \$500 2d mortgage exchanged for domestic bonds of like amount. One domestic bond of \$100 has been redeemed.

A large amount of ballasting has been done during the year, and charged to current expenses. The fencing of the road is nearly completed—the total expenditure for fencing to Jan. 1, 1859, was \$31,636 49. Construction has been charged during the year with \$5,701 79, principally for dis-

count and fencing. The track and road-bed have been much improved. About 15 tons of rails have been re-rolled, and several hundred bars of iron repaired. Over 20,000 ties were replaced, and about the same number will be required this season. Two bridges require to be rebuilt—the materials for one of them being on hand. The other will cost between three and four thousand dollars.

OFFICERS.

JOHN BROUGH, *President and Superintendent.*

EDWARD KING, *Secretary.*

THOMAS H. SHARP, *Treasurer.*

Iron Manufacture in the United States.

The American Iron Association of Philadelphia has just published a report of their operations from which we make the following extracts:

"The American Iron Association has exerted itself to effect an exhaustive survey and analysis of the iron productions of the United States. It has obtained authentic statistics of the manufacture of iron in the United States and Canada of 832 blast furnaces, 488 forges, and 225 rolling mills. There are three principal departments of iron manufacture: the first is represented by the blast furnace and blooming forges, producing crude iron from the ore; the second, represented by forges, properly so-called, turning cast iron into malleable blooms and slabs; and the third, represented by the rolling mills, converting pig and malleable iron into manufactured shapes, ready for the mechanic and the civil engineer.

The following table will show the present extent and distributions of the works in these departments and in the different States of the Union:

STATES.	Anthracite furnaces.	Charcoal and Coke.	Abandoned furnaces.	Blooming forges.	Abandoned bloomerics.	Refinery forges.	Abandoned refineries.	Rolling mills.	Abandoned.
Maine...	1	..	..	..	..	..	..	1	..
N.Hamp...	1	..	..	..	..	1	..	..	..
Vermont...	5	..	..	5	..	..	..	1	..
Massach...	3	7	..	..	..	5	1	19	..
Rhode I'd	..	..	..	..	..	..	..	2	..
Conn'ticut	1	14	..	..	..	6	..	5	..
New York	14	29	6	42	1	3	2	11	6
N. Jersey	4	6	12	43	29	2	..	10	1
Pennsylv.	93	150	102	1	3	110	44	91	6
Delaware...	..	..	1	..	..	..	..	4	..
Maryland	6	24	7	..	..	..	..	13	..
Virginia...	..	39	56	..	..	43	..	12	..
N. Carol...	..	3	3	36	..	..	..	1	1
S. Carol...	..	4	4	2	..	..	..	3	..
Georgia...	..	7	1	4	..	..	..	2	..
Alabama...	..	3	1	14	..	..	..	3	..
Tennessee	..	41	33	50	2	9	3	3	2
Kentucky	..	80	17	..	..	4	9	8	..
Arkansas...	..	..	..	1	..	..	..	..	..
Missouri...	..	7	..	..	..	3	..	5	1
Illinois...	..	2	..	..	..	..	..	1	..
Indiana...	..	2	3	..	..	..	..	1	..
Ohio.....	..	64	26	..	..	..	5	15	..
Michigan...	..	7	..	3	..	..	..	2	..
Wisconsin	..	3	..	..	..	..	..	..	..
Total...	121	439	272	203	35	186	64	210	15
Furnaces. Forges. R. M.									
Working	1,159	560	389	210					
Abandoned	386	272	99	15					
In all.....	1,545	832	488	225					

The various iron regions are set forth in the following summary:

There are certain geographical iron centres which are wholly irrespective of international boundary lines.

1. There is the iron region of Northern New York, which formerly included Vermont, and makes its iron from primitive ores by means of 40 bloomeries and a few blast furnaces, three of which are now anthracite.

2. There is the hematite and primary ore belt of the Highlands, beginning in Western Massachusetts and running through Northern New Jersey into Pennsylvania, containing 44 charcoal and 22 anthracite furnaces, and 60 forges, most of them making iron from the ore. Some of these works are of the oldest in the United States, and of Revolutionary celebrity. Yet the region itself holds its own, in spite of its admirable location, in the present condition of the manufacture, owing to its ruinous proximity to the seaboard ports, glutted as they are with foreign iron.

3. Eastern Pennsylvania and North-Eastern Maryland is the greatest iron region in the Union, containing as it does 98 anthracite and 103 charcoal furnaces, and 117 forges, none of which last produce iron from the ore. It is itself divisible into smaller areas, with distinct geographical and geological limits, affording primitive and brown hematite ores, and in the centre lies its anthracite region of principal productiveness.

4. North-Western Virginia and South-Western Pennsylvania constitute together a fourth much smaller iron region, with its coal measure carbonate ores, and its 42 furnaces, and two or three forges. Its production in the table is accidentally increased by the circumstance that the great Cambria works of Johnstown have been built within its northern limits.

5. Pennsylvania has still another and more important iron region in the north-west, including the north-eastern corner of Ohio. There 66 furnaces have been in blast, manufacturing iron from the buhrstone and other carbonaceous ores at the northern out-crop of the great bituminous coal region. All the forging of this region is done in the rolling mills and workshops of Pittsburgh and other centres of trade upon the Ohio waters.

6. The Ironton region through which the Ohio river breaks above Portsmouth contains 45 furnaces on the Ohio and 17 on the Kentucky side, some of which use the coal of the mine for fuel, and all of them the ores of the coal measures for stock.

7. The old iron making region of Middle and Eastern Virginia, a prolongation of the Pennsylvania region across the Potomac, supplied with the same brown hematite and magnetic ores, contains 16 furnaces in its division east of the Blue Ridge, only one of which is in blast, and 30 furnaces west of the Blue Ridge. It has also 35 forges.

8. In the northern part of East Tennessee, and north-west corner of North Carolina, is seen a knot of 41 blooming forges and 9 furnaces using the hematite and magnetic ores of the highland range; while to the west of them, at the base of the Cumberland Mountain, and on the out-crop of the fossiliferous 'dyestone' ore of the upper silurian rocks, are 14 forges and 5 furnaces. In the south-western corner of North Carolina are five forges of the same kind, and further to the east is a belt through the centre of North Carolina passing over the line of a few miles into South Carolina, consisting of 27 forges and 5 furnaces. There is also a small iron region in Northern Georgia, along the line of the Chattahoochee, which passes over into Alabama. This whole country possesses an incalculable, inexhaustible abundance of the richest ores, while its production of iron still remains at a minimum.

9. There is as yet but one principal iron region in the far West, that of Western Tennessee and Western Kentucky, with its peculiar ores, and 45 furnaces, and 6 or 8 forges; but

10. In Missouri a beginning has been made with the Iron Mountain as a centre, and there already exist 7 furnaces, in blast upon brown hematite and primitive ores.

St. Louis, Alton and Chicago Railroad.

The contest for the possession of this road has been amicably arranged, under negotiations conducted by Mr. John T. Stuart, of Springfield, Ill., on behalf of Gov. Matteson, and Messrs. J. C. B. Davis and John Cleveland, counsel for first, second and third mortgage bondholders, in that city, for the purpose of settling the terms of a surrender of the road to the latter claimants. *The Chicago Tribune* gives the following as the terms of the agreement:

I. That Gov. Matteson shall deliver to a committee of nine bondholders (three representatives of each mortgage) actual possession of the road, with all its real, personal and mortgaged property, and shall guarantee the said committee against any interference or detriment under or by virtue of the "Spencer Lease." He will transfer to the committee all of his own interest in the charter of the St. Louis, Alton and Chicago Railroad, and will endeavor to have the whole charter so transferred.

II. The committee do not assume or recognize in any way any agreements existing between the Road or Gov. M., and the Joliet and Chicago Railroad Company or Messrs. Mitchell and Buckmaster.

III. The bondholders assume to pay the arrearages due to the employees to the amount of \$154,000, \$25,000 to be paid when the road is placed in their hands, and the remainder to be satisfactorily secured to them out of the first net earnings. Gov. Matteson is to pay all arrearages accruing since Dec. 1, 1858.

IV. The bondholders agree to apply the next earnings to the payment of \$181,806 66, said to be due to Brown, Brothers & Co., Clark, Dodge & Co., the Ocean Bank, New York, John Anderson & Co., St. Louis, and the Bank of Bloomington, Illinois, on account of said Road, if, on investigation, the said liabilities are found to be *bona fide*.

V. The fifth and sixth points provide for the payment, out of the net earnings, of \$68,445 66 for wood, and \$11,554 74 for materials and supplies.

VII. The bondholders agree to pay Matteson the balance claimed by him for advances to the Road over and above the amounts received by him from the Road, said amount to be ascertained by referees, and not, in any event, to exceed \$60,000.

These points constitute the basis of the contract shortly to be entered into between Gov. M. and the bondholders. The latter agree among themselves to apply the earnings of the Road, after discharging the above indebtedness, to the payment of the accrued interest on the three classes of bonds in the order of their precedence. The first mortgage was made Oct. 1, 1852, for the sum of \$2,000,000; the second, June 1, 1853, for \$1,500,000; the third, March 1, 1854, for \$1,000,000. The total amount of accrued interest is about \$800,000.

Detroit Extension of the Grand Trunk R. R.

A meeting of the stockholders of the Detroit extension of the Grand Trunk railroad was held in this city yesterday. Messrs. Thomas Galt, of Toronto, and Alexander Galt, and James Ross, of Montreal, resigned their places as directors; whereupon Messrs. Thomas Baring, Kirkman D. Hodgson, and George Carr Glyn, all of London, England, and all members of the British Parliament, were chosen to fill the vacancies. Mr. Baring is the senior member of the celebrated banking firm of Baring Brothers.

The narrow-gauge, of this State, instead of the broad-gauge, of the main line, was decided upon between this city and Port Huron, thus causing a break of gauge at Port Huron.

The road is to be ready for the cars by September 1, at which time it is hoped the Trunk road will be completed to Port Sarnia, and Victoria Bridge be opened at Montreal.—*Detroit Tribune*.

T R E A T I S E

ON THE

PRINCIPLES OF CIVIL ENGINEERING

AS APPLIED TO THE

CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, *Civil Engineer,*
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 292.)

§ 86. It has been observed that in all cases where the upper and lower chords are parallel the action of the load is similar. The comparative strength, however, of trusses having this outline, may be made in a great degree, to depend upon the skilful distribution of the materials.

nnn. In the cases illustrated by Fig. 43, 45 and 50, it was found that the verticals and the diagonals do not sustain equal pressures, but that the forces increase in proportion as the distances from the centre of the truss increase: the end braces supporting vertically one-half the weight.

ooo. The vertical strains accumulating from the centre toward the abutments, produce the irregular deflections, which have been illustrated in Fig. 50 and which have led to the use of *spur-braces*, acting against the under side of the chords and supported in the masonry of the abutment or piers, as represented in the next figure.

Fig. 58.



ppp. These spur-braces, in many instances, are subject to being carried away by ice, or flood wood, and interfere with the water way in such a manner as to render their use impracticable.

§ 87. The fact that the arch, or the spur-brace, had become an indispensable auxiliary to the simple truss of considerable span; and the difficulties which have been experienced in combining the arch and the truss, by any of the usual methods, so as to obtain unity of action, have led to the recent and very important improvements found in the "*McCallum Truss*."

Fig. 59.



qqq. In this arrangement the arch is substituted for the "top chord" of the other systems, and forms a component part of the truss, acting in perfect harmony with the other parts.

The principles of this truss, may be partly illustrated, by Fig. 60, in which AB is the arch substituted for the top chord. CD and EH are arch-braces substitutes for spur-braces, and,—passing through the bottom chord,—act directly upon the top of the masonry of the abutments and piers.

It is evident that any deflection of the arch, between C and H, will tend to separate those points, and to produce an outward thrust upon the upper ends of the braces. This tendency, again, is to generate an upward circular motion of the upper end of each brace, about its lower end resting upon the masonry as a fulcrum. Consequently, this upward tendency of motion, at the points C and H, is to raise the middle of the lower chord by tension of the iron rods CF and HF. Now, if a strut be inserted between the arch and the lower chord, as shown by the dotted lines (GF), it is clear that the arch will not be deflected by the weight (W) at the centre, and that the equilibrium of the truss will not be disturbed by its application.

Fig. 60.



rrr. That the peculiar action just described does not take place, when the top and bottom chords are made parallel to each other, will be quite obvious on an inspection of Fig. 61.

Fig. 61.



Here it will be seen that any deflection of the upper chord, between G and H, will shorten the distance between these two points, and the motion of the upper ends of the arch-braces will be inward and downward, increasing the deflection throughout the whole length of the chord. In this case, the point F will go down with G and H, and the introduction of the strut (CF) will only tend to the same result.

sss. To further illustrate the superiority of the *arched top* form of truss, over that of the parallel outlines, Fig. 62 and 63 are here introduced.

Fig. 62.



Fig. 63.



In these figures the upper and lower chords are supposed to be connected by ties, which may be either iron rods or wooden posts. The arch-braces are arranged to the same angles of inclination and at the same distance between the points of support on the abutments, in both cases. The other braces are left out of the figures, in order to simplify the elucidation of the principles under consideration.

It will readily be noticed that the truss as represented by Fig. 62, will sustain a load placed between the points A and B, equal, only, to that due

to the capacity of two independent beams of the same dimensions as the chords, and the same distances between the points of support.

A very different result will be obtained from the other form of truss (Fig. 63) as has been verified by experiment. The portion of the upper chord, between A and B, being an arch,—or arc of a circle rather than a chord,—any load placed thereon and tending to deflect it, will produce a thrust at A and B, which will be transferred directly to the abutments through the arch-braces. In this state, without other braces, the truss will sustain not only its own weight, but is capable of supporting in addition, a very considerable load.

A locomotive and tender, weighing no less than 90,000 lbs., have been run repeatedly and without risk of damage, across a bridge of 140 feet clear span, while the trusses were in the condition represented by Fig. 63.

§ 88. In computation of strength it has been usual to consider all wooden bridge trusses as *open beams*; or, as "made up" with a middle web indefinitely thin (D-Fig. 17). This theory may be applicable when the resulting forces of all the braces are upon both chords.

One of the peculiarities of the "McCallum truss" is, that the arch-braces do not, in any manner, act upon the lower chord, but simply against the masonry of the abutments.

So far then, as regards the "arch-braces" and the "straining-beam" (§ 67), this part of the system is a *confined arch*, and may serve as such while the other part of the system acts as a beam. Or, the arch part of the system may be held in reserve, to be used only when the beam part shall fail.

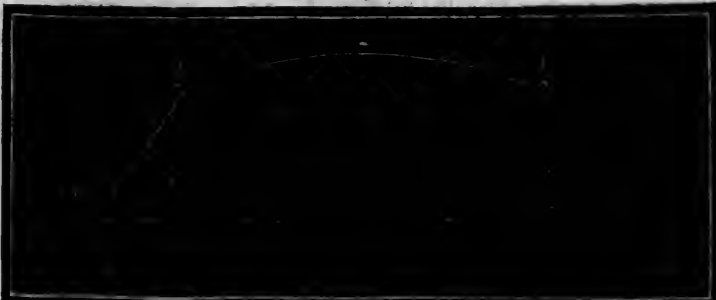
This being the case, the stability of the truss should not be materially affected by a separation of the lower chord near the middle where it is generally exposed to the greatest strain.

Fig. 64.



ttt. The arched straining beam (ACB), Fig. 64, and the arch braces (AD and BE) form an arch for the support of weights (W' and W''); and so long as the abutments (D and E) are unyielding, the system will be in equilibrium. Again (Fig. 65) the weights W' and W'' instead of being suspended directly from the points A and B, may be made to rest upon portions of a lower chord as DF and EG.

Fig. 65.



uuu. These segments of the chord are supported on the abutments (D and E) and by the tension rods, (AF and BG). But the weights W' and W'' act upon those points only through the intervention of the rods (AF and BG).

The system is still in equilibrium.

vvv. Allow the weights W' and W'' to be removed and the equilibrium will be disturbed; the deflection at C, under the influence of the weight W, will take place and the segments of the chord will be drawn upward, as in Fig. 66.

Fig. 66.



www. To prevent this result, and to restore the equilibrium as it existed before, nothing is required but to insert the struts.

Fig. 67.



(CF and CG, Fig. 67), before removing the weights (W' and W'' Fig. 65).

The action when the straining-beam is straight, will be reversed, and neither struts nor ties, at CF and CG will be of any avail.

The value of the arrangement, whereby a part of the system is held in reserve, was practically illustrated on the Ohio and Mississippi railroad in March, 1858. The bridges on that railroad from the Great Miami to the Wabash river, are constructed on this principle (Fig. 59).

Some ten miles westward of Lawrenceburg, Ia., one of these bridges 154 feet long, with a clear span of 144 feet, occurs on a curve of 4 degrees per 100 feet. An express train was thrown from the rails by coming in contact with a large piece of rock which had fallen upon the track, at about one hundred yards from this bridge.

The locomotive, tender and a portion of the cars ran so far into the bridge as to fracture six posts, twelve braces, thirty floor beams, and both chords. The latter being completely divided. In this condition the bridge held up engine, tender and cars, to the astonishment of every beholder. The strength of the track stringers and of the lateral braces and tie-rods, contributed partially to this result.

In clearing up the wreck of machinery etc. strong timbers were laid across from arched top to arched top of the opposite trusses, by means of which the engine etc. were elevated and suspended until the repairs to the bridge and track were made sufficiently to remove them.

§ 89. For bridges, the most valuable timber found in this country is the *White or Weymouth Pine*. The trunk of this tree is, in some instances, five to seven feet in diameter, perfectly straight and 100 feet in height without a limb. The wood is soft, fine grained, easily wrought and very durable.

Red or Norway Pine abounds in the Northern States and Canada, attaining the height of 70 to 80 feet, with a trunk two feet in diameter, very straight and uniform in size for two-thirds its length. It affords a compact, fine-grained resinous timber, highly esteemed for strength and durability.

Yellow or Southern Pine is abundant from New Jersey to Florida.

It attains to the height of 100 to 150 feet, and 3 to 4 feet in diameter. It furnishes a close, fine grained, moderately resinous, stiff and durable timber.

White Oak may be preferred for the parts of a structure subjected to a crushing force. It is widely diffused throughout the forests of the United

States and Canada—attaining a height of seventy to eighty feet with a diameter of five to six feet.

§ 90. The cohesive strength of these kinds of timber may be estimated at about 10,000 lbs. per square inch of section. (See table I.) The judicious engineer will not subject them to a permanent strain of more than one-fifth of this weight, or 2,000 lbs. per square inch of section.

WHIPPLE and HAUPT, in their masterly essays upon the subject of bridges agree in adopting the rule of not relying upon pine to sustain more than 1,000 lbs. per square inch when acted upon either by tension or thrust.

§ 91. The ability of timber to resist compression, depends in a great measure, on the proportions of length and sectional area (§ 15).

A cubic inch of White Oak was crushed, in the direction of its fibre, by 3,860 lbs. A similar cube of pine was crushed by 5,400 lbs. (§ 16, table II.)

A piece of Oak 2½ feet high, and 2½ inches square—that is, 12 diameters high—broke under a weight of 3,461 lbs. per square inch of section. A piece, 24 diameters in length, broke with 2,623 lbs. per square inch, and another piece, 36 diameters, broke with 1,604 lbs. per square inch of section, (table II.).

Sensible deflection was produced, in each of these three cases, under about half the breaking weight.

These results do not seem to conform to any easily defined law, and the data are so few and uncertain, that no attempt is here made to give a precise rule for determining questions of this kind.

WHIPPLE adopts the following table of weights, for pine, per square inch,

(To be continued.)

Message of the Governor of Connecticut.

The message of the Governor of Connecticut gives a favorable view of the affairs of that State. The agricultural interests are highly prosperous, and great improvements have been made in the cultivation of the soil, improvement of stock, and reclamation of waste lands. The manufacturing interest has higher hopes of remuneration than existed last year.

The receipts into the State treasury for the past year were \$339,911, and the balance in the treasury on the first of April, was \$12,506. The debt is only \$48,620, having been reduced the past year by the sum of \$32,540.

The School Fund amounts to \$2,043,372, and the income from it has been \$142,303, or nearly 7 per cent. The number of children in the State in January last was 103,103, an increase of 1,617 for the year. There is a marked improvement in the schools of the State.

The State prison labor is leased at a price 20 per cent. lower than formerly, but has defrayed all the expenses of the institution, and yielded a revenue of \$1,871 69.

The only line of new road put in operation during the year has been an extension of the New Haven, New London and Stonington road, between Groton and Stonington. There are now six hundred and two miles of railroad constructed within the limits of this State. The amount of capital paid in is \$18,727,367 31. The amount of floating and funded debt, chargeable to construction, is \$11,256,092 50. The net income for the year has been \$1,046,404 92, or three and one-half per cent. on the aggregate cost; while the gross receipts have fallen off over half a million of dollars. The New London, Willimantic and Palmer roads and the Providence, Hartford and Fishkill roads having failed to meet their obligations, have passed into the hands of trustees, and are now operated by them for the benefit of the bondholders.

There are now in the State seventy-three banks, with an aggregate capital of \$21,540,556, and a circulation of \$7,584,720. The circulation has increased \$3,335,582 during the year, but is a frac-

tion less than the average for the preceding ten years. With the exceptions referred to, these institutions have maintained their reputation by rendering all needful facilities to business, and by furnishing a sound currency.

The deposits in the savings banks amount to \$13,968,462.

Great Invention in Iron Making.

We have just had the pleasure of seeing tested one of the most important improvements ever introduced in the manufacture of iron. It is a new furnace, patented by Mr. James Criswell, and we saw it in full blast at the Allen Iron Works, situated at the corner of Carondelet and Allen avenues. This patent, we were informed, could take the common ore, and with one operation not lasting half so long, and not half the expense of the old fashioned blast furnace, could turn out a pure, substantial, and superior article of wrought iron, which would sell in market at about one-half the cost of iron by other methods, would stand a twenty-five per cent. harder test than others, and bring a premium per pound for railroad axles and any such general purposes where superior qualities are indispensable.

The first thing that attracted our attention was a collection of hammers, or crushers, worked by machinery, pounding the ore, in an iron trough, to the consistency of common sand, which was wheeled away to another part of the yard, and mixed in regular proportions with carbon, (ground stone coal,) which was taken up to a height of some twenty feet, by elevators, and there shoveled aside to be used when needed. Ascending with Mr. Criswell to this room, we saw level with the floor, some forty square brick tubes descending to the furnace and fires below, which were filled at the moment of our visit, with the mixture, as aforesaid, of iron ore and carbon. This we saw was a deoxidizing process, and by disturbing the compounded elements, we found that the flames of the boiling furnace below communicated with, and by burning the mixtures to a red heat produced deoxidization. In the centre of each of these brick tubes was placed an iron rod, communicating with an iron slide opening into a large iron bin immediately over the baling furnace, which, when deoxidizing had continued for thirty odd hours, would allow the ore to escape into the bin, and thence into the baling furnace. Here, being brought to a white heat, for a period of some fifty minutes, the ore is worked into balls of about one hundred weight, and being seized by a

when the force acts by thrust; the length being in terms of the diameter, or least thickness of the piece of timber.

TABLE VI.

Length in Diameters.	Weight in Pounds.	Length in Diameters.	Weight in Pounds.	Length in Diameters.	Weight in Pounds.
6.....	1,000	20.....	600	34.....	283
8.....	950	22.....	520	36.....	263
10.....	900	24.....	460	40.....	229
12.....	850	26.....	410	45.....	176
14.....	800	28.....	370	50.....	143
16.....	750	30.....	336	55.....	118
18.....	700	32.....	307	60.....	100

§ 92. Timber may be crushed by forces acting transversely to its fibres, at a point of bearing (§ 73).

The pressure which pine will sustain at a bearing point if applied to the whole breadth of a piece, is estimated at 200 lbs., or if oak, 300 lbs. per square inch of surface.

If the force act upon not less than half the breadth of the piece it will be sustained, as if applied to the whole breadth, without injury to the piece.

§ 93. In framing, or joining together timber for a bridge, so that one piece may act upon another, it frequently becomes necessary to reduce the section at certain parts of those pieces of timber which are acted upon laterally or by tension.

In such cases due allowance must be made for the reduced strength of those pieces of timber.

large pair of tongs sliding easily on a beam, placed for the purpose, each lump or ball is placed into and passed through a large circular crusher, relieved thus of all dross, and passed again through a series of revolving rollers, until the ore comes out of the process, diminished in heat, and lays upon the ground in wrought iron bars some twelve feet long, five inches wide, and one inch thick. Thus, in a few words, is the operation of making pure wrought iron from the common ore. In some instances, however, to show by experiment how easily the newly made iron may be made instantly marketable, the red hot iron is cut into convenient sizes, and instantly converted into horse-shoes or nails of every size. Nails thus made from this iron bring, we are told, a superior price, and the iron in bars has been bought up as fast as made for railroad axles. We found upon the ground several gentlemen from different parts of the country.—*St. Louis Evening News.*

New York and Erie Railroad.

The following, we take it, is an official statement of the financial condition of this company as it was on the first instant:

The entire bills payable outstanding, \$543,380 20; unpaid coupons on unsecured bonds, including those in hand of sinking fund, \$445,095. The wages of the men are paid up to the 1st of March. Supplies being purchased for cash, are paid up to the 1st of April. Total amount of 4th mortgage bonds issued, \$3,513,000; leaving applicable to floating debt, \$2,487,000; if the balance were negotiated on the terms proposed by the company, it would produce in cash \$1,243,500; which would leave, after paying entire floating debt and all past due coupons on the unsecured bonds, \$255,000.

This does not look so hopeless as to warrant the present depreciation in the securities of this great enterprise. The road and equipments have been much improved during the last eighteen months, greatly enhancing the real value of the property of the company, and at no previous period has there been so few unadjusted claims against the company.

Baltimore and Potomac Railroad.

The first instalment of payment on the shares of stock in this railroad have been made, and on Monday last the Chief Engineer in charge of the road commenced the work of its location, beginning on the south side of the Patapsco river, a few miles from Baltimore. He is yet occupied in locating the road line.—*Richmond Examiner.*

Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are at interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$833,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	85	85
Buffalo and State Line	500,000	Do. inconvertible	7	April, October	"	1886	90	96
Belleville and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1886	76	76
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1888	---	---
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1889	---	---
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Div's	"	1861-64	60	70
Do.	800,000	2d do. inconvertible	7	March, Sept.	"	1886	40	42
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage inconvertible	7	20 Jan. 20 July	"	1867	94	96
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	82	82½
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1882	7	Jan'y, July	"	1868	---	---
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	---	---
Cleveland, Painesville, and Ashtabula	567,000	Do. inconvertible	7	Feb'y, August.	"	1861	97	100
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August.	"	1860	65	70
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	60	67
Cleveland and Toledo	525,000	Do. inconvertible	7	Feb'y, August.	"	1863	75	80
Chicago and Mississippi	800,000	Do. conv. till 1887	7	April, October	"	1862-72	30	50
Do. do.	1,200,000	Do. inconvertible	7	April, October	"	1862-72	30	50
Covington and Lexington	400,000	Do. do.	7	April, October	"	1867	60	65
Do. do.	1,000,000	2d mortgage, convertible	7	March, Sept.	"	1883	47	55
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	April, October	"	1876	87	89
Florida Freeland	1,500,000	Do. not convertible	7	March, Sept.	"	1891	77	78
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	65	72½
Gaens and Chicago	2,000,000	Do. inconvertible	7	Feb'y, August.	"	1863	93	94
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1876	90½	92
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	---	---
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863	84	88
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873	---	---
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866	---	---
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianapolis & Cincinnati (for Lawb. & U. M.)	500,000	Do. conv. till 1857	7	March, Sept.	"	1866	87	90
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	75	85
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1859	7	Feb'y, August.	"	1865	71	73
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1883	83	85
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	Boat.	1860	95	97
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	92	93
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	---	---
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	---	---
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877	67	72½
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1868-62	---	---
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-76	---	---
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873	---	---
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867	70	75
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66	70	77½
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	57	62
Pennsylvania (Central)	6,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1860	100½	101½
Racine and Mississippi	680,000	Do. conv. sink g'd	8	Feb'y, August.	N.Y.	1875	---	---
Scioto and Hocking Valley	800,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861	---	---
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865	---	---
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866	---	---
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1867-72	68	72

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,600	Mortgage	6	Jan'y, July	Balt.	1876	85	86
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1868	7	10 Jan. 10 July	N.Y.	1870	84	96
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	80½	81
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	69½	70
Do. do.	8,000,000	4th mortgage, not convertible	7	April, October	"	1880	47½	49½
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1876	20	23
Do. do.	4,551,000	Convertible Inscription	7	Feb'y, August.	"	1871	20	21
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	20	22
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1860-70	103	104
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	95	95½
Do. do.	3,000,000	3d do. convertible	7	May, Novemb.	"	1870	79½	79½
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	88½	90
Do. (Free Land)	3,000,000	Mpge 345,000 acres—priv. 7 shares	7	March, Sept.	"	1860	95	95½
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	84	87
New York and Harlem	1,250,000	Do. do.	7	May, Novemb.	"	1861-72	94½	95
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	96	99
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	N.Y.	1873	94	94½
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	81	83
Do. Goshen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1863	71½	72
New York Central	3,237,000	No mortgage, do.	6	May, Novemb.	"	1863	94	95
Do. do.	3,000,000	No mortgage conv. from June 57-59	7	16 June, 16 Dec.	"	1864	104	104½
Panama, 1st issue	900,000	Convertible till 1859	7	Jan'y, July	"	1866	114	---
Do. 2d do.	1,475,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	500,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	---	---
Do. do.	3,469,000	Do. convertible	6	Jan'y, July	"	1870	85	85½
		Do. inconvertible	6	April, October	"	1866	76	76½

CITY SECURITIES.	Int'l payable.	On'd	Ask.	CITY SECURITIES.	Int'l payable.	On'd	Ask.
New York, 5 per ct. 1858-60		98 3/4	99	Milwaukee, 7 per ct. coup. X	Divers	45	70
Do. 5 do. 1870-75	{ May, August, and November.	93	94 1/2	New Orleans, 6 per ct. cp. R.R. X	Do.	75	80
Do. 6 do. 1883		103	103 1/2	N. Orleans, 6 per ct. cp. municip. X	Jan'y, July	87 1/2	91
Do. 6 do. 1890-93		92	93 1/2	Philadelphia, 6 per ct. 1876-96	Jan'y, July	100	100 1/2
Albany, 6 per ct. coup. 1871-81 X	Feb'y, August.	99	101	Pittsburgh, 6 per ct. coup. X	Divers	46	50
Allegheny, 6 per ct. coup.	Jan'y, July	96	99	Quincy, 8 per ct. coup. 1868 X	Jan'y, July	67	75
Baltimore, 6 per ct. 1879-90	Quarterly.	97 1/2	100	Racine, 7 per ct. coup. 1878 X	10 Feb'y, Aug	80	87 1/2
Boston, 6 per ct. coup.	April, October	101	102	Rochester, 6 per cent. coup. X	Divers	90	97 1/2
Brooklyn, 6 per ct. coup. Long X	Jan'y, July	102 1/2	103	St. Louis, 6 per ct. coup. Long X	Do.	84	85
Cleveland, 7 per ct. cp. W. W. 1870 X	Do. do. 100	103	103	Do. do. Municipal X	Do.	56	57
Cincinnati, 6 per ct. coup.	X Divers	92 1/2	95	Sacramento, 10 p. ct. cp. 1862-74 X	Do.	35	40
Chicago, 6 per ct. coup. 1873-77 X	Jan'y, July	85	86	S. Francisco, 7 p. a. cp. 1865 pay. N. Y. X	May, Novemb.	60	70
Do. 7 per ct. coup. 1880 X	Jan'y, July	97 1/2	99 1/2	Do. 10 p. ct. cp. 1871 X	Do. do.	90	91
Detroit, 7 per ct. cp. W. W. 1873-78 X	Feb'y, August.	100	102	Do. 10 do. pay. N. Y. X	Jan'y, July	---	---
Dubuque, 8 per ct. cp. Long X	March, Sept.	100	100	Do. 6 per ct. pay. N. Y. 1876 X	Do. do.	58	61
Jersey City, 6 per ct. cp. W. W. 1877 X	Jan'y, July	99	101	Wabash, 6 per ct. coup. X	Divers	68	69
Leavenworth, 6 per ct. cp. 1880-82 X	X Divers	72	72 1/2	Do. 6 p. ct. Mun. 1874 X	March, Sept.	80	81 1/2
Memphis, 6 per ct. coup. 1882 X	Jan'y July.	64	70	Zanesville, 7 do. X	April, October	---	---

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending May 9, 1859.
BONDS. Per cent.

Little Miami, 1st Mort.	68	64	and int.
Covington and Lexington, 1st Mortgage	68	---	
Do. do. 2d do.	7	60	
Do. do. Income	10	---	
Ohio & Miss. E. D., Construction	7	---	
Cinc., Ham. and Dayton, 1st Mortgage	7	---	
Do. do. 2d do.	7	83	
Indianap. & Cincinnati, do. do.	7	82	
STOCKS.			
Cincinnati, Hamilton & Dayton	---	59	
Columbus and Xenia	---	87½	
Indianapolis & Cincinnati	---	66	
Little Miami	---	90	
Ohio and Mississippi (E. D.)	---	---	

Railroad Earnings.

The following are the earnings of the Cincinnati, Hamilton and Dayton railroad for the month of April against the corresponding month of last year:

April, 1859	\$40,218 19
April, 1858	36,217 19

Increase in 1859.....\$4,063 00

The business of the Illinois Central Railroad for April, 1859, was as follows:

Land Department.

Acres Construction Lands sold	1,586.82 for \$23,009 50
Acres Interest Fund Lands sold	40.00 for 400 00
Acres Free Lands sold	713.96 for 12,743 76

Total sales during the month	2,340.78 for \$36,153 26
To which add Town Lot sales	1,429 65

Total of all.....\$37,582 91

Acres sold since Jan'y 1, 1859	12,647.02 for \$178,596 88
Acres sold prev'ly, 1,240,141.57	15,778,162 42

Total.....1,252,788.59 for \$15,956,758 80

Construction Bonds canceled in April, 1859	\$36,500 00
Construction Bonds canceled previously	1,012,000 00

Total.....\$1,048,500 00

Free Land Bonds canceled in April, 1859	\$3,000
Free Land Bonds canceled previously	129,000

Total.....132,000 00

Total Bonds canceled up to April, 31, 1859.....\$1,180,500 00

Cash receipts in April, 1859.....\$52,199 49

Do. since Jan'y 1, 1859... 178,384 89

Total cash and bonds received to April 30, 1859.....\$2,853,182 42

Traffic Department.

Receipts from passengers	\$61,368 89
Do. freight	74,773 30
Do. mails	6,358 23
Do. rent of road	5,333 00
Do. other sources	4,437 53

Total receipts in April, 1859.....\$152,271 05

Do. do. 1858.....179,991 01

Do. since Jan'y, 1859.....\$574,043 49

Do. do. 1858.....590,370 18

Original Land Grant, 2,595,000 acres; Railroad, 706 miles of main track, and 87 miles of sidings; 113 engines; 2,401 cars; funded debt, \$18,819,500; share capital, \$60 on 175,000 shares—\$10,500,000.

1856.	1857.	1858.
Traffic...\$2,434,878.59	2,293,964.59	1,976,578.52
Work.exp.1,444,546.19	1,791,231.14	1,419,954.80

Total..\$990,332.40 502,733.43 556,623.72

The receipts of the Grand Trunk Railway of Canada for the week ending April 23, were.....\$44,858 86
Week ending April 24, 1858 50,653 83

Decrease\$5,794 97
Total traffic from July 1st.\$1,860,939 54
Same period last year 1,947,972 87

Decrease.....\$87,033 33
Traffic of the Great Western Railroad, for the week ending April 29, 1859.

Passengers.....\$21,718 20
Freight and live stock..... 12,730 49
Mails and sundries..... 1,875 86

Total.....\$36,384 56
Corresponding week of last year.....\$44,062 80

American Railroad Journal.

Saturday, May 14, 1859.

New York and New Haven Railroad.

There has been some discussion of late in reference to the small *net* revenue derived from the New York and New Haven Railroad, and a pamphlet of not much account has been published in reference thereto. It may not be unseasonable, therefore, to take a brief review of the operations of this company from the opening of their road to the present time, embracing a period of *nine* years.

The aggregate cost of the road, adding that of the several years together, has been \$42,533,022; the total earnings, \$6,935,195; amount paid on account of interest, \$956,345; on account of dividends, \$82,856. The two last sums make an aggregate of \$1,784,906, as the amount received thus far from the investments, which is at the rate of 4 2-10 per cent. The amount received by the stockholders has equalled only 3 1/4 per cent. The gross earnings in the meantime have equalled 18 1/2 per cent. on the cost of the road; the operating and other charges 14 3-10 per cent.,—or a trifle over 75 per cent. of the gross earnings.

Of the extraordinary charges, \$386,315 have been on account of the Norwalk accident, and \$223,939 on account of loss on the lease of the Canal road.

The New York and New Haven Railroad has one of the best routes in the country, with earnings per mile equalling nearly \$15,000. Yet it has returned to its owners less than many roads earning one-half the per centage on the capital invested in them. It has been unlucky, and unquestionably, badly managed, for a portion, if not for the greater part of the time since it has been in operation.

A general review of our roads would show that the amount saved to stockholders bears hardly any ratio to the amount of their gross earnings. Good management seems rather a matter of luck, than a thing to be counted on with any degree of certainty. If a road happens to make a good start, so as to reflect credit upon the parties conducting it, this very fact becomes a motive to good conduct, which ripens into a habit or policy, producing the happiest results. The parties in charge feel compelled to emulate the success of their predecessors, and have a very powerful motive super-added to those of a more common kind. On the other hand, when a road becomes embarrassed, or has failed to justify expectation, its managers have no standard set them, nor any adequate motive to

put forth all their powers, and both they and their road sink to a mediocrity, from which they hardly ever emerge. Several years have elapsed since the New York and New Haven Railroad have paid anything to its stockholders, save one small dividend of 3 per cent. Both they and the company have become habituated to their non-payment, and they may now be omitted with impunity, and almost without complaint. In fact the directors would gain hardly any more credit by paying than by omitting them.

It is a common delusion to expect large *net* from large *gross* earnings. It would be as proper to expect success in trade from the extent of the business carried on. It is not the extent of transactions that may have taken place, but the skill with which they have been conducted, that success depends. So with railroads. Some of our roads having the largest receipts show the smallest per centage of *net* earnings. Some parties have the faculty of making a great deal out of a road, and others none at all.

Railroad Competition--New York and Erie Railroad.

OFFICE OF THE N. Y. & ERIE R. R. Co., }
New York, 7th May, 1859. }

To the Editor of the AM. RAILROAD JOURNAL:

DEAR SIR—I beg leave most emphatically to deny the assertions made in your editorial of this date, headed "Railroad Competition." All the reductions on freight have been made by the New York Central agents, without the slightest provocation or retaliation on the part of this Company, and without any excuse, except that the interests of the New York merchants required uniform rates from Boston, New York, Philadelphia, and Baltimore, to all western points. This I am ready to prove conclusively to any disinterested party, or to a committee of stockholders of the New York Central R. R. Co.

Competition between the New York Central Co. and the Buffalo and Corning R. R. Co., at Buffalo, in regard to cattle, led to reductions on both cattle rates and passenger fares; but these were made without my knowledge or assent. On the contrary, I would have prevented these reductions, had not the New York Central reduced immediately to same rates as the Buffalo and Corning Road—thus preventing any intervention on my part.

After the summer rates were established by the New York Central at Buffalo, the local rates from New York to Buffalo, were:—

	1st	2d	3d	4th
Class.	class.	class.	class.	class.
	\$75	\$55	\$45	\$30

Then were subsequently reduced by the N. Y. Cent'l to 60 50 35 20
And further reduced on 18th

April to. 40 35 30 20
And on 27th April altered to. 50 35 25 20

In all these modifications we followed the New York Central, but in no instance, where there were regular rates, did we reduce below the rates of that Company. In the present contest, I have constantly held that we had no money with which to retaliate on our competitors, however unjust and uncalled for might be their aggressions.

No agreement or alliance between the New York Central and New York and Erie Companies would permit an increase of rates whilst the contest is continued with the Pennsylvania Railroad. The

latter Company competes with the Northern roads at Cleveland, and every other point west of Cleveland.

May I ask, by what system of logic you arrive at the conclusion that the state of things which now exists, in regard to railroads, is the consequence of the doctrines preached by me, but never really practised on any other road? I have ever, on all occasions, urged the impolicy of resorting to the means which have brought about the present state of things, and have never resorted to them, even in self-defense, except in the case of reduction last year in the passenger fares.

I trust you will do me the justice to correct your statements, which I believe you would never have published, had you been aware how grossly you have been deceived by your informant.

Believe me, respectfully yours,

CHAS. MORAN, President.

Illinois Central Railroad.

The machinery on this road seems to have been maintained and run during the past year, with a good degree of economy, as will be seen by reference to the following abstract, furnished us by S. J. Hayes, Esq., Superintendent of Machinery on the Road:

Total number of engines.....	110
Number of miles run by passenger trains.....	936,599
" " by freight trains.....	846,502
" " by construction and wood trains.....	215,043
" " by all the trains.....	1,998,144
bbls. waste used.....	25,426
" tallow ".....	2,501
Gallons oil ".....	17,274
Cords of wood used.....	35,699
Tons coal and coke used.....	8,759
Wages paid firemen and engineers.....	\$79,447
Cost of repairs.....	102,592
Value of oil, tallow and waste used.....	18,288
Value of wood and coal used.....	180,233
Cleaning engines.....	15,434

Total cost of maintaining and running machinery.....	\$395,996
Average cost of wood and coal per mile run.....	9.02
" " oil, waste and tallow ".....	.91
Wages of firemen and engineers per mile....	3.97
Cost of repairs per mile.....	5.18
" cleaning engine per mile.....	.77

Total cost per mile of running and maintaining machinery.....19.81

The Company have now in operation 18 coal-burning engines. The cost of wood on tender is estimated at \$4 31 per cord; of coal, \$3 per ton.

For a similar service on the Galena and Chicago Railroad, the past year, the cost was 41.65 cents per mile; on the Chicago, Burlington and Quincy, 28.04; on the Michigan Central, 27.10.

New York City Railroads.

The following statement shows the number of passengers carried over the various lines of railroads in New York, during the year 1858:

Roads.	No. of Passengers.	Receipts.
Second avenue.....	4,867,171	\$243,868
Third avenue.....	8,105,515	405,275
Fourth avenue.....	2,014,486	100,724
Sixth avenue.....	5,240,978	262,048
Eighth avenue.....	6,829,459	341,475

Total.....27,057,802 \$1,352,891

If we add the travel on the Brooklyn roads to this statement—which is 7,572,828—we will have the number of passengers who used the railroads

of both cities during the past year, amounting to \$4,633,525, and the gross receipts therefrom \$1,731,676 25. This gives a daily average of 94,882 persons, showing the money taken every day in the year to average \$4,744 10.

Debt of Louisville.

The city of Louisville owes a bonded debt of \$3,001,000, and presents as assets therefor the following:

Stock in Jeffersonville R. R. Co.	\$200,000
Stock in Gas Co.	188,081
Stock in Louisville and Nashville R.R. Co.	1,501,000
Mortgage stock in Lebanon Branch.	225,000
Stock in Louisville Water Co.	550,000
Wharf, Real Estate, &c.	1,251,926

Morris and Essex Railroad.

This company have resolved to extend their road to the Hudson River, and to raise an additional capital of one million of dollars for that purpose, for which the books of subscription will be open at Newark on Monday, the 16th inst., from 1 to 4 o'clock. The subscription will be confined to the stockholders, who will be allowed to subscribe for their pro rata of such increase.

Ventilation of Railway Cars.

To the Editor of the AM. RAILROAD JOURNAL.

SIR,—Now that the *furor* for rail car ventilation has nearly died out, will you allow an obscure individual from Canada to come before the railroad world through your columns?

I have been many years studying and experimenting upon the subject of ventilation generally, and have at the end of about fifteen years and the expenditure of more than a few thousand dollars, brought it to perfection.

All there is to do now, in order to ascertain this fact, is to come and view its operation.

As regards that branch which belongs to railway cars, I have seven now running upon the Grand Trunk railway, the operation of which will be better to be viewed in about a month from this time. The last two which have been finished and put upon the road within a month past, are an improvement upon the others.

Even if I had brought this to perfection sooner, the public could have derived no benefit from it for two reasons; first,—because railway companies have been kept amused by such a multitude of experiments, each of which promised to effect the object and at a trifling cost, that any advances made by one whose invention would involve an outlay of more than a few dollars, even after the inventor had made the experiment at his own expense, would not be listened to; secondly,—because these companies had really been so victimized by *tin peddlars* and back-loads of "patent ventilators"—(the knowledge of the employees not being sufficient to distinguish between them)—that they became disgusted with every thing in the shape of a "patent."

Now, however, that almost all the expedients for the ventilation of cars have one by one been dropped, and the public has about made up its mind, that if it cannot go by water in summer time, and in a clean and comfortably warmed car in winter, to stay at home; and the directors of many of these companies finding in consequence, that their receipts from passengers are not only not keeping pace with the increase of population, but actually falling off year by year, they may be induced to listen to propositions for rendering railroad traveling tolerable to humanity, even

though the expense may be a few hundred dollars for each car.

The paucity of travelers by rail may, in part, no doubt, be laid to account of the revulsion in trade and money matters within the last two or three years, but that the great falling off of the passenger traffic is wholly due to this cause, is an erroneous supposition, and this opinion is corroborated by the statement of the Connecticut roads, published in your last JOURNAL, where during the most prosperous years of 1854, '55 and '56 the falling-off of passengers was even greater than in 1857 and '58.

The facts are that business men have been driven by the discomfort of rail traveling (now rendered intolerable in summer, by increased speed,) to discover ways and means other than by personal attendance in their business arrangements; and pleasure travelers have found by experience that their sufferings upon railways more than counterbalanced any pleasure they have derived from their journey. In summer they are literally choked with dust and cinders, and in winter suffocated with the filth of 50 or 60 pairs of lungs, the emanations from which, (and many of them sickly ones too,) the passengers are all obliged to share and share alike! Besides—whilst their heads are in a temperature of 80°, their feet, (except the few who huddle around the stove,) are benumbed with cold. "We get all the passengers there are, and why incur unnecessary expense," railroad men think, and even say. This is not true—you get none but those who cannot avoid it.

Why is it that almost all the inland watering places upon the continent have, within the last few years, been deserted for sea bathing places? Why is it that the streams of tourists follow the great lakes and rivers? I answer, the filth of our railway cars. Make railroad traveling a pleasure, as it ought to be and as it might be, and the effect will be to double the number of travelers upon nearly all the railroads upon the continent of America.

Cobourg, May 5, 1859.

H. RUTTAN.

Pacific Railroad of Missouri.

In the JOURNAL of 9th ultimo, we gave a concise statement of the financial condition of this company which we had compiled with much care from a report made by them to the Board of Public Works of Missouri in December last. We have now before us the Annual Exhibit of the directors to the stockholders for the fiscal year ending February 28, 1859. The earnings of the main line during that time were:

From passengers	\$331,392 02
" freight	320,351 58
" mails	21,345 83
" rents	1,019 14
" telegraph	240 38
Total main line	\$674,248 95
" S. W. Branch (3 months)	2,061 17

The operating expenses for same time were:—

Main Line	\$371,227 35
S. W. Branch	3,578 94
	\$374,806 29

Net earnings

\$301,503 83
The receipts of the company for same time were \$596,479 02
The discrepancy between the earn-

ings and receipts are unusually great, owing to a large unsettled claim for freight, amounting to \$66,896 28. There is also a full quarter of mail money due, amounting to \$6,000.

The receipts of transportation department from opening of the road to March 1st, 1859, were

\$2,006,824 02
Total expenses for same time
1,270,273 54

Cash balance	\$736,650 48
Interest charged to transportation department to November 30, 1858 ..	884,455 87

Showing a deficiency of

The statement of the cost and progress of the main line, west of Jefferson, does not vary materially from that previously given. It is as follows:	
Work done	\$1,405,360 45
Remaining to be done	3,108,639 55

Total estimated cost	\$4,514,000 00
Add for machine shop at Kansas city ..	31,000 00

Aggregate total

CONDENSED BALANCE SHEET, FEB. 28, 1859.

DR.

Capital stock:—

Main line	\$3,263,684 65
South-West Branch.	66,973 33
	\$3,330,657 98

Bonded debt:—

Main line	\$6,803,000 00
South-West Branch.	1,400,000 00
	8,203,000 00

Premium received on bonds	71,594 30
Land grant rents and sales	7,777 79

Floating debt:—

Main line	\$73,460 81
South-West Branch.	127,549 59
Bills payable	413,072 84
Due Robert Benson	1,381 40
" E. D. Morgan & Co., 60,000 00	
	675,464 64

\$12,288,494 71

CR.

Construction, St. Louis to Jefferson.	\$5,992,198 50
" west of Jefferson	1,403,460 50
Rolling stock	614,782 23
General expenses	115,457 35
Interest and exchange	2,056,698 61
Construction S. W. Branch	1,226,010 49
Land grant, geological survey	31,925 40
Interest and exchange	318,249 27
General expenses	23,011 81
Undistributed balances	50,031 92
Int. charged to transp.	\$834,455 87
Less net earnings	736,550 48

97,905 39

Steamboat line, balance of accounts	718 99
Bills receivable	\$162,445 18
Bonds of town of Her-	
man	500 00
Sundry accounts	59,973 00
Cash and bonds in treas-	
urer's hands	135,136 07

358,054 25

\$12,288,494 71

In reference to the progress of the work the Chief Engineer says:—

The running distance has been increased by the extension of the main line 37½ miles from Jefferson to Tipton; and of the South-West Branch, 19 miles to St. Clair. The graduation of about six miles more on each branch is done, except a small amount of trimming and finishing. The heavy work east of Otterville has also been carried on to such an extent, that we could open the road to Georgetown before next winter, if the means were forthcoming. The work in Johnson county has been continued, but the collections come in so slowly that the progress does not justify the expense of an assistant to supervise it.

On the South-West Branch, the graduation is well advanced to Kinsey's, 43 miles beyond St. Clair; and I think the road can be opened to Jamestown, 67 miles from Franklin, and 104 miles from St. Louis, in November next; if the Board feel able to push the work. By the time the track is laid to Jamestown, the graduation can be completed to Rolla, and the track can be laid to that point early in the following spring. Either of these achievements will be of great importance to the South-West, as even Jamestown is nearer to Springfield than is Tipton or Syracuse, and the railroad distance saved by taking this route to St. Louis will be 63 miles.

The Legislature having adjourned without granting any aid whatever, the directors have given up all hopes of a vigorous prosecution of the main line during the present year; they hope, however, by strict economy in the expenses, and by a judicious use of all the means within the reach of the company, including the sale of free lands belonging to the main line, and of such other unencumbered property not absolutely required for the purposes of the road, and by the collection of unpaid subscriptions, to be able to meet the interest punctually in July next, and to pay all engagements.

The equipment of the road consists of 12 passenger and 14 freight engines; 21 first class, and 5 second class passenger and mail cars; 6 baggage and express cars; 269 freight and 137 construction cars.

Earnings of main line for twelve months ending February 28, 1859.

	Pass'gers.	Freights.	Mails.	Total.
March ..	25,818.22	27,646.14	1,302.08	54,766.44
April ..	31,752.84	30,379.58	1,302.09	63,434.51
May ..	31,069.46	22,310.27	1,302.08	54,681.81
June ..	22,897.25	14,862.37	1,302.08	39,061.70
July ..	24,404.23	29,012.25	1,875.00	55,291.48
Aug. ..	28,770.33	34,210.67	2,037.50	65,018.50
Sept. ..	32,860.52	41,541.38	2,037.50	76,439.40
Oct. ..	36,420.63	26,580.35	2,037.50	65,038.48
Nov. ..	28,021.83	25,093.51	2,037.50	55,152.84
Dec. ..	24,515.49	24,531.28	2,037.50	51,084.27
Jan. ..	22,408.77	19,967.54	2,037.50	44,413.81
Feb. ..	22,452.45	24,116.24	2,037.50	48,606.19
Tot. ..	\$331,392.02	320,251.58	21,345.83	672,989.43

Insurance Law.

GOODS STOLEN DURING FIRE.—LIABILITIES OF INSURERS.

In the case of *Tilton vs. The Hamilton Fire Insurance Company*, (1 Bosworth's N. Y. Superior Court Reports, 367) the question arose whether the owner of a stock of goods insured with the defendants company, could recover for a portion of them removed by direction of the defendants to save them from the fire, but afterwards stolen from their custody.

The facts of the case were somewhat in dispute as well as the law. For the purpose of deciding the question involved, the court assumed the facts to be as follows.

The goods were a stock of ready made clothing in plaintiff's store, in the city of New York. The store was burnt down, and if the goods had not been removed they would have been entirely consumed by fire. A few moments after the fire was discovered the insurance watch arrived, broke open the doors, took possession of the store; and commenced moving the goods across the street. The police formed lines across the street about midway of the block, above and below the fire, to prevent persons approaching the building. The goods

were removed from an honest motive to save them from total destruction by fire, which was inevitable unless they were removed from the premises mentioned in the policy. Extreme vigilance and caution were used to prevent any of the goods from being lost by theft or otherwise during the process of removal. But notwithstanding all the vigilance used, a quantity of the goods were stolen.

The following is the substance of the opinion of the majority of the court, holding defendants liable.

BOSWORTH CH. J.—Is the loss under the peculiar facts of this case, a loss by fire, within the meaning of the policy? The fire created a necessity of immediately removing the goods, in order to save the whole or part of them from being burned up. In making such a removal, even if all be removed before the fire reaches that part of the building from which they were taken, a loss in spite of all precautions, may be produced by at least two causes incident to such an act.

One is, a partial injury of some of the goods themselves, by their hurried removal, and the confused state in which they may necessarily for a time be thrown together. Another is, from a theft, or abstraction of some of the goods. If these are not material results, it is believed that common experience shows that both, in large cities, are almost invariably inevitable results. Was not the fire the immediate cause of, though not the active agent in, the destruction of the goods.

The distinction between the proximate, and remote cause of a loss becomes in some cases so faint, that it is difficult to discern it. I think it a sound rule that when the damage in any particular case is a direct and unavoidable consequence of the occurrence of a peril insured against, the insurers are liable, though the immediate agent was not such peril. All the consequences inevitably following from the peril insured against, or incident thereto, are properly attributable to the peril itself.

The fire in this case created a necessity of removing these goods, and left no other alternative possible, except their total consumption by fire.—If they had not been removed, and if the fire had been extinguished before the building was consumed and if by extinguishing it the goods had been partially damaged by water. I understand it to be conceded by all the cases, that such a loss would be covered by the policy.

In that case there would have been no damage to the goods from their having come in contact with the fire, or from actual burning. In the case supposed, the goods owing to their peculiar position, were damaged by water employed to extinguish the fire. In other words, it resulted from an effort necessarily, as well as properly made, and one which the contract of insurance contemplated would be made in case of fire, to save the insured property from total destruction.

In the present case, the removal was an act necessarily and properly done, not to extinguish the fire, but to keep the goods from coming in contact with the fire, and made, when it was apparent, and the result demonstrates, that it was impossible to extinguish the fire, until the building and its contents were destroyed. This was an act which the contract contemplates would be done on such an emergency. It not only contemplates it, but if

the plaintiff's had been apprised of the fire, in time to remove their goods before the fire could reach them, and they as reasonable and prudent men, knew that they could make such removal, but instead of attempting it had supinely stood by and had seen the goods consumed, no court or jury would charge the company with the loss, unless coerced by some rule, which they were inexorably compelled to follow.

But an honest and faithful effort is made to prevent the fire from destroying the whole. In consequence of that effort, a large part of the insured property is saved. In spite of it, a part of such property is lost, but not burned. Without such effort all would have been burned. Would not the part that was lost, be lost in consequence of the fire, and unavoidably so lost?

If the insurers are not liable for such loss occurring under such circumstances, then the assured ought not to be required to make an effort to remove his goods in case of fire in order to save the insurer from greater loss; and the parties who undertake to remove the goods should be charged as wrong doers, for the consequences of their interference, unless such interference could be shown necessary to prevent the spreading of the fire, to other buildings.

Suppose the fire had reached the goods in question and some of them had been damaged directly by the fire, and the others had been removed, and none of them had been lost or stolen, but some of those removed had been damaged by the act, notwithstanding the exercise of extreme precaution and care to avoid such a consequence, would not that damage be covered by the policy? I think it would.

But even in that case, fire would not have been the immediate cause of the damage, unless all such acts as are a cause of damage and as the fire renders proper and necessary to avoid greater inevitable loss, are to be attributed to the fire itself. In any other views, the removal of the goods damaged by such removal, and not the fire, would be the proximate cause of the loss.

But I can see no distinction in principle between a partial injury to some of the goods saved by the removal, and a loss of a part of those attempted to be removed, to save the whole from unavoidable destruction, when they are lost in spite of the extreme of human precaution to prevent loss or damage from the act of removal, whether such loss be caused by theft, or some unavoidable casualty during the removal, which renders the article valueless.

Condition No. 6, annexed to, and forming a part of this policy expressly declares "that in case of fire, or of loss, or damage thereby, or of exposure to loss or damage thereby, it shall be the duty of the insured to use their best endeavors for saving and preserving the property; and if they should fail to do so, this company will not be answerable for the loss or damage sustained in consequence of such neglect."

Hence, the duty, by the terms of the policy, was imposed on the plaintiff, in such a state of things as is shown in this case to have existed, to use his best endeavors to save the goods by removing them. Suppose the plaintiff had been present, and used such endeavors, and in spite of all the care and precaution that could be used for their preservation and safety, some are lost, or

stolen, but the residue are saved from a total destruction which would otherwise have involved all of them.

He would have done precisely what the policy required him to do as a condition of retaining the liability of the company for the value of such part, as the use of his best endeavors could not save from injury. As to those which his great efforts, and vigilance have saved unharmed, he has no claim against the company, because as to them there is no loss. But on the defendants' theory, the company is not liable for the loss of those which human effort and care could not save because they were not consumed by fire. Yet it was his duty to remove all of them, because by the best endeavors that could be used all could not be removed. All having been removed, there is no liability, because those which are saved are uninjured, and those which it was impossible to save were not burned or damaged by fire. And yet the fire, by the express terms of the contract between the parties, made it the duty of the insured to remove the goods, in the condition of things existing at the time, if it was reasonably certain that such an act would save the company from a greater loss than would have fallen upon it if no removal had been made.

I cannot resist the conclusion that such a loss was one which the parties to the contract contemplated might occur, and that it was the intent of the parties, that any loss which should unavoidably result from the fire should be covered by the policy although not caused directly by actual burning.

Central Railroad of New Jersey.

The board of directors have issued their report for the 12th year ending April 1, 1859, of which the following is a synopsis:

Receipts from passengers	\$175,170 55
" merchandise	298,782 73
" coal	381,934 08
" mail, express, rents, etc	15,065 98
	\$870,953 34
Running expenses	\$81,773 31
Repairs of road	48,629 90
" engines	22,098 12
" cars	15,383 93
" b'ldg's, bridges, etc	11,154 99
Expense account	20,567 75
Wood consumed	75,303 82
Coal	17,911 16
Ferry expenses	40,369 88
Miscellaneous	7,188 00
	350,280 73
Net earnings	\$520,672 61
Stock issued for dividend \$200,000 00	
Sundry accounts	31,722 36
Materials, etc., reduced	24,609 26
Cash from old account	2,629 40
	258,861 02
	\$779,533 63
Dividend 10 per cent.	\$200,000 00
Interest on bonds, notes, etc.	256,672 26
260 income bonds purchased	215,650 00
Reduction of indebtedness	55,409 95
State tax $\frac{1}{2}$ per cent.	23,851 34
Charged to depreciation	13,499 01
Sundry property accounts	6,331 72
	771,414 28
Cash on hand	\$8,119 35

The surplus receipts of the year have been applied to the re-purchase of the income bonds. Of the \$500,000 issued in the fall of 1857 and winter of 1858, at 75 per cent., \$260,000 have been redeemed at an average cost of 83 per cent. The difference between these two prices is charged against the year's earnings as a loss. A reduction in bills and accounts payable of \$55,409 95, has also been made. A few property accounts have been slightly increased, and the railroad account has been slightly reduced.

The profit and loss account has been credited with the gross earnings, \$870,953 34, and debited as follows:

Ordinary expenses, as per statement	\$350,280 73
State tax $\frac{1}{2}$ per cent.	23,851 34
Interest on bonds, etc.	256,672 26
Losses in re-purchasing income bonds	20,650 00
Dividend, 10 per cent.	200,000 00
Balance of profit and loss account transferred, partly to credit of income bonds towards losses on future purchases, and partly to property accounts to cover depreciation	19,499 01
	\$870,953 34

By this statement it will be seen that the balance of the earnings which remained, after deducting expenses, taxes and interest, was \$240,149 01, equal to 12 per cent. on the \$2,000,000 of capital stock. The interest, \$210,000 paid on the \$3,000,000 mortgage bonds, added to the above \$240,149 01, gives \$150,149 01 as the return on the \$5,000,000 stock and bonds, equal to 9 per cent. on the whole if it had all been stock. After deducting the losses incurred in purchasing income bonds, and reserving \$200,000 to cover a dividend of 10 per cent., the balance of the account, \$19,499 01, has been applied (as was the balance of the previous year's profits) to the reduction of various accounts, in pursuance of the policy of keeping down the cost of the property as much as possible.

To represent the net earnings absorbed in the reduction of bonded and other indebtedness, a dividend of 10 per cent. has been declared and paid by an addition of \$200,000 to the capital stock.

It is the intention of the board to increase the capital stock by a further issue of \$300,000, and thus provide for the balance of the income bonds. It is not necessary to pay these bonds before 1863, but they must be "provided for" by a suitable fund before the net earnings are released from their lien, so as to be applicable to cash dividends. It is safe to assume that a cash dividend will be made in November.

Many holders of bonds of the first series (\$500,000) of the first mortgage issue, which fall due August 1st, 1860, have applied to have their bonds extended 20 years from that date. A decision will be made in the fall, whether to allow this to be done, or to further increase the stock \$500,000, (being the whole amount the board have authority to issue,) and to pay them off. The board incline to the latter course, but many of the stockholders recommend the extension, as tending to keep up dividends. If it is decided to renew the bonds, the option will be given to holders either to extend them, receiving a new sheet of coupons, or to sell their bonds to parties ready to buy them at par and extend the time.

A comparison of the receipts and expenses of the past two fiscal years gives the following results:

	1859.	1858.	Increase.
Receipts	\$870,953 34	\$682,940 30	\$188,013 05
Expenses	350,230 73	325,747 68	24,533 05

Net earnings \$520,672 61 \$357,192 62 \$163,479 99

The receipts from passengers have been nearly stationary, owing to the continued stagnation of business, but are now on the increase. The receipts from merchandise have increased 10 per cent. with a prospect of a steady advance as business revives. The receipts from coal have increased

75 per cent. and are now the largest source of revenue.

The expenses show an increase of less than \$25,000. With an increase in the mileage of 33 per cent. the running expenses show a reduction of \$3,455 41, and an increase in the fuel consumed of only 20 per cent. Repairs of road show an increase of \$14,500, all the ballasting done during the year having been charged to this account.

The company own 30 engines, 25 of which are wood burners and 5 are coal burners. Two more coal burners are ordered, and more may be required during the year, if the business continues to increase. Of these engines, 25 are in good order, 2 in fair order, 2 require general repairs and 1 is rebuilding. Of these engines 22 are narrow gauge and 8 are broad gauge. At the present time 22 are required for daily use. A gradual change of the wood engines into coal burners will be commenced as soon as the company become satisfied of the best plan of construction to be adopted; and the experiments making by other companies are carefully watched with this design.

The equipment of cars is as follows: 19 first class passenger cars, 2 second class passenger cars, 7 baggage and mail cars, 68 house freight cars, 18 covered cattle cars, 5 open cattle cars, 89 platform freight cars, 10 eight wheel coal cars, 6 caboose cars, 42 four wheel gravel cars and 10 dirt cars.

All the cars are in good working order and sufficient for the company's business at present, but purchases will soon have to be made.

The total number of miles run by all the trains has been 488,871. The ferry boats have made 2,818 trips, of twelve miles each, between New-York and Elizabethport, the commencement of the road; and run 3,819 miles on excursions, making a service of 37,635 miles.

The number of passengers carried has been 319,583. The number carried one mile, has been 6,985,370, which is equivalent to 93,138 through passengers. This does not include commuters or free passengers. The number carried the previous year was 277,409, who traveled 6,726,377 miles; equivalent to 89,685 through passengers; showing an increase the present year of 42,174 in the number of passengers, and 258,993 in the miles traveled, equivalent to an increase of 3,453 in through passengers.

The number of tons of merchandise carried has been 144,557. The total movement of merchandise, or number of tons carried one mile, has been 7,456,282, equivalent to 99,517 tons of through freight. The tonnage of the previous year was 115,424, which was carried 6,604,744 miles, equivalent to 88,063 tons through freight; showing an increase the present year of 29,133 tons, and 851,538 in the miles carried, equivalent to an increase of 11,351 tons in the through freight to New York.

The number of tons of coal (2,240 lbs. each) carried has been 564,504. The total movement of coal, or number of tons carried one mile, has been 28,638,276, equal to 454,576 tons carried through. The tonnage of the previous year was 310,445, which was carried 15,328,637 miles, equivalent to 243,311 tons of through coal; showing an increase the present year of 254,059 tons, and 13,309,639 in miles carried, equivalent to an increase of 211,265 tons in coal carried over the road from Easton to Elizabethport.

This coal tonnage has been divided between the Lehigh and Lackawanna regions, as follows:

	1859.	1858.	Increase.
Lackawanna region	426,575	224,090	202,485
Lehigh	136,929	86,355	51,574
	564,504	310,445	254,059

The year just closed has been, to the company, one of continued prosperity and success. The remarkable geographical position of the road has secured a remunerative business, which gives every promise of continuing steadily to develop. The favorable returns of the present year are made in a season of dullness and depression in every branch of business, and of stagnation in the coal trade.

Ordinary Receipts, Expenses and net earnings of Railroad and Ferry.

	Receipts.	Expenses.
April, 1858.....	\$70,907 77	\$25,672 69
May.....	72,978 36	30,124 42
June.....	73,826 99	29,916 36
July.....	77,285 84	32,246 20
August.....	77,845 30	29,177 80
September.....	72,628 74	28,883 99
October.....	71,397 54	82,511 98
November.....	72,992 35	27,518 79
December.....	79,616 98	30,829 68
January, 1859.....	61,145 27	28,564 88
February.....	65,809 06	24,763 36
March.....	74,519 14	30,070 58

Total.....\$870,553 34 \$350,280 73
Total, 1857-8.....\$682,940 30 \$325,747 68

Increase.....\$188,013 04 \$24,533 05

CONDENSED BALANCE SHEET.

Construction.....	\$373,097 89
Land damages.....	289,890 84
Engineering.....	95,257 83
Interest.....	431,939 62
Discount on second mortgage bonds	225,000 00
Miscellaneous expenses.....	65,710 61
Station houses, shops and water stations.....	131,800 00
Land and work at Elizabethport....	133,479 03
Ferry interest and boats.....	256,350 00
Engines.....	256,200 00
Cars.....	168,500 00
Telegraph, docks, machinery, etc...	39,536 80
Materials on hand.....	96,782 69
Cash and cash items.....	17,335 87

\$5,580,981 18

Capital stock.....	\$2,200,000 00
First mortgage bonds, due 1860.....	\$500,000 00
First mortgage bonds, due 1865.....	500,000 00
First mortgage bonds, due 1870.....	500,000 00
Second mortgage bonds, due 1875..	1,500,000 00
Income bonds.....	180,000 00
Bills payable.....	175,000 00
Balance of sundry accounts.....	19,981 18

\$5,580,981 18

OFFICERS.

JOHN T. JOHNSTON, *President.*
G. M. MULLIGAN, *Secretary and Treasurer.*
JOHN O. STEENS, *Superintendent.*

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P. C. HILDRETH, Wheeling, Va. 8220

Dubuque & Pacific Railroad Company.

THERE will be an election of seven directors of said Company on Monday the 6th of June, 1859, at the office of the Company in Dubuque.

\$419

JAMES M. MCKINLAY,
Secretary.

JAMES JEFFRIES & SONS, MANUFACTURERS OF LOCOMOTIVE, CAR AND TANK SPRINGS, PHILADELPHIA, (rear of Girard House.) REFERENCES.

M. W. BALDWIN & CO., R. NORRIS & SON, A. WHITNEY & SONS, Philadelphia; JOS. R. ANDERSON, Richmond; SMITH & PERKINS, Alexandria, Va.; JNO. EDGAR THOMSON, of Penn. R. R.; EDWARD C. DALE, of P. G. & N. R. R.; S. RUTH, of Rich. F. & P. R. R.; THOS. DODAMEAD of Va. Central; URIAH WELLS, Petersburg; H. D. BIRD, South Side R. R., Petersburg; C. O. SANFORD, of Petersburg R. R.; JNO. R. McDANIEL, of Va. & Tenn. R. R.; JAS. P. ROBERTSON, of Wilmington and M. R. R.; HENRY T. FRANK, of S. C. R. R.; S. S. SOLOMONS, of North East R. R.; JOHN FLYNN, of Western & Atlantic R. R.; E. F. ROWARTH, of Greenville & Col. R. R.; GEO. YONGE, of Georgia R. R.; WM. CLARK, of Muscogee R. R.; W. W. BALDWIN, of Montgomery & W. P. R. R.; WM. M. WADLEY, of N. O. J. & G. N. R. R.; A. D. SEGER, of Opelousas R. R.; C. WILLIAMS, of Vicksburg; ALLEN S. SWEET, of Buffalo and Erie R. R.; F. C. ARMS, of Memphis; H. COFFIN, of Memphis; A. WOREL, of Seaboard & R. R. R.; UNION CAR WORKS, Portsmouth; WM. M. HIGHT, of Augusta; S. & R. H. RIKERS, WHARTON & PATSCH, Charleston, and all Roads where our SPRINGS are in use.

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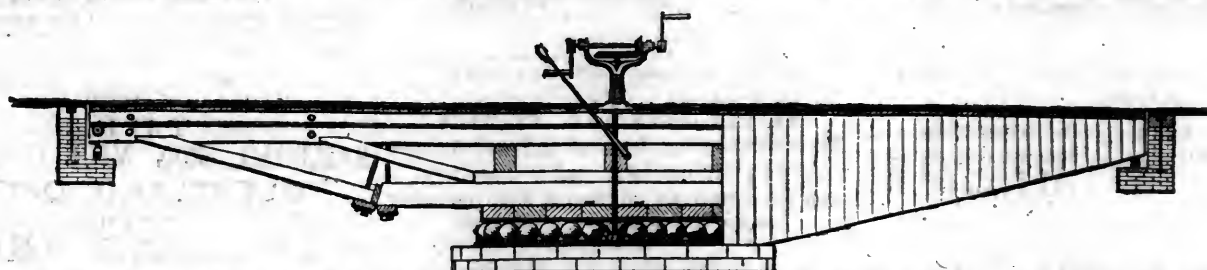
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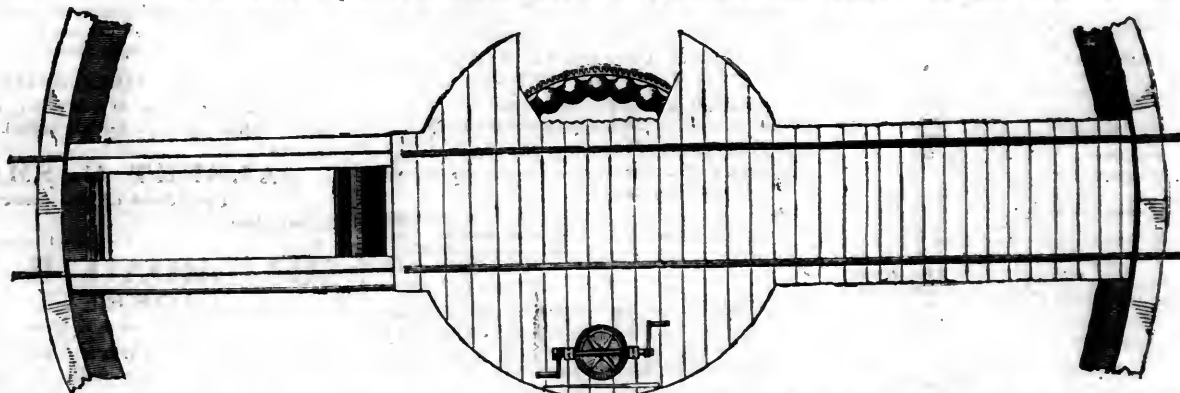
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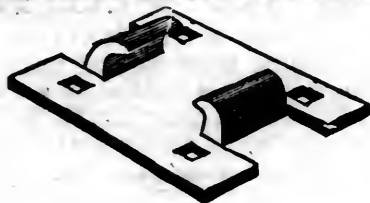
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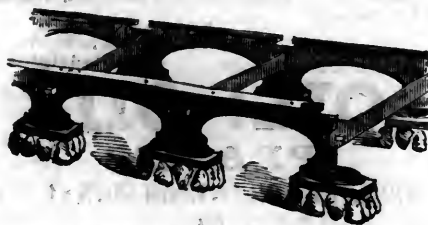
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
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

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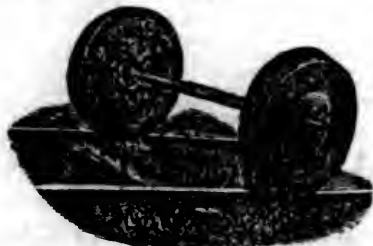
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AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
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HENRY V. POOR, *Editor.*

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SECOND QUARTO SERIES, VOL. XV., No. 21.]

SATURDAY, MAY 21, 1859.

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MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, May 21, 1859.

The Grand Falls, N. B., Bridge Disaster—To what was It Due?

In the RAILROAD JOURNAL of the 14th inst., appears a description of the general features of a bridge erected across the St. John River, at Grand Falls, New Brunswick, together with an account of its failure on the 18th of December last, just 18 days after it was opened for travel.

This disaster has not attracted that attention among engineers which the inferences or conclusions fairly deducible from it demand. The failure was not simply that of an unimportant road bridge, involving merely the strength of a wooden stringer, but was of such a nature as to involve the whole question of the applicability of iron in all such structures, where its tensile strength is used under the low temperatures of our northern latitudes.

Since reading the description referred to, I have examined the detailed specifications of the bridge, as published in the report of the Board of Works for New Brunswick, for the year 1857, so that but little difficulty exists in accounting for the failure. Although the description you publish does not agree with the official specification in respect to the dimensions of some of the parts, yet it is sufficient to give a correct idea of the

principle upon which the bridge was constructed, and I refer to that description in order that I may be understood without a repetition, giving only such dimensions as were omitted, or erroneous. The plan is simply a wooden *Howe* truss, 7 feet high, with a cambre of 5 feet at the centre, spanning an opening 190 feet wide—the truss being supported at intervals by *trestles* resting upon wrought iron chains hung from side to side of the opening, and having a *versed sine* of 15 feet at the centre. These chains had a section of 18 inches in the aggregate at the centre, and 20 inches at the ends. They were anchored to the back of the abutments, and were also connected to the ends of the bridge, so that the trusses served as *struts* or straining beams, to resist the tension of the chains. The bridge, it is stated in the article referred to, failed under a moving load of one ton! and a distributed load at rest, consisting of one foot of snow, estimated to weigh 20 tons.

Since the accident, a report upon the cause of the failure has been made, at the request of the Board of Public Works, by R. W. Burrowes, Esq., C. E., which I have now before me. He gives the same statement in respect to the moving load, but says nothing of the 20 tons of snow. He speaks, also, of the bridge having been subjected to a moving load, on the day of its opening, equal to $13\frac{1}{2}$ tons, and concludes, from the fact that the bridge failed under a load of one ton, while it stood under a load of $13\frac{1}{2}$, that there was no "direct defect of materials or workmanship." I infer from this, either that your published description must be wrong in respect to the snow, or that there was an equal amount of snow in both instances. If the latter was the case, it seems very strange that Mr. Burrowes' calculations should not have taken it into account. That he did not, is rendered quite certain from his estimate of weight of bridge and load, which he makes 120,334 lbs. From careful computations of the bills of materials, I make the weight of the structure between the faces of the abutments, excluding all that portion of the bridge and chains immediately on them, and including the *moving* load, about 109,000 lbs.

Mr. Burrowes' estimate probably included those portions of the trusses and chains which

mine excludes, and therefore the two agree, very nearly.

I quote Mr. Burrowes:

"In a calculation of a tensile resistance to fracture, of 50,000 lbs. per square inch, and a general distribution of load, the chains should have sustained a weight of 666,666 lbs.

"The resisting force of truss to upward pressure, taking into consideration the cambre, (five feet,) together with the anchorage on abutment and pier, should have been equal to 481,023 lbs. Add to this, the weight of structure itself, 120,334 lbs., making the whole resisting force to contraction of chains equal to 601,357 lbs."

All this is not very clear, but I suppose he means that the stiffness and weight of the structure should have given way, and the whole have been lifted up in the centre by such a contraction of the chains as would have produced a tension of 601,357 lbs., and that they should have been able to bear a tension of 666,666 lbs. Instead of lifting up the trusses, as should have been the case, the chains parted, and trusses and all fell into the river.

I again quote Mr. Burrowes:

"It must be apparent to an observing mind, that a combination of materials, affected so materially by temperature, placed in positions where they are supposed to act equally and simultaneously as resistants to a transverse strain, must be erroneous." These remarks relate to a combination of a rigid wooden truss, and an iron suspension. The effect of difference of temperature being in the one case immaterial, whilst on the other, with a chord of 190 feet, and a versed sine of 15 feet, and length of arc equal to 193.12 feet, and a difference of temperature of $+100^{\circ}$ and -30° , the contraction of the chain will be equal to .19 of a foot, and a diminution of the versed sine and consequent vertical strain upon the truss equal to .50 feet."

All this (italicised by myself) is hardly as clear as the other remarks quoted; but I suppose, where he says *transverse* strain, he means something entirely the reverse, viz., *longitudinal* strain, and that by his figures he means that the chains being 193.12 feet long between the abutments, as they hang, would contract .19 of a foot under a temperature of -30° , and that this con-

out the chains, were subjected to more than 2½ times the strain which they should have been to have sustained the structure beyond risk, even if the lower chords had not parted by tension, the compression upon the upper chord, slightly braced laterally as it was, would have collapsed the whole structure like an egg shell. It is not therefore at all surprising that, when the chains parted, and the trusses were subjected to their weight in addition to their own, it should have gone down. Mr. Burrowes says "the causes of the failure of the truss can be accounted for in various ways." I propose to account for the failure, and not for the causes, and one way is enough. The truss had not strength to stand alone, much less sustain the weight of the chains.

It is a most important enquiry in these days when such a disposition exists for iron bridges of all conceivable shapes, why a structure, which, according to all calculations, was supposed to have a maximum capacity to sustain 124 tons at the center; or 228 tons distributed over its entire length, in addition to its own weight, should have broken down with a load of not exceeding 21 tons, distributed, and most probably not exceeding 10 tons. There must be some unknown element not taken into account in designing structures depending upon the tensile strength of iron. Such terrible errors are not made in wooden structures, and it behooves the Engineers of the country to look to this question before it is too late; for not a day passes but thousands of unconscious travelers are subject to the treachery of such designs as these.

All accounts concur in stating that there was no evidence of flaw in the fracture of the chains—that the bars that broke showed no appearance of fibre, but looked cold short and brittle. Short pieces of the bars were found lying upon the rocks, as if each chain had given way in different places at the same moment, or had broken like cast iron, by falling upon the rocks beneath. But one inference can be drawn from the case before us. It is unavoidable—and that is, that extreme cold changes the structure of the material and destroys the fibre. At a temperature of zero, the bridge, according to Mr. Burrowes, had upon it 13½ times the load that it had when it broke, at a temperature of -30°. According to Mr. Fairbairn's experiments, which Mr. Burrowes refers to, the deterioration of cast iron between +32° and +16° was about 13 per cent. If this ratio continues, the strength at -32° could be but about ¼ the strength at +32°. If this be the case with cast iron, it is fair to infer that the per centage of deterioration would be greater in wrought. The doubts that this and other similar failures, cast upon the reliability of wrought iron for such purposes, and under such circumstances, calls for extreme care and moderation in its use, until at least some well conducted experiments shall fix upon more reliable formula for ascertaining its value under all temperatures.

Notwithstanding the failure of one suspension bridge at this place, (for this was nothing but a suspension bridge,) it is surprising that Mr. Burrowes should have written the following closing paragraph to his report: "Taking into consideration the amount of work done towards the erection of a wire suspension bridge, I should consider it the most economical; and viewing it in this light, should, under the circumstances, consider it

the most feasible, at the same time recommending as much elasticity to tension as is consistent with the distribution of weight, and counteraction to wave; a principle which I think can be adopted." Beyond the inference that by this, he means to recommend to the government the erection of another structure, subject to the same risks and objections as the last, merely substituting wire cables for wrought iron bars, the paragraph is all Greek to me. I confess not to understand the "principle" which he thinks can be adopted, but if there is any probability that its adoption will prevent the mercury from going down to -30°, then I think it would be well to try another experiment. If it will not have this effect, then the government had better adhere to well tried and well known plans, and venture upon no more doubtful expedients, designed to avoid difficulties which have no existence except in the minds of those who wish their experiments tried. I will venture to find a dozen bridge builders in 24 hours who will erect a wooden truss across the Grand Falls which will sustain a ton to the foot, in length, the whole structure not to cost materially more than the one which broke down under a load of less than 200 pounds to the foot.

In the foregoing remarks I do not intend to reflect upon the general plan of the bridge, except to the use of iron under the conditions recited. Assuming iron to be a proper material in such low temperatures, then I believe the plan adopted to be well conceived, as it is tasteful in appearance, and economical in execution. A. P. R.

TREATISE ON THE PRINCIPLES OF CIVIL ENGINEERING AS APPLIED TO THE CONSTRUCTION OF WOODEN BRIDGES.

By S. S. POST, *Civil Engineer,*
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 310.)

§ 94. For the purpose of reviewing some of the most important of the principles herein before advanced—of illustrating their application in determining the size and strength requisite for the several parts of a structure—and of rendering the subject more familiar to the student, the following examples are introduced.

EXAMPLE A.

Required a railroad bridge of 15 feet clear span, and 15 feet clear width between the trusses, which are to be of the form represented by Fig. 29.

The greatest weight to be sustained at one time is: that of a locomotive weighing 60,000 lbs., 40,000 lbs. of which rest at the lowest points of two driving wheels, ten feet from the centre of a four-wheeled truck, the shafts of which are centrally five feet apart.—What will be the least dimensions of the several parts of the bridge, if constructed of White Pine?

The greatest weight that can be brought upon any timber in the structure, at one time, is that of the driving wheels upon the floor beams, or cross-bearers, the ends of which are supported upon the stringers or chords of the trusses on either side of the bridge.

This weight, 40,000 lbs., acts successively upon each of the floor beams in the bridge, and the determination of their size and number, is thus suggested as the first step in the calculation.

The distance between the points of bearing of wheels on opposite rails, varies as the gauges of different roads vary, from 4½ to 6 feet. Suppose it to be 5 feet. Then the weight will be applied 2½ feet from the centre, and may be considered as applied 10 feet from one end of the beam and 5 feet from the other.

Then (§ 27) $7.5 \times 7.5 : 5 \times 10 :: 40,000 : 35,555 =$ the weight which, if laid upon the middle of the beam, will produce the same effect as 40,000 lbs. applied 2½ feet from the middle.

Here we have the length of the beam (15 feet), the weight to be supported, in the middle of the beam (35,555 lbs.) and the kind of timber to support this weight without having its elasticity injured thereby, (represented by $c = 0.01168$, table IV.) given to find the breadth and depth of the beam.

Now the depth of the beam is expressed thus: $\frac{L^2 \times W \times c}{B} = D^3$, (§ 44,) and the breadth thus:

$$\frac{L^2 \times W \times c}{D^3} = B \quad (§ 45).$$

Either of these expressions is equivalent to $L^2 \times W \times c = BD^3$, or, $15 \times 15 \times 35,555 \times 0.01168 = BD^3$, or, 93,438 = the breadth multiplied into the cube of the depth of the beam.

If it be desirable to have the section a square, that is the breadth and depth of the same dimensions, the fourth root or square root of the square root, of 93,438, equal to 17½ inches, will be the breadth and depth, very nearly; for 17.5×17.5^3 , or, $17.5 \times 17.5 \times 17.5 \times 17.5 = 93,789$ which is a little in excess.

If the breadth be fixed at 12 inches, then the depth will be $\left(\frac{93,438}{12}\right)^{\frac{1}{3}} = \sqrt[3]{7,786.5} = 19.82$ inches; or, if the depth be fixed at 16 inches the breadth will be $\frac{93,438}{16^3} = \frac{93,438}{4,096} = 22.81$ inches.

The strength of two beams of half the breadth—of three beams of one-third the breadth—or of four beams of one-fourth the breadth, etc., etc., if the weight be uniformly distributed across them, will be equal to the single beam. In practice such a division is made and uniformity in the distribution of the weight is obtained through the intervention of the track stringers.

Suppose, that, instead of the single beam 16 × 22.8 inches, three beams 16 × 7½ inches are substituted for the support of the 40,000 lbs. Suppose, also, that these beams are placed at a distance apart and a track stringer 8 inches in depth and 6 inches in breadth is placed at right angles across their top surfaces, under each driving wheel; the driving wheels resting directly over the middle beam.

What must be the greatest distance between the beams?

The weight upon the centre of each track stringer is 20,000 lbs., of which, one-third part, or 6,667 lbs., is sustained by the middle beam, and the remainder, or 13,333 lbs. must be supported by the strength of the track stringer with its ends resting upon the two outward beams. To find the length of the track stringer, or the distance apart of the outside beams in this case, the expression

$$(\S 46) \text{ is } \frac{D^3 \times B}{W \times c} = L^2; \text{ that is } \frac{8^3 \times 6}{13,333 \times 0.01168} = \frac{2,072}{155.73} = 19.72 = L^2; \text{ and } L =$$

$\sqrt{(19.72)}=4.44$ ft. = the distance between the two outside beams. Add to this the thickness of one of the beams 0.63 of a foot, and their distance centrally will be 5.07 feet, or from centre to centre of each beam, say 2½ feet. This gives six spaces—and 7 beams for the span of 15 feet.

When a joint occurs in the track stringers, another stringer of equal size must be laid alongside of it, to break that joint and preserve a continuity of the necessary strength.

In bridges of considerable length the track stringers should be composed of two thicknesses of timber, side by side, bolted together with their butt joints alternating each other for a distance of half the length of the pieces employed.

The floor beams at the extreme ends of a bridge may be supported upon the abutments, beneath the rails, otherwise they should be of the full dimensions to support the greatest weight.

The next step will be to ascertain the weight of the materials in the floor beams and track stringers, etc., etc., which the trusses must carry in addition to the weight of the locomotive. Only so much of the material as is found between the abutments need be taken into the account.

5 beams, 17 ft. long, 16 by 7½ inches = 72 cub. ft.
4 stringers, 15 " " 8 " 6 " = 20 " "

Total 92 " "

The specific gravity of White Pine is 0.455, or 28.43 lbs. per cubic foot (table IV.).

The weight of the beams and stringers is, therefore, when perfectly dry, 2,615 lbs.

To this add the weight of iron rails, say 600 lbs., and for bolts, spikes, ties, the effect of rain or snow, etc., etc., 785 lbs. more, making in all, 4,000 lbs. in addition to the weight of the drivers.

These 4,000 lbs. being distributed uniformly, produce the same effect upon the trusses as would 2,000 lbs. at the centre of the bridge. The greatest load at the middle of the bridge will then be 42,000 lbs., half of which must be supported by either truss, acting (at *c*, Fig. 29) by thrust upon braces (*ac* and *bc*); by tension on the vertical tie (*cd*) and upon the chord (*ab*).

The direct cohesion of bar iron, at a mean temperature, is about 60,000 lbs. per square inch of section (table I.). At a temperature of 40° below zero it does not, probably, exceed 15,000 to 20,000 lbs. At ordinary temperature, wrought iron may be subjected to occasional strains of 15,000 lbs. per square inch, which will produce an extension of about .0006 of its length, but will not, materially, injure its elasticity. Except in climates where excessive degrees of cold are sometimes experienced, it will be safe to rely upon it for a permanent strain of 10,000 lbs. per square inch. The vertical tie (*cd*), if of wrought iron, of best quality, well annealed, will be of sufficient strength with a section of 2.1 inches, which is very nearly equal to that of a round rod 1½ inches in diameter.

Suppose the height of the truss to be one-sixth of the span, (as in Fig. 37 and 43). Then the length of each brace (*ac* and *bc*) is 3.16 times the height—and as each brace supports, vertically, 10,500 lbs., the force acting in the direction of each brace with a tendency to compression is 33,180 lbs.; for, 1 : 3.16 :: 10,500 : 33,180.

To resist this thrust we have braces 7.9 feet long. If we assume 6 inches as the least thickness of the braces, they will be 16½ diameters in length

and will sustain a compression of 733 lbs. per square inch, (as per table VI. § 91.) The area of the section will then be $\frac{33,180}{738} = 45$ inches = $6 \times 7\frac{1}{2}$ inches.

Or, assuming 6½ inches as the least thickness of the braces, they will be about 14½ diameters in length and may resist a compression of 790 lbs. per square inch, without bending. In such case the area will be $\frac{33,180}{790} = 42$ inches = $6\frac{1}{2} \times 6\frac{1}{2}$ inches nearly.

The tension on each chord (*ab*) will be 31,500 lbs.; for the height is to the half span, as half the weight is to the horizontal strain, as has been demonstrated, (§§ 78 and 79), that is 1 : 3 :: 10,500 : 31,500.

This requires a sectional area of 31.5 inches, at 1,000 lbs. per square inch. If we suppose that the chord must be reduced one-half its size, in forming a shoulder or abutment against which a brace is to act, to produce the tension, then the section should be double that just given or 63 square inches. Assuming its thickness to be 7 inches, its depth will be 9 inches.

Finally, it is necessary to ascertain if these dimensions of the chord are sufficient to support the weight to which it will be subjected at the middle points, between *a* and *d* and between *b* and *d*, Fig. 29. This weight upon each chord will be equal to 20,500 lbs. acting at the middle of a beam 7.5 feet long. Then $\frac{7.5 \times 7.5 \times 20,500 \times 0.01168}{7} = 1,924$, the cube of the depth (§ 44) and $\sqrt[3]{1,924} = 12.44$, or say 12.5 inches the depth of the chord required in case the thickness is 7 inches.

The greatest vertical pressure of the braces upon the chords, is 10,500 lbs. each, and their bearings should not be upon a surface less than 7.5 by 7 inches to prevent crushing; for $7.5 \times 7 \times 200 = 10,500$ (§ 92). The greatest load upon the ends of the chords will be 21,000 lbs. each, requiring a fair bearing upon the abutments of 15 inches by 7 inches.

EXAMPLE B.

A railroad bridge 22.5 feet clear span is required of the form of truss represented by Fig. 39. The height being one-sixth of the span, and the weight of the locomotive the same as in example A.

It is evident that the dimensions of the floor beams and track stringers in this case, and indeed in most cases, will be the same as required in example A, the sectional area of these timbers not being materially affected by the length or kind of truss.

In this case there will be between the abutments, 8 beams, 17 ft. long, 16 by 7½ inches = 115.5 cub. ft.
4 stringers, 22.5 " 8 " 6 " = 30 " "
to the weight of which in wet weather, add that of the iron rails, chairs, spikes, ties, etc. The whole may be estimated at 6,000 lbs., or 3,000 lbs. upon each truss.

The chord (*ab*) may be considered as divided into three portions of equal length (*af*, *fg* and *gb*) supported by the abutments (*a* and *b*) and the vertical ties, (*df* and *eg*). Each portion of the chord is, therefore, 7.5 feet in length, between its points of support, and sustains one-sixth part of the flooring, track, etc., or 1,000 lbs. uniformly distributed—equal to 600 lbs. at the middle.

The greatest lateral strain, then, to which the chord can be subjected, will be the weight of locomotive (20,000 lbs.) and of flooring, etc. (500 lbs.), in this case 20,500 lbs.

A White Pine beam 7.5 feet long to sustain a weight of 20,500 lbs. at the middle, without injury to the elasticity of the fibre, if 8 inches in breadth, will require a depth of 11.9 inches; for, $\frac{7.5 \times 7.5 \times 20,500 \times 0.01168}{8} = 1,683.56$ and $\sqrt[3]{1,683.56} = 11.9$.

If the track stringers be made so perfectly inflexible as to effect a completely uniform distribution of the weight of the driving wheels of the locomotive over each 7.5 feet of the bridge, the lateral strength of the chord may be reduced one-half, or say to $8 \times 9.5 = 76$ square inches.

Taking the greater depth as more safe, the chord will contain about 15 cubic feet of timber, and, at 30 lbs. per cubic foot, will weigh 450 lbs.

The greatest load that can be brought to act upon any one of the vertical ties will be,
One-half weight of drivers 20,000 lbs.
One-sixth of floors, tracks, etc. 1,000 "
One-third of chord 150 "

Total 21,150 lbs.

If round bar iron be employed for these ties, it should be very nearly 1½ inches in diameter in its least section,—or say a sectional area of 2½ inches, which, at 10,000 lbs. per square inch, will carry 22,500 lbs.

Wrought iron, 1½ inches diameter weighs 8 lbs. per lineal foot. In this case the bolts with suitable head, nut, collar, etc., will weigh about 56 lbs. each.

The greatest vertical strain at the head of either brace will be 21,150 + 56 + half the weight of the straining beam, say 30 lbs. or in all 21,236 lbs. But (§ 75) two-thirds only of this weight, or 14,157 lbs. act vertically upon any one brace at one time. This being resolved into its horizontal and oblique forces (§ 6, c.) will give 23,314 lbs. as the tensile strain on the chord, and, consequently, an equal tendency to compression on the straining beam.

The straining beam is 7.5 feet long. Assuming it to be 6 inches square, it would be 15 diameters in length, and (table VI.) would withstand a thrust of 775 lbs. per square inch of section. Then $775 \times 36 = 27,900$ lbs., which is somewhat too little.

But $\frac{23,314}{775 \times 6} = 6.1$ very nearly, and 6×6.1 will give a sufficient cross section. It contains, therefore, nearly two cubic feet and will weigh about 60 lbs.

The inclination of the braces, in this case, being as 2 horizontal to 1 vertical, their length will be equal to 2.236 times the height of the truss; for $\sqrt{1^2 + 2^2} = \sqrt{5} = 2.236$.

The thrust in the direction of the brace will be $14,157 \times 2.236 = 31,655$ lbs.

The distance between the chord and straining beam is 3.75 feet; the length of the shortest or under side of the brace is $2.236 \times 3.75 = 8.385$ feet or 100½ inches. The top length of the brace will be nearly a foot and a half greater than the under side, so that the average length may be assumed at 9 feet or 108 inches. Taking the brace at 6.5 inches square, it will be 16½ diameters in length and should resist a thrust of 733 lbs. per square inch of section. Then $6.5 \times 6.5 \times 733 = 30,969$ lbs.,

a result 686 lbs. too small. Increasing one side an eighth of an inch, the result will be

$6\frac{1}{8} \times 6\frac{1}{8} \times 733 = 31,565$ lbs., only 90 lbs. too small.

A brace of these dimensions will contain 2.7 cubic feet and weigh about 80 lbs.

To be more precise as to the tensile strain upon the chord, when the load is sustained at the points d or e , Fig. 38, we have,

One-half weight of drivers.....	20,000 lbs.
One-sixth of floor-beams, rails, etc....	1,000 "
One-third of chord	150 "
One iron tie-rod	56 "
One-half straining beam	30 "
One brace	80 "

Total..... 21,316 lbs.
two-thirds of which, or 14,210½ lbs. act, vertically, at the foot of one brace, and 7,105½ at the foot of the opposite brace in the same truss. Then

$$1 : 2 :: 14,210\frac{1}{2} : 28,421\frac{1}{2},$$

1 : 4 :: 7,105½ : 28,421½, gives the horizontal strains in either direction.

To resist the tensile strain upon the chord at 1,000 lbs. per square inch, requires a cross section of 28.4 inches; while, to resist the lateral strains, a section, at least two or three times as great, is necessary.

If the two braces were to meet at the top without the intervention of a straining beam, as represented by Fig. 37, and the weight ($W=21,316$ lbs.) applied at the centre, it is clear that the horizontal strain would be $1 : 3 :: \frac{21,316}{2} : 31,974$.

Now $3 \times 3 : 31,974 :: 4 \times 2 : 28,421\frac{1}{2}$ which verifies the other calculation.

EXAMPLE C.

Suppose the truss to be of the general form represented by Fig. 43.

Span 30 feet—height 5 feet—weight of floor beams, track, etc., per lineal foot of bridge, and locomotive, the same as in examples A and B. The truss being divided into four panels, 7.5 feet long, the lateral dimensions of the chord may be taken the same as in the last example to wit: 8 by 11.9 inches.

Of the weight of the floor beams, track, etc., estimated at 8,000 lbs.—1,000 lbs. will be suspended by each of the vertical ties (cf , dh and eg).

When the driving wheels of the locomotive bear at the middle of the bridge, the middle tie (dh) must sustain 21,150 lbs. This tie, if of bar iron, should have a section of 2½ inches, and will weigh about 50 lbs.

The upper chord or straining beam may be estimated, for the present, to weigh 200 lbs. Then the weight (W) acting upon the top of the central braces at d will be—

One-half weight of drivers.....	20,000 lbs.
One-eighth of floor beams, track, etc....	1,000 "
One-fourth of chord	150 "
One vertical iron tie	50 "
One-half of upper chord	100 "

Total at centre..... 21,300 lbs.
one-half of which (10,650 lbs.), is supported vertically, by each of the central braces, giving rise to a horizontal strain at their junction (d) and upon the lower chord between the points f and g , equal to a force of 15,975 lbs. It also gives rise to an oblique force, in the direction of those braces, of 19,170 lbs.

These braces are 9 feet, or 108 inches long, and, assuming them to be 4½ by 8 inches, are 22.75

diameters. Each will be capable of withstanding a thrust of 500 lbs. per square inch, or, $4\frac{1}{2} \times 8 \times 500 = 19,000$ lbs. It will contain 2½ cubic feet and weigh 75 lbs.

The vertical force acting at d upon the brace df is transferred to f and, again, to e , by means of the vertical tie (ef) when the weight at c is augmented as follows:—

Weight at d transferred to f	10,650 lbs.
Do. of brace df	75 "
Do. ½ of floor beams, track, etc....	1,000 "
Do. ½ of chord	150 "
Do. iron tie rods, etc., dh	50 "
Do. ½ of top chord	50 "
Do. locomotive truck	6,666½ "

Total vertical force at e 18,641½ "

The last item (6,666½ lbs.) is the effect at f of the weight of the truck, and is obtained in the following manner. The drivers being at the middle of the bridge; the centre of the truck is 5 feet from the abutment and 2.5 feet from the point f . These distances being as 2 to 1, it is evident that ⅔ of the weight will be supported at f and ⅓ at A .

The weight of the tender, on the opposite end of the bridge, acting at g will nearly counter-balance that of the locomotive truck, so that the whole of the 18,641½ lbs. may be assumed to act vertically, on each end brace.

The oblique force in the direction of the end brace will then be 33,555 lbs. Assuming the brace to be 6 by 8 inches, it will be 18 diameters long, and (table VI.) will bear a thrust of 700 lbs. per square inch. Then $6 \times 8 \times 700 = 33,600$ lbs.

The horizontal force resulting from the 18,641½ lbs. is 27,962.5 lbs., and acts upon the top chord (ce) with a tendency to compression, as well as upon the bottom chord (AB) with a tendency to extension.

The whole length of the top chord is 15 feet. At the middle it is secured from vertical, but not from horizontal deflection. Taking the horizontal breadth at 8 inches, it will be 22.5 diameters long, and will resist 505 lbs. compression per square inch. Then $8 \times 7 \times 505 = 28,280$ lbs., a slight excess.

The top chord will, therefore, be 15 feet long, with a section 7 by 8 inches. It will contain 6 cubic feet and weigh 180 lbs. instead of 200 lbs., as assumed before determining its necessary dimensions.

The horizontal strain of 27,962.5 lbs. acts upon the whole length of the lower chord, and that of the 15,975 lbs. acts in addition thereto between the points f and g , consequently the whole tensile strain between f and g is 43,937.5 lbs.

To verify this result by another calculation, on the supposition that the whole weight (W) is applied at d .

Weight at d transferred to f	10,650 lbs.
Additional weight at c	7,991½ "

Total weight at c 18,641½ lbs.

Now suppose the weight, or its equivalent, to be transferred from c to d . Of this 10,650 lbs. is actually applied at that point. The 7,991½ lbs. at c produce the same effect as one-half that weight (3,995½ lbs.) at twice the distance from A , that is at d .

Therefore, the equivalent weight at d is—

$$10,650 + 3,995\frac{1}{2} = 14,645\frac{1}{2} \text{ lbs., and}$$

$$dh : ah :: W : \text{horizontal strain; or,}$$

$$1 : 3 :: 14,645\frac{1}{2} : 43,937\frac{1}{2} \text{ lbs.}$$

Having determined the strains resulting from an application of the maximum load to the middle point of the truss, it is proper to ascertain the effect of a change of position of the load. Suppose the driving wheels bear at g , and the truck 2.5 feet from h towards f . Then ⅓ of the weight of the truck may be considered as supported at f , and ⅔ of its weight at g .

The whole weight of the truck (20,000 lbs.) is supported one-half by each truss, and in this case, the stress at g is 3,333½ lbs.

The weight at e may be summed up as follows:

Weight of drivers.....	20,000 lbs.
Do. of truck	3,333½ "
Do. ⅔ of floor beams, track, etc....	1,500 "
Do. ⅓ of chord	225 "
Do. one and a-half ties	75 "
Do. ⅓ top chord	90 "

Total vertical pressure at e 25,223½ lbs.

The weight at c will be:—

Weight of truck	6,666½ lbs.
Do. ⅔ of floor beams, track, etc.	1,500 "
Do. ⅓ of chord	225 "
Do. one and a-half vertical ties	75 "
Do. ⅓ top chord	90 "
	8,556½ "

Difference..... 16,666½ lbs.

Of this difference three-fourths, or 12,500 lbs. are supported vertically at B and one-fourth at A . Then $12,500 + 8,556\frac{1}{2} = 21,056\frac{1}{2}$ lbs. will be the greatest vertical strain upon the top of the brace ce . The greatest horizontal strain 31,585 lbs., and the greatest oblique strain 37,902 lbs.

It will now be seen that the upper chord and the end braces, as at first calculated, are too small and must be increased something as follows:—

Top chord, $8 \times 8 \times 500 = 32,000$ lbs.

End brace, $6\frac{1}{2} \times 8 \times 700 = 37,800$ "

The greatest weight upon the end of the bottom chord at any time, will be about 24,000 lbs. Allowing 200 lbs. per square inch (⅔) as the limit of safety against a crushing tendency, the chord should have a bearing upon the abutment of 8 by 15 inches at least. To distribute the weight fairly upon the masonry, the chord should, perhaps, have a bearing of 30 inches on each abutment. This will give a length of 35 feet for the whole structure.

A schedule may now be prepared of the materials requisite to answer with precision the conditions of the case proposed.

BILL OF MATERIALS

For a railroad bridge, 30 feet clear span—15 feet in clear between trusses—of White Pine timber.

	Feet long.	Inches.	Cub. ft.	
2 chords	35	$8 \times 12 =$	46½	} 416 cubic feet, or 4,980 feet B. M.
2 "	15½	$8 \times 8 =$	13½	
4 braces	10½	$8 \times 7 =$	16½	
4 "	10½	$8 \times 5 =$	11½	
14 beams	16½	$7\frac{1}{2} \times 16 =$	199	
2 "	16½	$12 \times 20 =$	55	
2 track stringers	35	$8 \times 12 =$	46½	
2 wall plates	18	$6 \times 15 =$	22½	
2 "	8	$6 \times 15 =$	3½	
6 iron bolts, 6 ft. 8 in. head to collar, 1½ in diameter			300 lbs.	
Iron stirrups for braces, etc.			120 "	
Do. bolts for floor beams, stringers, etc.			240 "	

Total weight..... 660 lbs.
(To be continued.)

Journal of Insurance Law.

A remarkable case has recently been determined in the New York Court of Common Pleas, which will be of interest to our readers. The case was not indeed a suit by or against a railroad company. But the principles decided are directly applicable in any action which may be brought under the recent statutes of many of our States, to recover damages for death caused by a negligent or wrongful act. These actions are often brought against railroad companies.

The facts in the case of which we speak were as follows:

Action was brought by the representatives of one Warner, to recover damages under the statute of New York, for his death, as caused by the unlawful act or neglect of defendant. It appeared that on the day of Mr. Warner's death, the defendant, who was a householder in the city of New York, directed his servant, Michael Fagan, to clear the snow off of his (defendant's) house. Fagan procured another man named Cashan to help him, and the two commenced shoveling the snow from the roof, throwing it into the street. Some of the snow, or snow and ice, thus thrown, fell upon the head of Mr. Warner, as he was passing along on the sidewalk below, and killed him. It appeared that Cashan went about the work merely to oblige his friend Fagan; but it could not be ascertained which of the two men threw the identical shovel-ful which caused the death.

At the time of the accident, Mr. Warner's life was insured for the benefit of his wife, and she has since been paid the proceeds of the policy, \$2,400.

The defence made chiefly two points:—

1. That, if the jury should find for the plaintiff, they should take into consideration, in assessing damages, the money received from the Insurance Company.

2. That, as the defendant did not authorize Fagan to employ Cashan, he was not liable for the act or negligence of Cashan. The burden of proof was on plaintiffs to show that the death was caused by Fagan and not by Cashan, and if they were in doubt as to this, they must give the defendant the benefit of the doubt. And that the defendant could not be held liable even for the act or neglect of Fagan, his servant, unless he himself was privy to it, and directed, or knowingly assented to the particular mode adopted by his servant of removing the snow from the roof.

The court however held, BRADY J., delivering the opinion.

1. That the jury ought not, in assessing damages, to take into consideration the insurance money received by plaintiffs. *Maisen vs. Simsbury*, 3; *Dougl.* 61; *Clarke vs. Inhabitants of Blything* 2; *Bam & Co.* 254; *Yates vs. Blythe*, 4 *Bing.* N. C., 272. Without reference to these adjudications, there were principles from the relations of the parties, and the statute creating the right of action, in favor of the plaintiffs, which forbade the consideration of any benefit elsewhere received. Jane C. Warner was entitled to the whole benefit of the policy of insurance. It was for her benefit alone, and it was secured by the payment of a premium to which the defendant did not contribute. But the benefit growing out of the right of action, now sought to be enforced, were not given to her by the statute, but were given to the

widow and next of kin, and did not arise on any common law liability. They were therefore *res inter alios acta*. The case was very different from that which would be presented from injury to a chattel, and it rested upon a statute, the object of which was to punish the wrong doer, who, by his carelessness, destroyed life. There was no privity between him and the insurance company, and they could not repair the injuries caused by the defendant. They could not restore to the widow and next of kin to the deceased the society, advice, and protection which he could have afforded them, aside from the pecuniary losses incident to the deprivation which his death occasioned.

2. That the defendant was liable in damages whether the death of Warner was caused by the act of Fagan in throwing snow, or that of Cashan. Fagan was engaged in removing the snow from the defendant's house, and by his express direction, when Warner was killed. It was true that Fagan had asked Cashan to help him, but this did not change defendant's responsibility. (1 *Blackstone's Com.* 431.) The following cases illustrate the doctrine that, where the master has entrusted the servant with the performance of a service, it is no answer in an action brought to recover damages resulting from the manner in which the service is performed, that the servant acted improperly in the performance of it; the master must respond because he has put it in the power of the servant to do the injury. (*Bush vs. Steinman*, 1 *Bys. & P.*, 404; *Randleson vs. Murray*, 8 *Nd. & E.*, 109; *Stone vs. Cartwright*, 6 *T. R.*, 411; *Sloath vs. Wilson*, 9 *Carr. & P.*, 607; *Borth vs. Mista*, 7 *Carrs. & P.*, 66.) The defendant here did not part with the control of the work. Fagan was his coachman, and was directed to remove the snow. He was entrusted with the duty and the manner of doing it, no specific directions having been given. He sought the aid of another with whom he acted in concert, both being engaged at the same time and acting in the same manner in removing the snow. It was wholly immaterial whether the death of Mr. Warner was occasioned by either Fagan or Cashan. The employment and direction was general, and it was not necessary to show that the master was privy to the negligence of his servant, nor need the manner in which a service is performed, under a general direction, be assented to by the master, in order to charge him for injuries resulting from the manner adopted.

The court therefore affirmed the judgment in favor of plaintiff, appealed from.

Savannah, Albany and Gulf Railroad.

The City of Savannah has agreed to endorse the bonds of the Savannah, Albany and Gulf railroad to the amount of \$300,000 to enable that company to meet all its engagements promptly, and particularly to pay their subscription to the Main Trunk, of \$200,000; the bonds to run twenty years, and the interest to be paid by the road.

Farm Mortgage Bonds of the Wisconsin Railroads.

The *Chicago Press* learns from a source entitled to credence, that the Supreme Court of Wisconsin has agreed upon a decision declaring the Farm Mortgages and City and County Bonds issued to railroads in that State, to be unconstitutional and void. The non-resident bondholders, it is said, will immediately institute proceedings in the Circuit or Supreme Court of the United States to

test the validity of their securities; but as the U. S. Supreme Court has always been guided, in its construction of local laws, by that put on them by the State Courts, it is not probable that anything will be gained by carrying the suits to that tribunal.

Heavy Forgings.

During the past week the heavy double crank shaft, weighing 8,358 lbs., intended for the engines of the new sloop of war, *Iriquois*, now building at the Navy Yard, was delivered to the contractors, Messrs. James Murphy & Co. It was manufactured at the works of Lazell, Perkins & Co., Bridgewater, Mass.,—one of the largest and oldest establishments of the kind in the country. The shaft is composed of Swedish scrap iron, worked in open charcoal fires, and the grain of the iron is made to continue the whole length of the shaft, and over or around the throws, thus making it stronger and firmer than the usual scrap iron forgings. Messrs. Lazell, Perkins & Co., are constantly turning out heavy forgings for steamers and machinery; also cranks for locomotives, axles for cars, &c., which are pronounced by those who have used them, of the very best quality. Samples of their car axles, &c., may be seen at the Supply Establishment of Messrs. Low & Burgess, No. 55 Liberty st., who are their agents.

Forged Stamp of Lowmoor.

Last week, in the United States Court at Pittsburgh, Pa., the case of *Hird, Dawson and Hardy, vs. Graff, Bennett & Co.*, was tried. Stanton and Shaler for plaintiffs, Loomis and Shinn for defendants.

The plaintiffs are manufacturers of iron in England; the defendants are also manufacturers of iron, in Pittsburgh. The suit was based on the use of a trade mark, or stamp, "Lowmoor," claimed and used by the plaintiffs. The genuine "Lowmoor" iron is of very superior quality, and is chiefly used in this country by railroad companies. It was alleged by the plaintiffs that an inferior iron was made and disposed of by the defendants, bearing the "Lowmoor" stamp, to the great injury of the plaintiffs.

The papers offered in evidence by the plaintiffs were read by Mr. Stanton; they contained the affidavits and depositions of different members of the firm of Lake, Brown & Co., in Chicago—the correspondence relative to the iron branded "Lowmoor," and various bills of sale. The affidavits set forth that the iron had been made by order of Lake, Brown & Co., by Graff, Bennett & Co. It was different in appearance to the genuine "Lowmoor." It had been sold by Lake, Brown & Co. Several highly respectable witnesses testified to the superior merits of genuine "Lowmoor" iron.

The jury retired, and in half an hour returned with a verdict for plaintiffs in the sum of \$446 46.

Operations of the United States Mint.

The gold coinage of the United States Mint, in Philadelphia, for the month of April, was \$42,520, mostly in gold dollars. The silver coinage was \$12,500, being in dollar, half dollar and dime pieces. Of cents, \$29,000 were coined. The whole number of pieces coined were 3,308,539, of the aggregate value of \$200,020. The total gold deposits of the month were \$74,000, of which \$51,105 were from California, and \$23,095 from other sources. The silver deposited was \$100,015. Old cents deposited \$3,800.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending May 16, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6s.....83	
Covington and Lexington, 1st Mortgage..	6s.....	
Do, do, 2d do.	7s.....50	
Do, do, Income	10s.....	
Ohio & Miss., E. D., Construction	7s.....	
Cinc., Ham. and Dayton, 1st Mortgage	7s.....	
Do, do, 2d do.	7s.....85	
Indianap. & Cincinnati, do.	7s.....83	
STOCKS.		
Cincinnati, Hamilton & Dayton	60	
Columbus and Xenia	88	
Indianapolis & Cincinnati	88	
Little Miami	90	
Ohio and Mississippi (E. D.)	90	

Railroad Earnings.

The earnings of the North Pennsylvania Railroad Co. in April were\$28,762 51
 April, 1859 25,243 35

Increase.....\$3,519 16
 In five months ending April 30.....\$127,727 60
 Same time last year..... 110,846 88

Increase.....\$16,880 72

The earnings of the Chicago, Burlington and Quincy Railroad in April, 1859, were:

Freight\$47,667 65
 Passengers 30,701 18
 Mails and miscellaneous 1,618 33

Earnings per mile, \$499 92. Total...\$79,987 16
 Operating expenses estimated at..... 45,000 00

Net earnings.....\$34,987 16

BETWEEN CHICAGO AND BURLINGTON—210 MILES.

Freight\$54,252 38
 Passengers 36,544 70
 Mails and miscellaneous . 1,872 33—\$92,669 41

BETWEEN GALESBURG AND QUINCY—100 MILES.

Freight\$17,763 86
 Passengers 13,061 95
 Mails and miscellaneous.. 833 33—\$31,709 16

Being \$401 22 per mile, Total for
 310 miles\$124,378 57
 Earnings in April, 1858 131,348 97

Decrease in 1859.....\$6,970 40

The earnings of the Norwich and Worcester road in April were:

	1858.	1859.
Passengers	\$9,461 86	\$10,078 25
Freight, &c	15,365 27	17,160 63

Total\$24,827 13

Increase..... 2,411 75

The earnings of the Michigan Southern and Northern Indiana Railroad for April 1858 and 1859 (partly estimated,) were:

	1859.	1858.
Passengers	\$67,902 29	\$96,849 71
Freight.....	68,032 96	79,686 40
Mails.....	4,435 56	4,485 62
Express and miscella's.	4,141 65	25,483 77

Total\$144,512 46

Decrease..... 61,993 14

The receipts of the Michigan Central road for April were:

	1858.	1859.
Passengers	\$114,773 79	\$73,885 13
Freight.....	102,286 81	63,791 31
Miscellaneous	5,999 77	5,496 86

Total\$223,010 37

Decrease..... 79,867 07

The receipts of the Cleveland, Columbus and Cincinnati Railroad were—

April, 1859\$81,425 00
 April, 1858 93,872 31

Decrease.....\$12,447 31

The revenue of the Baltimore and Ohio Railroad for April was as follows:

MAIN STEM.
 Passengers\$56,097 24
 Express 3,770 00
 Mails 8,085 33
 Tonnage 241,419 24—\$310,371 81

WASHINGTON BRANCH.
 Passengers\$25,449 07
 Express 1,300 00
 Mails 1,000 00
 Tonnage 6,361 74— 34,110 81

SOUTH-WESTERN VIRGINIA.
 Passengers\$4,116 23
 Express 866 67
 Mails 866 67
 Tonnage..... 19,601 81— 24,584 71

Total\$369,067 33

Compared with the same month last year, the following result is shown:

	1858.	1859.	Decrease.
Main Stem..	\$411,546.56	\$310,371.81	\$101,174.78
N.W. Virginia	3,352.57	24,584.71	8,767.86
Wash. Br. .	38,659.29	34,110.84	4,548.48

Total...\$483,558.45 \$369,067.33 \$114,491.12

It will be seen that the revenue of the road has fallen off, as compared with April, 1858, in all its departments, the aggregate decrease being \$114,491 12. The heaviest decrease is in the tonnage on the Main Stem, which, in April, 1858, amounted to \$348,063 45, against \$254,274 47 for April, 1859. This has been caused partly by the small amount of freight now coming from the West, but mainly by the suicidal competition between the four great Atlantic lines, which has so greatly reduced the rates of transportation. Compared with the previous month of March, the revenue of the road shows a decrease of \$40,993 69.

The financial year of the company commenced with October. The receipts of the first seven months of the present year compare with those of the previous year as follows:

	1858-9.	1857-8.
October.....	\$392,503 02	\$396,191 85
November.....	383,159 22	361,443 38
December.....	336,861 01	379,259 02
January.....	327,176 63	317,513 73
February.....	321,391 10	277,044 49
March.....	410,061 21	439,061 02
April.....	369,067 33	483,558 45
	\$2,540,219 52	\$2,657,071 94

Dec. present year. \$116,852 42

The earnings of the Stonington Railroad Company were in—

April, 1859.....\$19,953 88
 " 1858..... 17,909 93

Increase.....\$2,043 95

The earnings of the Little Miami, Columbus and Xenia Railroad, for April, compare as follows:

April, 1859.....\$84,823 67
 April, 1858..... 91,804 61

Decrease.....\$6,980 94

The earnings of the Galena and Chicago Union Company for the month of April were:

	1858.	1859.	Decrease.
Freights...	\$85,575 27	\$51,459 87	\$34,115 40
Passengers.	51,557 41	34,881 56	16,675 85
Mails, etc...	4,200 87	3,700 00	500 87

Totals..\$141,333 55 \$90,041 43 \$51,292 12

Corrected earnings for the previous month, \$92,920 62.

The comparative earnings of the Pacific Railroad for the three months ending March 31, 1858 and 1859, were:

	Passengers.	Freight.	Mails.	Total.
1859.	\$76,427.37	77,486.28	6,112.50	160,026.15
1858.	58,860.32	54,122.77	3,906.26	116,889.35

Inc. \$17,567.05 23,363.51 2,206.24 \$43,136.80

Earnings per mile, 3 months, 1858, (125

miles to Jefferson City).....\$935 11

Earnings per mile, 3 months, 1859, (163

miles to Tipton) 981 75

Earnings South-west Branch Pacific Railroad—

19 miles—for three months ending March 31, 1859:

Passengers\$1,067 90

Freight 1,606 71

Total\$2,674 61

The receipts of the Cleveland and Toledo road were in—

April, 1858.....\$84,148

" 1859..... 62,050

Decrease.....\$22,098

The receipts of the Grand Trunk Railway of Canada for the week ending April 30,

were.....\$46,222 87

Week ending May 1, 1858 46,424 74

Decrease.....\$201 87

Total traffic from July 1st.....\$1,907,162 41

Same period last year 1,994,397 62

Decrease.....\$87,235 21

The earnings of the Central Railroad Company of New Jersey for the month of April were—

1859\$81,824 95

1858 70,907 77

Increase (15 per cent.).....\$10,917 18

The following is a statement of the Ohio and Mississippi railroad earnings for April:

	1859.	1858.
Passengers	\$74,626 72	\$75,615 80
Freights	48,059 86	48,534 24
Express	3,315 00	3,315 00
Mail	6,633 33	5,150 00

Totals.....\$132,634 91

Increase.....\$19 87

1859.....\$132,615 04

1858..... 132,615 04

1859.....\$132,634 91

1858..... 132,615 04

1859.....\$132,634 91

1858..... 132,615 04

1859.....\$132,634 91

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1859.....\$132,634 91

1858..... 132,615 04

1859.....\$132,634 91

1858..... 132,615 04

market. They are in request at improving prices, and as provision has been made for their ultimate liquidation by a sinking fund, they are actually worth, for investment, their par value. Bondholders and owners of preferred stock will do well to hold on to their investments.—*Boston Journal*.

American Railroad Journal.

Saturday, May 31, 1859.

Railroad Summary for the Week.

Railroad Competition.—Several attempts have been made within a few days past to effect some arrangements whereby to put an end to the present competition between our leading railroads, all of which have fallen through from the fact that they contemplated a restoration of relations similar to those against which the New York Central rebelled. Such arrangements, we presume, the Central Company do not propose to renew.

The greatest sufferer in this unhappy controversy appears to be the *Erie*. In a contest like the present it has less strength than any of its antagonists, and consequently goes first to the wall. If the present competition continues during the season, the Erie will make a poor show at the close of the year. Its net receipts for the past year were a little over \$1,000,000. Its receipts this year will probably be less by more than a million than those of 1858. If so, net receipts will not be much better than *nil*. In the meantime, we see no evidence of any change in the policy or management of the company, which, outside the Board of Directors, has not a sincere defender or apologist, we presume, in the United States. Wisdom in these days is confined within a very small circle.

New York and New Haven.—The annual meeting of this Company was held on the 12th inst. The old Board of officers were elected, viz.:—Justus R. Bulkley, George N. Miller, Abraham R. Van Nest, George B. Carhart, Dennis Kimberly, John Bradley, John W. Leeds, Jonathan Godfrey, and Erastus C. Scranton.

The receipts of the past year were as follows:

From passengers.....	\$624,795 43
From freight.....	157,949 77
From mails, expresses, &c.....	45,946 75
Total.....	\$828,691 95
Total expenses.....	512,859 33

Net earnings of the road.....	\$315,832 62
Receipts from other sources.....	35,156 62
	\$351,832 62

This amount has been applied as follows:

Paid on second track extension, &c., balance.....	\$5,181 81
Paid loss in operating the canal road.....	32,500 00
" interest coupons on bonds.....	142,600 00
" dividend of 3 per cent.....	90,000 00
By reduction of accounts payable on April 1, 1858, viz.: coupons, balances due other roads, &c.....	50,372 13
Cash remaining on hand April 1, 1859.....	31,435 69
	\$351,000 54

There was a warm discussion upon the subject of *dead-heads*—the officers being accused of granting such favors, which was emphatically denied. The general unproductiveness of the road was not alluded to. Gnats were strained at, and camels swallowed. Out of gross earnings at the rate of 18½ per cent., the stock and bondholders have

been able to realize only about 4½ per cent.; 14 of the 18 per cent. going to expenses—a result not equalled by any railroad in the United States having as good a route and traffic. Yet the discontent of the stockholders finds a sufficient vent in a smart discussion upon the subject of *dead-heads*.

N. Y. and Harlem.—The election of Directors of the Harlem Railroad took place Wednesday last, the old Board being elected without opposition, viz.:—Allan Campbell, Wm. C. Wetmore, Cornelius Vanderbilt, Daniel Drew, Francis W. Edmonds, Chas. W. Sanford, Horace F. Clark, John Alstyne, Horace Brooks, Albert Smith, Albert J. Akin, John Harper, and A. B. Baylis.

This road appears to be doing remarkably well, steadily increasing its receipts, and economizing in its expenditures. What is marvelous in this result is, the fact that the Company have a list of *dead-heads*, on which are some editors. The Erie never indulges in such follies. Everybody riding on that road pays.

Pittsburg, Fort Wayne and Chicago Railroad.

—We give in another column the report of this company for the past year. We give it the credit of presenting to the public a model report. Everything in reference to its operations is fully and lucidly stated. Such statements imply a good degree of information upon the subject to which they relate. Many of our leading companies say nothing, because their officers know little or nothing about the roads of which they have charge; or because they do not chose to tell us what they do know.

The War News.—It is certainly an anomaly that the prospect of a general war in Europe should be regarded as favorable to the interests of a great commercial nation like the United States. It proves how separated we are from Continental politics. Already the price of *wheat* is higher by twice the cost of carriage from Chicago to New York. Such an advance is exactly the stimulus wanted to give life to the leading railroads of the country—an active demand for our agricultural products, which seem to be in prospect for a year at least. Our ships will reap their share of the general advantage. Cotton is effected injuriously, but the crop is so far gone forward that little loss will be suffered by our people by the fall.

Morris and Essex Railroad.—At the meeting of the stockholders of the Morris and Essex Railroad, held at Newark on the 17th inst., it was resolved that the Hudson River terminus of the extended road shall be at Hoboken, and that the cost of the extension shall be defrayed by a stock distinct from that of the present issue.

Railroad Earnings continue light. The Erie we understand falls off \$180,000 from April of last year. The earnings of the Galena and Chicago for the week ending May 8th, were \$24,098, against \$41,416 for April 1858; those of the Michigan Southern, for the two weeks in May, were \$60,912, against \$71,252 for a corresponding period the past year. The earnings of the Baltimore and Ohio for April were \$369,077, against \$485,896 for 1858. The earnings of the Michigan Central, for the first week in May, were \$28,646, against \$46,256. Those of the Pittsburg, Fort Wayne and Chicago were \$20,125 for the week ending May 14th.

The exports of specie from Jan. 1st to the 14th inst. were \$23,552,203. The comparative exports for the years past is as follows:

1857.	1858.	1859.
\$27,932,080	\$22,116,636	\$23,552,203

The prices for the week of the leading securities in the market have been as follows:

	May 13.	14.	16.	17.	18.
Missouri 6s.....	83½	84½	84½	84½	83½
Del. and Hud.....	95	96	96½	..	94
Pacific Mail.....	85	82½	80½	83½	85
N. Y. Central.....	75½	73½	72½	72½	72½
Hudson River.....	31½	31½	31½	..	31½
Panama.....	118½	118½	117½	118	117
Harlem Pref.....	36	37	36½	36½	..
Reading.....	46½	47	45½	45½	45½
Michigan Southern.....	9	10	9½	10	..
" Pref.....	30½	32½	31½	32½	31½
" Central.....	41	42½	41½	42½	42
Ill. Central shares.....	..	57	..	57	55
" 7s.....	81	81½	80½	79½	80
Gal. and Chicago.....	61½	63½	62½	44½	64
Cleve. and Toledo.....	26½	26½	..	27	27
Chi. and Rock Island.....	60	62	..	63	62
Tennessee 6s.....	91½	91	91½	91	91
Virginia 6s.....	94½	95	94½	95	94½

The Currency.—Report of Messrs. Opdyke, Gallatin and Others.

We have read with attention, and have tried hard, but we fear in vain, to penetrate the meaning of many portions of the recent report submitted by George Opdyke, James Gallatin and other gentlemen, upon "the present degree of bank expansion," submitted to a meeting of the New York Board of Currency held in this city on the 16th instant. As everything that receives the sanction of this body, commands a certain degree of respect and influence, and as the parties signing the report are oracles, in their way, self-constituted, very probably, on the subject of banking and currency, we propose to examine their arguments and to challenge some of the conclusions, which they, with so much confidence, claim to have established.

In the first place, not to follow the report in consecutive order, what is money?—meaning thereby not gold and silver, but bank bills, checks, and certificates of deposit. This question may be better answered, by stating the conditions or process, by which it arises or is created. A. B., the owner of a hundred barrels of flour, sells them to B. C., taking his note for their value, due in six months. A. B. takes this note to a *Bank*, which discounts it, or in other words, exchanges its own due bills for it; or gives him credit on its books for its value, less the rate of discount; or gives him a certificate that such a sum is subject to his order. The Bank thus substitutes its own credit for that of the purchaser of the flour, which the seller, in any of the forms supposed, uses as *money*. We will not here go one step further back to show why these credits of the Bank may be safely treated as money, in its strictest senses; i. e. as gold and silver, but only remark that they possess exactly the same value as gold and silver, as they represent an absolute value, to be replaced by an equivalent according to the terms of the note.

Now assuming that all transactions of the kind supposed are discounted at Banks, then the amount of Bank credits, or currency, or money, is always in direct ratio to the number of transfers of property that take place; or what comes to the same thing, the amount of property or fabrics produced. But all transfers of property are not upon credit, nor are all the credits given discounted at

Bank; but the amount of credits discounted has, probably, a very near ratio to the whole number of transfers that take place—which amounts to the same thing for this discussion, as if every transfer of property was followed by a discount at Bank.

The volume of currency, therefore, should have, and in fact, has a constant tendency to be in ratio to the value of fabrics created and sold. The abundance of one should keep pace with that of the other. The committee in their report adopt the arbitrary standard of population; as the proper measure of the amount of Bank credits, though by doing so they very soon find themselves in a dilemma from which they can only extricate themselves by the utterance of most absurd dogmas. Let us listen to these oracles—

"But it may be asked, why compare currency with population with the view of ascertaining its natural volume or normal condition? Why not compare it with commerce, whose instrument it is? The answer is obvious. Commerce in its largest sense—in the sense in which money is its instrument—includes every purchase and sale of all kinds of property. Taken in this sense, we have no statistics of commerce sufficiently comprehensive to serve the purpose of a comparison. Any attempt of this kind would be barren of useful results. But the results obtained by the comparison instituted in the foregoing table are believed to be perfectly reliable. *Commerce and population maintain uniform relations to each other; the growth of the one keeps pace with the progress of the other.* This is especially true of a country like the United States, where cheap and fertile land makes agriculture the leading interest, and where there is perfect exemption from every foreign influence calculated to change the habits and employment of the people. Our commerce, it is true, is alternately stimulated and depressed by bank expansions and contractions, but, if measured at its mean, its progress is believed to keep even pace with the march of population, and as commerce and money must necessarily maintain a uniform ratio, it follows that population and money must do the same, provided we take the average volume of money for a long period like that embraced in the table."

Let us see. In 1837, according to the table referred to, the deposits and circulation of all the Banks in the United States equalled \$276,583,076; the estimated population 15,663,597, which would give a ratio of \$17.61 of circulation and deposits for each individual. This ratio was largely reduced in subsequent years. In 1857, it had reached its highest ratio since 1837, viz, \$15.51. In reference to these fluctuations and the lessons they teach, we quote the following:

"In 1837, when the banks reached their highest degree of expansion, the ratio of money to population, was 17.61; in 1843 it was reduced to 6.14; which is little more than $\frac{1}{3}$ the ratio of 1837. In 1857 it had again increased to 15.51 and on the 1st January last, after having sunk the year previous to 11.55, it stood at 11.91, which is 25 per cent. above the average for the 26 years embraced in the table.

This feature of the table is also valuable as indicating the normal condition or natural volume of the currency. It appears that the mean quantity of currency furnished by the Banks of the U. States for the 26 years embraced in the table was \$11 92 to 1 of population. To this must be added the amount of coin in actual circulation, which is generally estimated to average about \$3 to each inhabitant, making, together, \$14 92, or, say, \$15 to 1 of population. *This, therefore, must be regarded as the quantity of money or currency that the commerce of this country requires;* for money is an instrument of commerce. Its office is to measure the value of other things and transfer

their ownership. *Commerce requires a specific quantity of money for this purpose. It requires an amount that will make the price of commodities correspond with their value.*

This point, (that is the requisite amount of money per head,) it is believed, has not hitherto been ascertained; but the above table shows it to be, for this country at least, about \$15 of currency to 1 of population."

Population, then is the only safe measure of the currency made up of bills in circulation and deposits. But, say our oracles, *commerce and money must maintain a uniform ratio.* Let us see where these two propositions which are unqualifiedly asserted, leave them.

In 1837, the internal commerce of the State of New York was carried on almost exclusively through its canals. Their total tonnage that year was 1,171,296. The value of this tonnage, \$55,809,288. The population of the State that year was, 2,200,000. In 1858, the tonnage of the canals had reached 3,665,192. Its value was, \$133,563,844. In the meantime the railroads of the State had been constructed. In 1858, the tonnage of these roads was 3,473,325, made up as follows:—

	Tons.
Products of the forest	303,236
Products of animals	734,995
Vegetable food	914,206
Other agricultural products	77,174
Manufactures	325,596
Merchandise	562,378
Other articles	556,140
Total tonnage.....	3,473,725

The value of this freight is estimated for us by one of the most experienced and competent forwarders in the State, as follows:—

	Value per ton.	Total.
Products of the forest	\$12	\$3,638,832
Do. animals	200	147,999,000
Vegetable food	50	45,710,300
Other agricultural products	12	924,888
Merchandise and manufactures..	500	443,987,000
Other articles	5	2,780,700
Add value of canal freights ....	..	138,568,844

Total.....\$783,609,564

This statement shows an increase in the internal trade of New York, from 1837 to 1858, a period of 21 years, of from \$55,809,288, to 783,609,564, which is at the rate of 1,500 per cent.! In the same period the population has increased from 2,200,000 to 3,676,000, or at the rate of 67 per cent. These are easily obtained and reliable data. It will not do to say that New York represents all the States, whose trade should be cited in illustration, instead of that of one State,—as the trade of New York has increased in less ratio than that for the whole country. In 1837, the tonnage coming to tide-water from the Western States, was 56,255 tons. In 1858, 1,273,099 tons, an increase of 2,000 per cent.! What then becomes of the dogma so confidently laid down by our oracles, that commerce and population always maintain uniform relations, and that, consequently, *money*, the representative of commerce, and population must do the same?

The commerce of a country must always be in ratio to its products. To create the present commerce of England, steam engines have been put to work, doing the labor of 300,000,000 men. Commerce there is not in ratio to population, but in ratio to the agencies that assist man in his

labors. With the steam engine, the productive capacity of a people may be increased twenty fold. The productive capacity of the people of the United States has been increased since 1837, more than five fold, by the means that science and invention have brought to their aid. In the meantime, our population has not doubled. For the committee to assert that commerce and population proceed in a similar ratio, is an absurdity which a school boy would be ashamed to utter. The commonest acquaintance with the progress of invention in labor saving machines, would teach one better. Were there no sufficient means in reach of the committee to show what the facts adduced by us prove, there might be some excuse. As it is, they are driven to a most absurd dogma, from an ignorance of the commonest principles of political science; and, in fact, from the want of the commonest reading and observation.

Another dogma of this committee is the following:

It is supposed by many that the large substitution of bank notes and inscriptions of credit for metallic money in this country, has permanently increased the volume of our currency. This opinion is believed to be erroneous. The engraving of a paper money on a metallic base expands the currency for a season, and sometimes enormously, as the table proves; but, so long as it is redeemable in coin, it must meet the competition of metallic currency in other nations with which we trade, as otherwise it would lose the whole of its metallic base; and this can only be done by periodical reactions, which contract the currency as much below its mean volume as it had, in the first instance, been carried above it. It will be seen, by consulting the table, that for the 26 years embraced in it, the currency was below its mean 13 years, and above it for the same period.

This dogma is very easily disposed of. Suppose our currency to be entirely a metallic one. Assuming the same number of transactions as with a currency made of *credits*, then the country must invest some \$450,000,000 in gold and silver, to supply the place of bank credits; or, in other words, we must convert an equal amount of *productive* into *unproductive* property, (for gold and silver, as coin, are unproductive.) The available means of the country would be reduced in an equal degree. As our wealth is reduced, so the transfers of property are reduced in number or amount. By using a symbol instead of the substance, we are enabled to effect the greater part of the transfers of society without the interposition of actual values, which remain employed, or are exchanged for articles which, united with labor, are capable of reproduction.

Another erroneous notion put forth by the committee is, that a currency of credit is based upon *specie*. So far from this being the case, the two are entirely dissimilar. Were the various productive interests in the country in entire harmony, then no specie would be required in trade, save for *change*. Each person would contribute to, just as much as he took from, the general stock of merchandise. His contributions would be his title to receive a corresponding amount or value from the contributions of others. This is just the manner in which distribution between producers and consumers is now effected. Gold is a necessary agent when the purchaser has nothing else to offer. In the settlements made between the banks, the strongest may not by any means, be the one that has the largest amount of gold in its

vaults, but the one which has the largest amount of credits against other parties, representing articles of consumption produced and sold. If a bank or person has anything else to pay with, gold is not wanted—except, to be sure, in such cases where credits are for the time annihilated, and society for the moment lapses into an elemental condition. But we so recently elaborated this branch of the subject, that we forego further discussion of it at the present time.

We shall return to this subject in our next number.

Chicago, Burlington and Quincy Railroad.

The road of this company commences 30 miles west of Chicago, at its junction with the Galena road, and extends 138 miles to Galesburg, where it connects with the Quincy and Chicago Railroad for Quincy, and with the Peoria and Oquawka Railroad for Burlington and Oquawka. In addition to earnings upon its own road, the company receives 73 per cent. of the earnings upon 30 miles between Chicago and the junction, and in computing the earnings per mile 22 miles should be added, making the length of the road 160 miles.

Pittsburg, Ft. Wayne and Chicago R. R.

The annual meeting of this Company was held in Pittsburg on the 29th of March last, at which the second annual report of the directors for the fiscal year ending December 31, 1858, was submitted, together with the general statement from the Auditor, showing the pecuniary affairs of the Company at that date. The following is an abstract:

EARNINGS FOR 1858.			
Freight.	Passengers.	Mails.	Total.
Jan..39,894.74	\$48,747.79	\$4,482.29	\$93,124.82
Feb..47,170.03	40,542.64	4,482.29	92,194.96
Mar..69,317.08	71,239.51	4,482.29	145,038.88
Apr..58,987.57	69,606.31	4,482.29	133,076.17
May..43,108.89	61,739.18	4,482.29	109,330.36
June 39,216.91	58,634.21	4,482.29	102,333.41
July..48,786.76	48,385.55	4,482.29	101,654.60
Aug..76,540.15	61,904.55	4,482.29	142,926.99
Sept..81,597.30	81,392.38	4,482.29	167,471.97
Oct..76,724.55	78,664.71	4,482.29	159,871.55
Nov..58,453.59	62,853.26	4,482.29	125,789.14
Dec..58,772.21	58,740.75	4,482.29	121,995.25

\$698,669.78 742,450.84 53,787.48 1,494,808.10
Rent of road, rents and miscellaneous 72,424.12

Total earnings.....\$1,567,232.22

EXPENSES.	
Repairs of machinery ...	\$193,903 33
Repairs of track and road-way.....	254,614 36
Repairs of bridges	22,152 22
Repairs of buildings.....	10,431 73
Station expenses.....	103,873 95
Fuel	91,814 06
Oil and waste.....	19,390 68
Train hands.....	140,966 36
Loss and damage.....	14,696 22
General superintendence.	41,075 21
Miscellaneous	72,655 48

965,573 60

Net earnings.....\$601,658 62
Interest on bonds issued..\$563,868 75
" floating debt. 84,676 40
Taxes for 1858

Discount, commiss'ns, etc 13,332 90

Deficiency of net earnings to pay interest, etc., in 1858

Do. in 1857.....\$4,751 69

Total deficiency Dec. 31, 1858...\$138,689 95

The allowance of one year's interest at 6 per

cent. to the shareholders, July 1, 1857, which was a charge to the net earnings for the first 17 months of the existence of this Company, and an increase of capital, being in excess of such net earnings, is the cause of the apparent deficiency to Dec. 31, 1857; that for 1858 seems to be the result in part of the diminished earnings, and the large amount paid as interest and discounts on the floating debt.

Compared with the previous year, the expenses show a decrease of.....\$103,117 73
The gross earnings a decrease of 93,192 67

And the net earnings an increase of.. \$9,925 06

The earnings from freight and miscellaneous items exceeded those of 1857 by \$45,330 23; while the decrease in passenger earnings was \$138,572 90.

The full paid shares of capital stock of the Company has been increased during the year \$39,400; and the scrip stock decreased \$9,204 09. The former is the result of the conversion of \$10,000 of scrip into full paid shares, and the allowance of interest on shares in the Ohio and Pennsylvania Railroad Company, held by Stark and Richland counties, O., to July 1, 1856, together with 20 per cent. premium on the same, and interest to July 1, 1857, amounting to \$11,750. The balance was issued to sundry parties in payment of labor done in construction, etc.

The bonded indebtedness of the Company has also been increased as follows:

Mortgage construction bonds.....	\$714,000
Real estate bonds	211,500
Bridge bonds of O. & P. R. R. Co.....	126,500
Sinking fund bonds issued to fund coupons due and maturing to April 1, 1859	576,765

\$1,658,765

In the negotiation of these bonds, the Company has paid \$115,877 64 as discounts; of which \$29,850 was on \$126,500 of the bridge bonds of the Ohio and Pennsylvania Railroad Company, being at the rate of 23½ per cent; \$55,089 24 on \$314,000 of the mortgage construction bonds of this Company, being at the rate of 17½ per cent.; and \$30,938 40 on \$166,500 of the real estate bonds of this Company, being at the rate of 24 per cent. Of the 1st mortgage construction bonds, \$400,000 were delivered to the Chief Engineer, together with \$75,000 of the real estate bonds, to be used in the extension of the road from Plymouth to Chicago.

Of the sinking fund bonds, amounting to \$716,415, there have been issued \$576,765—leaving still to be issued \$139,650. These bonds were created for the purpose of funding certain coupons of the bonds of the old companies, maturing during the past and part of the present year. The whole issue will fall due as follows: Jan. 1, 1863, \$314,475; Feb. 1, 1863, \$105,000; and April 1, 1863, \$269,940—including \$50,610 arranged to be issued for coupons of the Ft. W. & C. R. R. Co. Real Estate bonds.

Of the coupons of the bonds of the old companies, there have been \$3,150 converted into mortgage construction bonds, the parties preferring this course to that of taking the sinking fund bonds and converting them into the mortgage construction bonds, which the holders were entitled to do at 84 per cent.

Of the coupons of the Ft. W. & C. R. R. Co.

real estate bonds falling due April 1, and Oct. 1, 1858, and April 1, 1859, arrangements for the funding of which had been consummated, the company were obliged to pay in cash \$1,680, in consequence of one of the holders dissenting from the agreement made with the others.

The amount outstanding of the acceptances and notes of the company was \$972,287 12. Of this amount, \$356,218 78 was over due at the close of the year; \$427,114 43 mature during the year 1859; and the balance between Jan. 1, 1860, and Feb. 1, 1864. It will therefore be seen that the amount to be protected during the year, by payments or renewals, is \$783,333 31; if to this be added the notes of the old companies overdue, the warrants payable, matured, or maturing in 1859, unpaid construction and transportation accounts and other accounts payable, and coupons overdue, as given in the annexed statement, the result will show the sum of \$1,286,858 26 as the floating debt for which provision must be made during the present year.

The floating debt, which amounted in 1857 to \$1,951,875 14, has been reduced during the past year to \$1,657,594 46. In the above reduction of indebtedness is included \$21,150 60 of the obligations of the old companies, in the retirement of which \$18,576 50 was paid in cash, \$539 33 was funded, and the balance, \$2,034 78 was renewed by the issue of acceptances, and is included in the amount of their outstanding indebtedness.

The net decrease is as follows:

Bills payable of old companies.....	\$21,150 61
" " this company	399,704 87
Outstanding transportation accounts...	61,703 26
Coupons due.....	46,743 50
	\$529,301 74

Less increase of—

Warrants payable.....	\$66,025 23
Construction accounts.....	79,997 56
Other accounts payable.....	88,998 27
	235,021 06

Net decrease in floating debt....\$294,280 68

In the first report of the consolidated company for the 17 months ending Dec. 31, 1857, a statement was published showing the debts and assets, exclusive of the bonds and land, of the three several companies as far as ascertained. The increase in the construction accounts of these companies, since that date, amounting to \$44,028.51, consists of claims against those companies, assumed and paid by this company, of which no account was had prior to, but were part of their liabilities at the time of, the consolidation.

The net decrease in the notes and acceptances of this company is as follows:

Total amount retired.....	\$1,520,572 09
Of which were renewed.....	1,070,165 87
Leaving actually retired	\$550,406 22
Total amount issued..	\$1,220,867 72
Renewals as above....	1,070,165 87
	150,701 85

Net decrease

The increase in warrants outstanding is as follows:

Amount issued during the year.....	\$77,857 83
Less retired by cash payments, bonds, etc.	11,832 60

Net increase.....\$66,025.23

The increase in the construction accounts outstanding is as follows:

Vouchers audited and recorded.....	\$489,784 10
Less amount paid in cash.....	\$104,541 17
Construction bonds.....	31,700 55
Real Estate.....	118,625 00
Bridge.....	3,814 44
Acceptances.....	35,175 48
Stock.....	13,864 65
Transferred to sundry acts.....	61,475 48
Freight on iron credited to earnings, etc.....	40,539 47
	409,736 54

Net increase..... \$79,997 56

The decrease in transportation accounts may be stated as follows:

Vouchers audited and recorded.....	\$1,017,833 32
Less paid in cash.....	\$933,632 48
Construction bonds.....	43,441 70
Acceptances.....	23,670 30
Warrants etc.....	78,792 10
	1,079,536 58

Net increase..... \$61,703 26

The increase in "other accounts payable" is stated at \$88,998 27.

The unpaid coupons due to Dec. 1, 1858, which were payable in cash, have decreased during the year \$16,743 50.

The increase in construction expenditures was \$496,954 64. The whole amount of such expenditures from Aug. 1, 1856, the date of the consolidation, to Dec. 31, 1858, was \$2,152,464 13, as follows:

	Eastern Division.	Western Division.
Office expenses.....	\$2,115 53	\$2,165 19
Engineering.....	9,169 82	26,419 17
Land, etc.....	225,208 28	57,702 34
Grading.....	99,199 67	473,081 01
Superstructure.....	36,695 31	164,101 65
Iron.....	20,076 28	209,291 84
Fences, etc.....	2,663 70	1,394 57
Ballasting.....	5,514 44	149,247 54
Machine shops.....	9,832 85	42,139 03
Machinery in do.....	7,606 20	15,873 98
Fr'ght and pass. sta'ns	18,918 50	13,841 15
Wood and water do.....	19,885 01	19,741 36
Locomotives.....	257,891 63	3,046 28
Cars.....	204,011 34	1,355 48
Alleghany Bridge.....	84,504 60	
Contingencies.....	2,562 75	14,687 63
	\$975,355 91	\$1,187,108 22

The materials on hand have been reduced from \$125,210 31, in 1857, to \$97,705 42—being a difference of \$27,504 89, consequent upon a closer management enforced in the purchase and use of such materials. The bills and accounts receivable have been reduced \$38,314 89; the uncollected revenue at stations \$29,589 98; and the cash in transitu from agents \$15,371 41. This amount is deemed as low as can be practically attained.

The assets in the hands of the Chief Engineer and other general agents are to be expended as follows:

For the completion of the road.....	\$649,356 63
Int. and sinking fund of bridge bds.....	3,549 02
Payment of taxes in 1858.....	12,735 00
Sundries.....	2,428 87
	\$668,059 52

The balance due from the late treasurer has been reduced from \$77,141 93, by the payment to this company by the assignees of this estate of \$7,560, to \$69,581 93. Of this amount it is estimated that about 20 per cent. more may be collected.

GENERAL FINANCIAL STATEMENT.

	Dr.
Capital stock.....	\$6,260,555 16
Bonded indebtedness, viz.:	
1st mort. O. & P. R. R., due July 1, '65	1,000,000 00
2d " " " " Jan. 1, '66	750,000 00
Income " " " " Ap'l 1, '73	1,991,000 00
Bridge " " " " May 1, '76	199,500 00
1st mort. O. & I. " " Feb. 1, '72	1,000,000 00
2d " " " " Oct. 1, '73	380,000 00
3d " " " " Sep. 1, '64	17,000 00
1st " Ft. W. & C. " " July 1, '73	1,250,000 00
Real estate " " " " Dec. 1, '66	498,000 00
Mort. construction; " " Jan. 1, '87	1,097,000 00
Real estate " " " " Dec. 1, '66	270,500 00
Sinking fund " " Jan. 1, '63	274,050 00
" " " " Feb. 1, '63	91,245 00
" " " " Ap'l 1, '63	211,470 00
Floating debt, viz.:	
Bills payable O. & P. R. R. Co.....	5,753 92
" " O. & I. " " " " " " " " " " " "	19,241 58
" " Ft. W. & C. " " " " " " " " " " " "	10,013 84
" " P. Ft. W. & C. " " " " " " " " " " " "	972,287 12
Construction accounts payable.....	153,213 00
Transportation " " " " " " " " " " " "	227,884 90
Other " " " " " " " " " " " "	189,281 98
Coupons part due.....	9,341 50
Warrants payable.....	70,576 62
Coupons due on and after Jan. 1, 1858, to be funded.....	94,080 00
Due C. & P. R. R. Co. for rent of road to Jan. 25, 1859.....	4,258 06
	\$17,016,252 68

Cost of road, Aug. 1, 1856:	
Ohio and Pennsylvania.....	\$6,079,971 23
Ohio and Indiana.....	3,285,057 99
Ft. Wayne and Chicago.....	1,757,515 46
	\$11,072,544 68

Total.....	\$11,072,544 68
Balance of account, Aug. 1, 1856:	
With Ohio and Penn. Co.....	165,422 97
" " Ind. " " " " " " " " " " " "	222,761 49
" " Ft. Wayne and Chicago.....	107,483 72

Total cost, Aug. 1, 1856.....	11,567,212 86
Expenditures since:	
On Eastern division.....	\$975,355 91
" " Western " " " " " " " " " " " "	1,187,108 22
Discount on bonds:	
Pennsylvania R. R. Co.'s.....	2,975 00
Bridge bonds of do.....	32,240 00
Ft. W. and C. 1st mort.....	169,080 01
P. Ft. W. and C. mort. con.....	125,187 71
" " real estate.....	45,813 40

Premium on stock:	
Of Ohio and Penn Co.....	530,813 75
Of Ft. W. and C. Co.....	71,468 99

Total.....	\$14,707,255 85
Less proceeds of sale of locomotive engine, and depot grounds in Chic.	76,145 70

Total cost of road.....	\$14,631,110 15
Real Estate.....	971,604 89
Stocks and b'ds of other companies	91,100 00
Cash at N. Y. office.....	22,279 58
Materials on hand.....	97,705 42
Cash and cash items.....	103,073 90
Assets in hands of Chief Eng. and other general agents.....	668,059 52
Sundry accounts receivable, bad and doubtful.....	112,107 77
Coupons due Jan. 1, 1859, funded in advance.....	193,165 00
Do. paid in advance.....	17,356 50
Bal. of income account.....	138,689 95
	\$17,046,252 68

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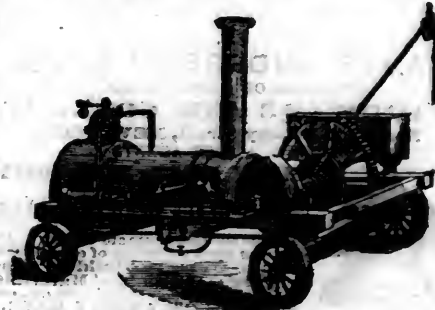
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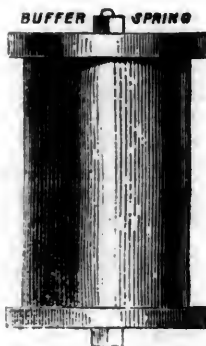
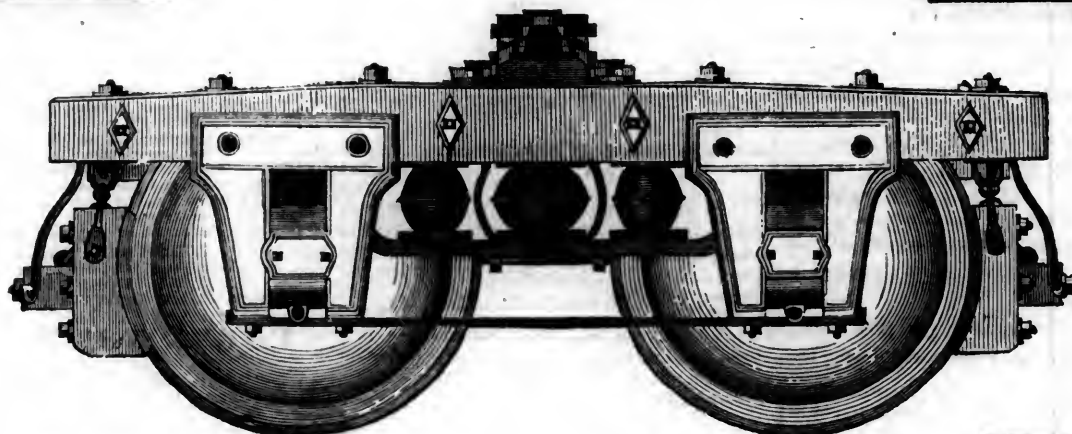
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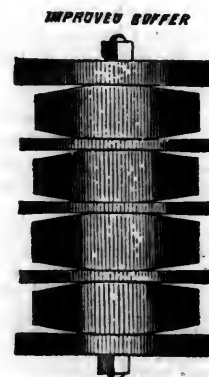
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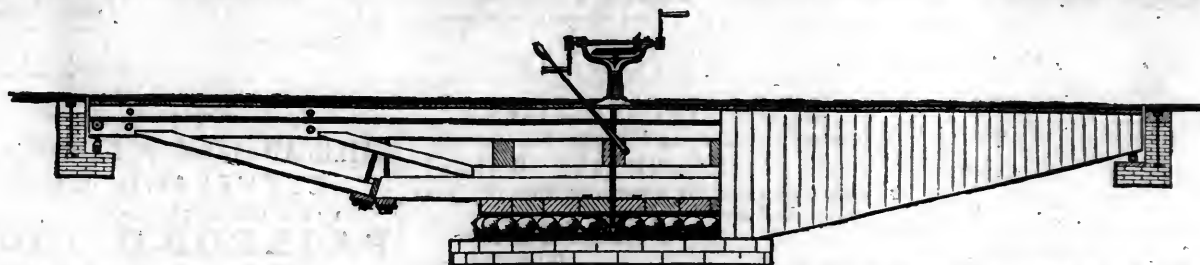
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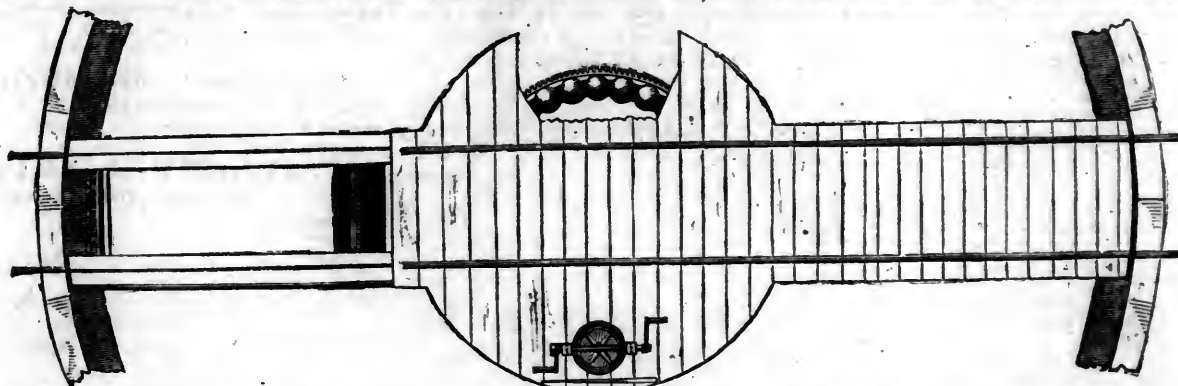
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RAILROAD IRON AND COMMON BARS.

THE UNDERSIGNED,
 Sole Agents to Messrs. GUEST & CO.,
 The Proprietors of the Dowlais Iron Works,
 Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAXIN, 70 Broad st.

STEEL, FILES, &c.

R. GROVES & SONS,
SHEFFIELD, ENGLAND,

MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.

A stock of the above goods constantly on hand.



CHAS. CONGREVE & SON, Agents,
 13 Cliff street, N. Y.

RAILROAD IRON.

The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER Free on Board at Shipping Ports in England, or at Ports of Discharge in the United States, RAILS OF SUPERIOR QUALITY, And of Weight or Pattern as may be required.
VOSE, LIVINGSTON & CO.,
 New York, Aug. 1, 1855. 9 South William Street.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
 54 Exchange Place,
 NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

RAILROAD IRON.

The undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES, ARE PREPARED TO CONTRACT FOR DELIVERY On board ship at Liverpool, or Welsh port.
C. CONGREVE & SON,
 13 Old St., N. Y.

RAILROAD IRON. CONTRACTS FOR RAILS,

AT A FIXED PRICE OR ON COMMISSION, DELIVERED AT AN ENGLISH PORT, Or at a Port in United States, WILL BE MADE BY THE UNDERSIGNED, **THEODORE DEHON,** 10 Wall st., near Broadway, New York.
 300 tons T rails on hand 54 to 57 lbs. per linear yard.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.
NORRIS & BROTHER,
 6m35 And 17 Nassau st., NEW YORK.

IRON BOILER FLUES.

Lap-Welded Boiler Flues, 1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.
 Wrought Iron Welded Tubes, From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

Warehouse—209 South Third st.,
PHILADELPHIA.

STEPHEN MORRIS, CHAS. WHEELER, JR.,
 THOS. T. TASKER, JR. STEPHEN P. M. TASKER.

RAILROAD IRON.

The Subscribers, Agents for the Manufacturers, ARE PREPARED TO CONTRACT FOR THE DELIVERY OF RAILROAD IRON AT ANY PORT in the United States or Canada, or at a shipping port in Wales.
WAINWRIGHT & TAPPAN,
 Boston, June, 1851. 29 Central Wharf.

MORRIS & JONES & CO.,
IRON MERCHANTS,
 MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL

IN ALL THEIR VARIETIES.
 BOILER PLATE, OAR AXLES,
 BOILER RIVETS, RAILROAD IRON,
 CUT NAILS and SPIKES, FIG IRON, &c.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.
 August 18, 1854 1733

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of RAILROAD EQUIPMENTS upon favorable terms.
JOHN W. HULL & CO.,
 No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address
N. WILKINSON, Secy,
 WHEELING, VA.

THE RAILROAD IRON MILL COMPANY,

CLEVELAND, OHIO,
 MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to
ALBERT G. SMITH,
 President of the Incorporation.
 February, 1855.

RAILROAD IRON.

WOOD, MORRELL & CO.,
 Having leased the extensive Works of the
Cambria Iron Company,
 Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate, ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.
 Philadelphia Office, North Penna. R. R. Building, No. 407 Walnut st.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.
 MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
 Agents for the United States,
 12 SOUTH CHARLES STREET,
BALTIMORE.
 6m35 And 17 NASSAU STREET, NEW YORK.

RAILROAD IRON.

THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.
 New York Agency:
BUSSING, CROCKER & DODGE,
 23 CHURCH ST.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the Delaware, Lackawanna and Western Railroad, this Company are enabled to obtain the Magnetic Ore from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per linear yard, viz:—25, 30, 35, 40, 45, 50, 55, 60, 65, and 75 lbs.

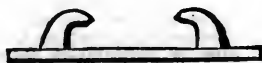
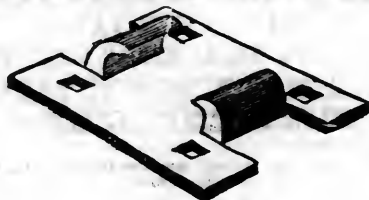
Samples of Rails and Merchant Iron may be seen at the office of the Company, 45 Exchange Place, New York.
 Address J. H. SCRANTON, President,
 SCRANTON, PA.
 or THEO. STURGEON, Treasurer,
 45 Exchange Place,
 NEW YORK.

**NEW YORK
RAILROAD CHAIR WORKS.****J. B. GREEN & CO., Proprietors.**

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late *New York Wrought Iron Railroad Chair Company*, and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our Chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Our manufacture of Chairs are used on a large number of Roads, of which the following list comprises some of them, viz

Galena and Chicago Union Railroad Company,
North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company.

Messrs **M. K. JESUP & CO., 44 Exchange Place, New York**, are the only parties authorized to act as our Agents.

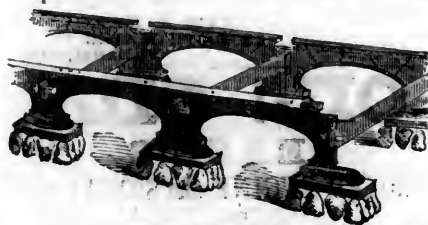
BEERS'**CAST-IRON ENDLESS RAIL,**

FOR CITY RAILROAD;

Now being laid in Philadelphia and elsewhere;

THIS road is exclusively of cast iron, without tie, string-piece, or chair; Rail 85 to 100 lbs. per yard; Durability four fold over the present road, with 65 lbs. groove rail; And with a saving on first cost; effecting a reduction in current yearly repairs, and relays, of at least \$1,000 per mile.

Also,—

**BEERS'****ELASTIC IRON RAILWAY,
FOR LOCOMOTIVE USE;**

This road can be built and equipped, without additional cost over a road with 56 lbs. T rail; saving not less than 60 per cent. on motive power, 50 per cent. on dead weight, and 80 per cent. on repairs of way; thus reducing the yearly expenses from \$1,500, to \$2,000, per mile. For full particulars, with drawings, relating to both roads, see a recent Treatise, entitled *Railroads, their construction and management*, with the remedy, from twenty-five years experience, by **S. A. BEERS**, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

S. A. BEERS.**GEO. M. FREEMAN,**

SUCCESSOR TO

PRATT & FREEMAN,

PHILADELPHIA

RAILWAY SUPPLY AGENCY,

No. 123 WALNUT STREET,

PHILADELPHIA.

Railroad Materials, Locomotive and Car Findings,

MACHINERY AND MACHINISTS' TOOLS,

MINERS' TOOLS, ETC.

COTTON WASTE, &c.

WHITE AND YELLOW CAR GREASE,

LOCOMOTIVE BRASS WORK,

Baggage Checks, Barrows, etc., etc.,

RAILROAD LANTERNS, SIGNAL LIGHTS,

STEAM GAUGES, COCKS AND WHISTLES,

INDIA RUBBER HOSE PACKINGS, ETC.

LANTERNS OF ALL DESCRIPTIONS,

ENGINE STATION, AND SIGNAL BELLS,

Superior Car Upholstery, etc.

AGENCY OF THE KEROSENE OIL COMPANY.

Orders solicited, promptly filled, and forwarded with

despatch and care at the manufacturers' lowest prices.

HOLT, GILSON & CO.,

MANUFACTURERS AND DEALERS

IN

RAILROAD & STEAMBOAT

SUPPLIES,

5 WATER ST., BOSTON.

LOCOMOTIVES AND CARS.

Rails, Sleepers, Chairs, Spikes, Wheels, Axles and Tires.

BOILER TUBES AND FELTING.

BOLTS, NUTS & WASHERS.

CAR, SHIP AND BRIDGE BOLTS.

Locomotive, Hand and Ship Lanterns; Car Trimmings of all descriptions; Steam and Water Gauges; Signal Bells, etc., etc.

AGENTS FOR CAR HEAD LININGS.

Sole Agents for TOMES' celebrated SAFETY GLASSES, and PACKER'S IMPROVED RATCHET DRILL.

Orders filled with despatch and at the lowest prices.

RAILROAD SUPPLIES.**GILBERT, MURDOCK & CO.,**

No. 61 Exchange Place,

NEW YORK,

ARE agents for, and prepared to furnish at manufacturers' prices,

RAILROAD IRON,

LOCOMOTIVE ENGINES,

RAILROAD CARS,

CAR WHEELS,

AXLES, CHAIRS,

SPIKES, TOOLS,

ETC., ETC.

All inquiries in reference to the above articles will receive immediate attention.

New York, January, 1859.

S. B. BOWLES,

MANUFACTURER AND DEALER IN

**RAILROAD
SUPPLIES,**

No. 12 GOLD STREET,

(Between PLATT and MALDEN LANE.)

NEW YORK.

RAILROAD SUPPLIES.**WILLIAMS & PAGE,**

No. 44 Water, between Congress and Kilby Streets,

Boston, Mass.**Iron Rails, Chairs, & Spikes,****FREIGHT AND COAL CARS,**

(on hand or made at short notice.)

Wheels and Axles of all kinds,

LOWMOOR, AMES, BOWLING AND NASHUA TIRES,

IRON AND STEEL,

Of all kinds for Shops and Tracks.

Car Trimmings, Paints, Oil, Varnish, Car and Switch

Locks, Ventilators, Lanterns, Head-Lights, Gauges, Rubber

Springs, Chairs, Hose and Bolting, Ash, Pine and other Tim-

ber, and ALL MATERIALS USED in Equipment and Repairs of

Railroads, Engines and Cars, at lowest prices.

THOS. S. WILLIAMS,**PHILIP S. PAGE,**

Late Sup't Boston & Maine R. R. Late PAGE, ALDEN & CO.

REFERENCES.

JAMES HAYWARD, President

Boston and Maine R. R.

Capt. WM. H. SWIFT, Boston.

LAWRENCE STONE & Co. do.

S. M. FELTON, Pres't Phila. W. & B. R. R.

PUEIFF, DODGE & Co., N. Y.

COOPER, HEWITT & Co., do.

REEVES, ROCK & Co., Phila.

E. S. CHESBROUGH, Chicago.

S. M. FELTON, Pres't Phila. W. & B. R. R.

A. BRIDGES & CO.,

MANUFACTURERS AND DEALERS IN

RAILROAD AND CAR

FINDINGS,

OF EVERY DESCRIPTION,

64 COURTLANDT ST., NEW YORK.

RAILROAD AXLES, WHEELS AND CHAIRS,

SPIKES, BOLTS,

NUTS, WASHERS,

CAR, SHIP AND BRIDGE BOLTS.

IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.

STEEL AND RUBBER SPRINGS,

LOCOMOTIVE AND HAND LANTERNS,

PORTABLE FORGES AND JACK SCREWS,

COTTON DUCK FOR CAR COVERS,

BRASS AND SILVER TRIMMINGS.

Also, Sole Agents for the Manufacturers of Car Head Findings.

Orders for the purchase of goods on commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES. JOEL C. LANE.

Messrs M. K. JESUP, JOHN KENNEDY, GILBERT A. SMITH.

M. K. JESUP & CO.,

RAILWAY AGENTS AND BANKERS,

41 EXCHANGE PLACE.

NEW YORK,

AGENTS FOR THE SALE OF

FOREIGN AND AMERICAN RAILROAD IRON

AND ALL MATERIALS NECESSARY FOR THE

Construction, Equipment & Operating of Railways.

RAILWAY AND OTHER SECURITIES

BOUGHT AND SOLD

Either privately or at the Board of Brokers.

A. S. & A. G. WHITON

32 PINE ST., NEW YORK,

DEALERS IN

RAILROAD IRON,**CHAIRS AND SPIKES,**

LOCOMOTIVES,

PASSENGER AND FREIGHT CARS.

MANUFACTURERS' AGENTS

For Locomotive Iron Turn Tables, Dimple's Patent Blower,

Gardiner's Volute Car Springs and

RAILWAY SUPPLIES GENERALLY.

ALSO

NEGOTIATORS OF SECURITIES.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

OASWELL & PERKINS,
Brokers, 69 Wall st.

New York, January 1, 1859.

Boston Locomotive Works,

Late Hinkley & Drury,
No. 380 HARRISON AVENUE,

BOSTON.

LOCOMOTIVE AND STATIONARY
**STEAM ENGINES;
BOILERS;**

Iron, Brass, Copper and Composition Castings;
COPPERSMITH'S WORK,
AND ALL KINDS OF RAILROAD MACHINERY
FURNISHED AT SHORT NOTICE.

ALSO



**VAN KURAN'S IMPROVED
RAILROAD WHEEL,**

PATENTED MAY 1, 1849.

Manufactured under the Personal Superintendence
of the PATENTEE, as above.



ORDERS for any quantity of Wheels executed with dispatch, and Wheels and Axles fitted in the very best manner, and at the lowest rate.

Address **DANIEL F. CHILD,**
Treasurer, Boston.

**THE JERSEY CITY
LOCOMOTIVE WORKS,**

SUCCESSORS TO

**BREESE, KNEELAND & CO.,
JERSEY CITY, N. J.**

MANUFACTURE COAL or WOOD BURNING
LOCOMOTIVES, Steam Fire Engines,
Portable ENGINES and BOILERS, Cast Steel
SPRINGS for Engines, Tenders, Passenger or Freight
Cars; SHAFTING and ALL KINDS OF RAIL-
WAY MACHINERY.

They also furnish to order TYRES, DRIVING WHEELS
and AXLES, CASTINGS and FORGINGS.

Boiler Work furnished with dispatch.

G. M. WHEELER, **C. KNEELAND,**
PRESIDENT. SECRETY & TREAS'R.

W. G. HAMILTON, V. P. & Eng'r.

OFFICE IN NEW YORK—49 WILLIAM ST.

UNION WORKS, BALTIMORE.

POOLE & HUNT,

Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials
and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TYRES, equal
to any produced in the country.

WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for expressing Oils and for
other purposes.

MACHINERY of the most approved construction for Flour-
ing and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings
of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or
description. SHAFTING, PULLIES and HANGERS.

**THE ROGERS
Locomotive & Machine
WORKS,**

SUCCESSORS TO

ROGERS, KETCHUM & GROSVENOR,

PATERSON, N. J.,

HAVING extensive facilities, are now prepared to furnish
promptly of the best and most improved description, either

COAL or WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER VARIETIES OF

RAILROAD MACHINERY.

J. S. ROGERS, Pres't. } Paterson, N. J.
WM. S. HUDSON, Supt. }

M. K. JESUP, Vice Pres't.

L. P. STARR, Sec'y and Treas'r.

44 Exchange Place, New York.

Locomotive Engines.

DANFORTH, COOK & CO.,

PATERSON, N. J.,

HAVING erected an extensive Shop, with the most ap-
proved Machinery and Tools, are prepared to execute
orders for the various classes of Freight and Passenger Loco-
motive Engines and Tenders, in the best manner and on the
most favorable terms.

Also, Stationary Engines, and the various Tools suitable for
furnishing Repair Shops.

The business of Machine making, heretofore carried on by
Charles Danforth & Co., is continued by the present firm, and
all orders will receive prompt attention. 1y49

**THE SCHENECTADY
LOCOMOTIVE WORKS,**

SCHENECTADY, N. Y.,

HAVING large facilities, are prepared to receive and ex-
ecute orders for

LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and
dispatch.

BRASS and IRON CASTINGS; LOCOMOTIVE TYRES
welded and blocked to exact sizes, and every thing connected
with the building or repairing of Locomotives furnished on
short notice.

These Works being located on the New York Central Rail-
road, near the centre of the State, possess superior facilities
for forwarding their work to any part of the country, without
delay.

JOHN ELLIS, Agent.

WALTER McQUEEN, Superintendent.

RICHARD NORRIS. HENRY LATIMER NORRIS.

RICHARD NORRIS & SON,

LOCOMOTIVE STEAM ENGINE

BUILDERS,

SEVENTEENTH STREET, ABOVE CALLOWHILL,

PHILADELPHIA,

ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

LOCOMOTIVES,

RAILWAY TOOLS AND

MACHINERY.

MANUFACTURE to order, Locomotives of any Arrange-
ment, Weight or Capacity. In Design, Material and
Workmanship, the Locomotives produced at these Works,
are equal to, and not excelled by any.

WEST POINT FOUNDRY.

R. P. PARROT, Lessee.

Manufacturer of Marine and Stationary

ENGINES,

Sugar Mills, Saw Mills, Iron Bridges, Cannon,

WATER PIPES, BOILERS, IRON BUILDINGS,

CASTINGS and FORGINGS of ALL KINDS.

WM. KEMBLE, } Agents
CHAS. J. NOURSE, }

26 Broadway.

MACHINERY OIL.

REFINED NEAT'S FOOT OIL

WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all
kinds of machinery use.

PETER COOPER,

17 Spring Slip,

New York.

**THE IMPERIAL
LUBRICATING OIL,**

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON.)

108, 110, 112, 114, 116 and 118 CHURCH ST.,

NEW YORK.

FOR RAILROADS,

STEAMSHIPS, MILLS, MACHINE SHOPS, ETC.

THIS OIL having been before the public for a long time,
and having been extensively used in different parts of the
country, and on each occasion meeting with unqualified ap-
proval, renders the manufacturers confident when making the
following claims:—

1st. Its first cost is vastly less than that of any Oil in use,
of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any
journal or bearing, all the gum in the Oil being entirely decom-
posed.

3rd. It will keep all journals and bearings cool, clean
and bright as new, thus not only saving wear and tear, but
saving also no inconsiderable amount of motive
power.

4th. It is fully as durable as any Oil in the market, and
consumers are invited to make their experiments on such jour-
nals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all
odor or unpleasant smell.

Also,—

**J. C. HULL & SONS'
REFINED BURNING OIL.**

Buyers are requested to give this OIL a trial, as it is be-
lieved that it will be found the

**CHEAPEST, CLEANEST AND BEST
OIL FOR BURNING,**

(all things considered), in the market.

CERTIFICATES from a large number of Railroad
and Steamboat officers, also, prominent Manufacturers
and Machine Builders, can be seen by application as above.

TAW & BEERS,

DEALERS IN

Sperm, Whale and Elephant Oils,

Adamantine Car and other Candles,

AND MANUFACTURERS OF

TAW'S LUBRICATING

GREASE

FOR RAILROAD CARS

AND HEAVY MACHINERY.

THIS celebrated GREASE has been in use upwards of
Ten years; and is in the opinion of FORTY RAIL-
ROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or descrip-
tion of machinery.

TAW & BEERS,
18 SOUTH WATER ST.,
Philadelphia.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of
Thousands of Gallons, prove this Oil to be superior
for Burning, and TWENTY-FIVE per cent. more
durable than Sperm Oil, for Lubricating, and the only Oil
that is in all cases reliable, that will keep bearings cool,
and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The *Scientific American* and *Manufacturer's Journal*, after
testing this Oil, pronounce it superior to any other for La-
bricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or
Europe.

AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 22.]

SATURDAY, MAY 28, 1859.

[WHOLE No. 1,206, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, May 28, 1859.

Locomotive Department on the Illinois Central Railroad.

The cost per mile of running and maintaining the Locomotive Department of the Illinois Central Railroad, for the months of February and March, of the present year, was as follows:

No. of miles run.	140,045
No. of cars per train	6.49
Lbs. of waste used	3,776
Gallons oil "	2,592
Cords of wood used	5,757
Tons of coal "	1,554

Wages of engineers and firemen.	\$9,454
Repairs.	17,556
Value of waste, tallow and oil.	2,455
Value of wood and coal	27,213
Cleaning engines.	2,031

Total cost

Cost of oil, waste and tallow per mile	00.82
Cost of wood and coal "	09.18
Wages of engineers and firemen "	03.87
Cost of repairs "	05.96
Cost of cleaning "	00.69

Total cost per mile.

Average miles to pint of oil.	14.88
" " cord of wood	41.98
" " ton of coal.	36.35

Estimated value of wood, \$4 16 per cord.
" " coal, \$2 10 per ton.

The above statement represents the entire cost of running and maintaining the Locomotive Department.

Georgia Railroad and Banking Company.

The report of this company for the fiscal year ending April 1, 1859, gives the following statement of earnings from business of the road during that time:

From Passengers.	\$354,562 75
" Freight.	755,554 76
" Mail	44,503 57

\$1,154,621 08

And the expenses were:

Conducting transportation.	\$144,244 83
Motive power.	190,055 15
Maintenance of way.	156,393 64
" cars.	54,276 25
Relaying iron, outfit, etc.	59,298 08

610,257 95

Net profits

Net profits from operations of the bank.

Total net income

Dividends declared.

Carried to credit of reserved fund.

Add balance to credit of reserved fund, March 31st.

Balance to credit of reserved fund.

The increase in gross earnings is as follows:

From Up freight.

" Down "

Miscellaneous

\$132,906 10

Less decrease of revenue from

Passengers

Way freight from connecting

roads

Total increase

The sources of revenue have been as follows:

Through. Local.

Western & Atlantic R. R.

E. Tenn. & Georgia R. R.

Rome Railroad.

Atlanta

Atlanta and W. P. R. R.

Georgia Railroad.

Passengers

Miscellaneous.

Mail

Total

The business of the past year has been very profitable, and both gross and net profits exhibit not only an increase over the previous, but are also above the average of preceding years. This increase is due to the large increase in the transportation of cotton, and the legitimate increase in return freights, which naturally attended it. The proportion of net to gross profits is also much larger than the average of former years, arising mostly from the smaller quantity of new work done—the outfit being unusually full and perfect.

The bonded debt of the company is now \$373,060, (all incurred for subscriptions to other roads). The president recommends that it be met as it falls due, and no renewal asked or accepted for a dollar.

The relaying of the remaining 25 miles of the main line with a heavier rail is recommended; also both branches, to Washington and Athens, with a light T rail on cross-ties—being now laid with a strap rail on continuous wooden stringers. Three or four locomotives will also be required the coming year.

MONTHLY EARNINGS FOR 1858-9.

	Passengers.	Freight.	Mails.	Total.
Ap'l	\$24,185.63	\$52,536.70	\$3,708.64	\$80,430.97
May	23,525.29	59,448.37	3,708.63	86,682.29
June	20,275.62	24,565.78	3,708.63	48,550.03
July	25,442.45	31,783.07	3,708.63	60,934.15
Aug.	25,198.87	48,766.21	3,708.63	77,673.71
Sept.	23,999.78	61,609.28	3,708.63	89,317.69
Oct.	26,860.12	110,506.62	3,708.63	141,075.37
Nov.	33,453.05	73,078.73	3,708.63	110,240.41
Dec.	43,108.99	84,006.86	3,708.63	130,824.48
Jan.	43,977.97	74,759.83	3,708.63	122,446.43
Feb.	32,803.62	60,080.12	3,708.63	96,592.37
Mar.	31,731.36	74,413.19	3,708.63	109,853.18

Tot. \$354,562.75 755,554.76 44,503.57 1,154,621.08

CONDENSED BALANCE SHEET.

	Dr.
Capital stock	\$1,150,000 00
Bonds of the company	373 060 00
Income from earnings of road	1,181,518 89
Reserved fund.	473 890 56
Discount, interest, rent, etc.	83 772 20
Dividends on sto. k.	50,552 00
" unpaid	19,640 43
Due corporations and agents.	163,329 07
Depots	252,939 44
Circulation	1,293,618 45

\$8,048,321 04

	Cr.
Cost of road and outfit.....	\$1,174,491 94
Conducting transportation.....	617,166 75
Salaries, office expenses, etc.....	28,773 53
Interest and taxes.....	33,715 92
Real estate, etc.....	146,072 36
Materials on hand.....	124,129 71
Stock in other roads.....	829,550 00
Bonds of other companies.....	59,500 00
Discounted notes and domestic bills.....	654,799 22
Bills of exchange.....	471,279 43
Assessments on stock unsettled.....	337 50
Due by banks, agents, etc.....	176,473 20
Cash.....	732,031 48
	\$8,048,321 04

OFFICERS:

JOHN P. KING, *President.*GEORGE YONGE, *Superintendent.*

Book Notices.

ENGINEERING PRECEDENTS FOR STEAM MACHINERY; embracing the performances of Steamships, and experiments with propelling instruments, condensers, boilers, &c., accompanied by analysis of the same—for Engineers, by B. S. ISHERWOOD, Chief Engineer, U. S. Navy. 127 pages. II. BALLIERE, 290 Broadway, N. Y.

This is the first publication of what is intended to be a series, if the demand is sufficient. The whole is original matter, and arranged in the most practical and useful manner for Engineers, and cannot fail to be a most valuable book of reference in matters of this kind.

The contents of the present book are: British gun boats in China; British Dispatch Screw Steamer *Lytx*; Screw Steamer *Sydney*, Ireland and Scotland; British war-screw Steamship *Conflict*; Comparative Experiments with the screw and paddle wheel, as applied to the *U. S. Steamers Spencer and McLane*. Copious tables are given showing the results of the operation of the various vessels enumerated. The analysis is thorough, and all the elements of power and resistance so separated and arranged, as to be readily understood.

As a matter of general interest we extract the following description of the British gun boats in China:

These gun-boats were some of those constructed in 1856, by the Admiralty, for a projected attack upon the fortifications of Cronstadt: as this attack was not made, their adaptation for such a purpose was not tested; but those sent to China proved of indispensable service in the military operations on that coast, and fully established the great value of this description of vessel for literal warfare.

They were of three classes, and known as gun-boats of 40, 60, and 80 nominal horses power. The 60 horses power class was the original type, and the other two classes were merely variations on it. The hulls were of wood, plainly finished, and did not possess more than the usual strength given to naval steamers of their tonnage. The 40 horses power class was rigged as two-masted fore-and-aft schooners; the 60 horses power class was rigged as three-masted fore-and-aft schooners; the 80 horses power class was rigged as three-masted fore-topsail schooners. A light jib-boom was carried, but the bows of all were without either cut-water or bow-sprit, in order to permit the forward pivot gun to stand over the line of the keel and fire directly ahead. The hulls of all had the same beam, namely, 22 feet; but they differed in length, depth, and draught of water; those of the 40 horses power class were 109 feet 10 inches long, those of the 60-horses power class were 100 feet long, and those of the 80 horses power class were 125 feet long between perpendiculars. The water-lines of the 40 and 60 horses power classes have much fullness, the floors

have little dead-rise, and the bilges are but slightly rounded. The water-lines of the 80 horses power class are sharper, the bilges better rounded, and there is more dead-rise to the floor. The load draught of water of the 40 horses power class is 6 feet; of the 60 horses power class, 7½ feet; and of the 80 horses power class, 8½ feet.

The armament of the 40 and 60 horses power classes was the same, namely, one 8 inch shell gun of 95 cwt., (sometimes a long solid 32-pounder was substituted), pivoted on the bow; one 10 inch shell gun (sometimes an 8 inch shell gun was substituted,) pivoted amidships; and two 24-pounder brass howitzers aft. The 40 horses power class was originally intended to carry only one 10 inch shell gun. The armament of the 80 horses power class was two brass 24-pounders aft, two brass 24-pounders forward, one 10 inch shell gun pivoted amidships. When the battery was fired in the broadside direction, the vessel heeled over greatly beneath the recoil, although fitted with projecting rolling-plank on the bilges.

None of the gun-boats carried their battery at sea, their guns being transported by larger vessels. The 40 and 60 horses power classes were towed from England to China by large steamers; the 80 horses power class sailed the distance with their screws hoisted out of water, and are said to have proved themselves good sea-boats. All the gun-boats carried but four days' water in tank, depending entirely upon their distilling apparatus for their daily supply. The least possible quantity of provisions was carried, and the coal in bunker was limited to three and a half or four days' steaming, both on account of deficiency of space and to reduce the vessel's draught of water. The smoke pipes were hinged, in order to be laid upon the deck when the vessel was under sail alone.

The 80 and 60 horses power classes were fitted with two engines; the 40 horses power class had only one engine. All the engines were non-condensing, direct acting, and horizontal; and when two were used, both were placed on the same side of the keel. There was no separate expansion valve, but the steam was cut off by lap on the steam valve, and the link motion.

The boilers, which were three in number for the 80 and 60 horses power classes, and two in number for the 40 horses power class, were all of the same type. They had cylindrical shells with flat ends; the farther smoke connection, or uptake, was of thin iron, bolted to the shell, but not composing part of it. In the rear end of each boiler was an inner cylinder of 26 inches diameter, the upper half of which was the furnace and the lower half the ash-pit. The principal heating furnace was composed of iron tubes, lying horizontally, in the same direction as the furnaces and immediately behind them; the upper row of flues was on the same level with the tops of the furnaces. Between the furnace and near the tube plate was a brick bridge 9 inches wide. The draught of the boiler depended entirely on the blast produced in the chimney by the exhaust steam from the engine; the natural draught was so very sluggish that about four hours were required to raise steam from cold water with Welsh coal. The blast-pipe had three nozzles of different diameters, to be used as more or less steam was required, and the back pressure against the pistons, due to them and other causes, varied from 3 to 6 pounds per square inch above the atmosphere, according to the consumption of coal per hour. The farther smoke connection, or uptake, could be swept of its ashes instantaneously and very completely by a steam jet of 2 inches diameter, which drove them out of the top of the chimney; though when this operation was performed it was necessary, for an obvious reason, to bring the wind abeam. The maximum steam pressure these boilers were intended to be worked at, was 60 pounds per square inch above the atmosphere, but the usual average was 40 pounds. At the chimney end of the boiler there was a passage with a hatch over it; the passage was 3 feet wide to give room for sweeping the flues. A passage 21 inches wide extended also along both sides the boilers. The coal was

principally stowed on both sides the engines and boilers, extending somewhat over them, and serving as a protection against shot; the remaining portion was stowed forward of the bulkhead. The whole of the machinery, in all the vessels, lies below the water line, and the length it occupies between bulkheads is about 32 feet.

All the gun-boats are propelled by two-bladed true screws, which are fixed with the 40 and 60 horses power classes, but hoist up with the 80 horses power class. The screw and engine shafts can be disconnected by unbolting a pair of discs; this, however is a slow process, and when it is desired to drag the screw revolving, the connecting-rods of the two engines are unkeyed from their crank-pins.

The 60 horses power class was the original type of gun-boat, and the object had in view when constructing it was to produce a vessel that could support two guns of large calibre for battering at point blank range a formidable fortress, and at the same time offer a target of the smallest possible size to the enemy. For this purpose, the vessels were to be of very small dimensions with pretty full water lines, to be low on the water, and to have so light a draught as to be able to run close in shore; as they were to receive the fire of the heaviest hostile ordnance, their machinery was to be protected by being placed below the water line, and behind the shelter of the coal-bunkers. Their steam power was to be what was necessary to carry them rapidly in and out of action, and for prompt manœuvring against wind and current. As these vessels were constructed for the sole purpose of attacking Cronstadt, and were expected to be destroyed in that service (for both officers and crews were to be volunteers), excellence of model, kind of machinery, economical application of the power, capacity to perform sea voyages of reasonable length, etc., were quite secondary considerations—very different from what they would have been had the vessels been destined for general instead of such special service. The great considerations were, small size hull, large size ordnance—the machinery being simply that which would weigh the least, cost the least, occupy the least space, and yet be sufficient for working the vessels quickly even against the current and wind, on the occasions it was expected to use them. The accommodations for officers and crew, and the quantity of coal and store carried, were, for the same reason, unimportant matters. The cannon, stores, coal, etc., were to be carried to the scene of action by large screw steamers, from which the gun-boats were to be fitted out and sent in as bull-dogs to bait a bear. As a necessary consequence of this programme, the hulls were made with tolerably full water-lines, to give strength and displacement; the spars were made very small, and the machinery adopted was a light non-condensing engine, working at a high rotary speed, with a steam pressure of from 50 to 60 pounds per square inch above the atmosphere, and following for two-thirds the stroke of piston. The boilers were tubular, with circular shells—simplicity, fewness of parts, and readiness of access for quick and easy repair, being the governing objects. Only 28 tons of coal were carried in the bunkers, very little water was taken in the tanks, the distilling apparatus being depended on for the daily supply; provisions and stores were also restricted to the least quantity; and then the officers and crew, limited to the fewest number, were thrust into what little space remained.

Census of Nashville, Tennessee.

A census of the city of Nashville, lately taken, gives the following results:

The population of the city proper is 25,113—of which 19,728 are whites, 10,757 males and 8,971 females; 5,385 blacks—of whom 1,758 are free. The population of the suburbs is 6,700, making a total of 31,813. The manufactures of the city reach \$2,374,700; the total trade exclusive of manufactures, is 22,476,812. About one hundred steamboats visit the port during a year, with an aggregate tonnage of 108,000.

Detroit and Milwaukee Railroad.

The annual meeting of this company took place at Detroit on the 10th inst., at which a report was submitted of its affairs as they were on the 31st of Dec. 1858.

The paid up capital of the company on the 31st Dec. 1858, was as follows:

Share Accounts:

For amount received on 47,215 shares of \$50 each.....\$2,360,750 00
Less amount of arrears on 1,287 shares of the above..... 31,595 26
\$2,329,154 74

Bond Account:

Sterling bonds of the Oakland and Ottawa R. R. Co., at 6 per cent., due 1873, viz:
\$2,600 non-convertible.
28,400 convertible,
\$31,000, say.....\$155,000
Dollar bonds of the Oakland and Ottawa R. R. Co., at 7 per cent., convertible, due 1873..... 51,000
Dollar bonds of the Detroit & Pontiac R. R. Co., at 8 per cent., non-convertible due 1863..... 150,000
Dollar bonds of the Detroit & Pontiac R. R. Co., at 8 per cent., non-convertible, due 1863..... 100,000
Dollar bonds of the Detroit & Pontiac R. R. Co., at 8 per cent., convertible, due 1866..... 250,000
Dollar bonds of the Detroit & Milwaukee R. R. Co., at 7 per cent., first mortgage, convertible, due 1875...2,500,000
Dollar bonds of the Detroit & Milwaukee R. R. Co., at 8 per cent., 2d mortgage non-convertible, due 1866 751,500
Dollar bonds of the Detroit & Milwaukee R. R. Co. at 10 per cent., 3d mortgage, convertible, due 1863.... 750,000
\$4,707,500 00
\$7,036,654 74
Balance..... 1,971,714 47
\$9,008,369 21

The complete examination of the accounts of the company, made up before the arrangement was completed for the advance of the \$750,000 in January, 1858, showing the company to be in this position.

The actual debts then due were as follows:

Bill and bonds due, nearly \$800,000, of which was then actually overdue and protested...\$992,247
Int. coupons, due Nov. 15, 1857..... 110,379
Debts due to contractors and others for work already done..... 284,269
Interest and damages on protested notes. 36,456
Wages due to men engaged in the working of the opened line..... 48,000
Amount due for right of way and damages..... 12,000
Int. bonds due on shares up to the opening of the line..... 330,000
Int. due on bonds up to May 15, 1858.... 110,500
do do do Nov. 15, 1858..... 120,000
\$2,043,853
To that has to be added the cost of completing 46 miles of road—station buildings, rolling stock, sidings, fencing, ballasting, &c., say about..... 850,000
\$2,909,000

It will thus be seen that the amount of indebtedness actually incurred and owing when the present board was elected, was upward of \$2,000,000; besides which a considerable sum had to be expended to complete the line. To meet that indebtedness, the company was in possession of the following assets:

Loan from G. W. R. R..... \$750,000
2nd mort. bonds, worth at par..... 600,000
Total.....\$1,350,000

And in addition, the earnings of the line. A further loan of \$500,000 was effected from the Great Western Railway Company. This will make the present position of the company as follows:
Balance against capital as per acct. to 31st Dec. 1858.....\$1,971,714
Reduced by loan from Great Western Railway Co.....\$500,000
By bonds due 1st Jan. 1860.... 332,000
Balance of revenue account... 144,270
And old account arranged.... 100,000
Bonds on hand to be issued.... 200,000
1,276,270

Total floating debt..... \$695,444

The expenditures of the company have been as follows:

EXPENDITURE.

By amount expended on the construction of the line prior to 1st January, 1858.....\$6,738,593 60
Do. for rolling stock, viz:
Locomotive engines and tenders...\$123,968.13
Pass., fr't & other cars. 245,583.21
\$369,551 34
\$7,108,144 94
By amount expended during the period, between 1st of Jan. and 31st Dec., 1858:
For interest and discount on shares, bonds, loans, &c., including \$332,005 83 of interest bonds on the capital stock of the Co. up to the opening of the line to Lake Michigan.....\$743,623 77
For land, works, bridges, perm. way, &c..... 575,251 71
For stations, warehouses, wharves, &c..... 163,342 60
For workshops and machinery, incl'g fixed engines..... 23,770 08
For electric telegraph.. 12,341 96
For ferry steamer to for crossing Detroit river. 13,700 00
By General Charges:
Law charges.....\$9,411 26
Engineering.....25,395 43
Salaries.....17,086 63
Agency..... 8,400 82
Police force..... 365 10
Office expenses..... 261 88
Insurance and taxes.....20,810 87
Advertising, printing and stationery..... 1,828 00
Office furniture..... 2,445 59
Traveling and incidental expenses..... 4,143 86
Rolling stock.....\$1,622,179 55
Locomotive engines and tenders..... 134,890 79
Passenger, freight and other cars..... 143,153 93
1,900,224 27
\$9,008,369 21

The Revenue for 1858 was as follows:

Revenue Account.

The following account shows the receipts and expenditures on revenue account for the year 1858:

RECEIPTS.

To amount received for the carriage of 127,414 $\frac{1}{2}$ passengers.....\$170,614 45
To amount received for parcels and mails..... 17,608 27
To amount received for freight and live stock..... 174,567 24
\$362,589 96
To amount received for rents..... 2,448 57
\$365,038 53

EXPENSES.

Am't.
By maintenance of way.....\$50,279 65
By locomotive expenditure..... 44,479 06
By repairs and renewals of passenger and freight cars..... 12,422 75
By passenger traffic expenses, including cost of steam ferry across Lake Michigan..... 48,692 71
By freight traffic do..... 47,678 34
By general charges..... 17,215 13
Total working expenses.....\$220,767 84
By balance..... 144,270 69
\$365,038 53

The report states that the great bulk of the amount required for the completion of the line, and providing it with rolling stock, has now been expended, and there is at present hardly an outlay, except for ballasting, fencing, and cattle-guards, in progress.

To meet the present liabilities of the company, a resolution was adopted, authorizing the directors "to issue stock, entitled to not more than ten per cent. per annum dividend, to the amount of \$1,000,000, in conformity with the authority conferred upon this company by virtue of the act in relation to preferred stocks, passed at the session of the Legislature of 1859. And if the existing creditors of the corporation are willing to exchange their claims for such stock, it may be issued from time to time for that purpose, in addition to the above mentioned sum, but such additional stock shall in no case be entitled to a dividend greater than the interest payable on the claims for which it may be exchanged; provided, that the present debt of the company shall in no event be increased by virtue of such issue beyond the said sum of \$1,000,000; and provided further, that all of said stock shall be redeemable and payable at par at any time after the issue thereof, upon six months' notice being given."

We copy the following from the report of the company:

As was stated in the report made by the President on the 1st of December, 1858, the financial position of the company, when the present Board was elected, proved, on examination, to be most critical and embarrassing. By great exertions the credit of the company has been very greatly raised, the line completed throughout to the lake, and considerable progress made in liquidating the large amount of indebtedness which was pressing so heavily upon the company. In accomplishing these results, about \$420,000 of the second mortgage bonds have, up to the present time, been disposed of at 80 per cent., in payment of old debts. This plan will be continued until the full amount of this class of bonds has been issued.

The line was completed to Mill Point on the 1st September, 1858, and the present terminus at Grand Haven was brought into use on the 22d November, 1858.

The line was opened too late in the fall to permit of any large number of through passengers being conveyed last year; but two steamers are now running between Milwaukee and Grand Haven in connection with the trains of this company, and the Directors are happy to state that the number of passengers they are carrying is sensibly and satisfactorily increasing. As the season advances, the through passenger traffic will undoubtedly

materially improve; and when the new steamers, building specially for the route, are brought into use, they will so thoroughly command the confidence of the public that the Detroit and Milwaukee Railroad cannot fail at all seasons to secure a large proportion of the passenger traffic of the North-west.

The communication between Milwaukee and Grand Haven was regularly kept up throughout the winter for freight purposes and large quantities of flour, provisions, &c., were carried east from Milwaukee. This was a new era for the North-west, and the merchants and dealers there were, for the first time, enabled to have their property conveyed to the East during the winter, and at the same prices as were charged from Chicago. Several thousand tons of produce, which, without this line, must have remained in Milwaukee until the opening of navigation, were thus carried to market, and a great benefit thereby conferred upon the commercial interests of the North-west. Merchandise from the East, in considerable quantities, was also carried across the lake, during the winter, with regularity and dispatch. The great advantages of this line have thus been demonstrated to the merchants of the North-west, and freight is now being daily carried to Milwaukee by this route, although navigation was for some time been open.

The commercial revulsion during the autumn of 1857, aggravated by two successive deficient harvests in the West, pressed with great severity upon the North-western States, and therefore the business in that section of the country, during the last year, has been remarkably light. The quantity of freight which, under these circumstances, and on the first opening of the line, this company has carried, gives the board the greatest encouragement as to the growth of the traffic after the country shall have been blessed with productive harvests.

The local traffic, during the past year has been seriously affected by the causes which have operated to so great an extent in diminishing the business upon all the railroads in the country. A careful consideration of the present business of the line, and a review of the sources from which traffic will be derived, has led the Board to the conclusion that a good harvest, and the consequent revival of general business, will increase the local traffic to at least double the present weekly receipts. And when to that is added the through business already presenting itself with the increase which will follow from good harvests, there is no room for doubting that this company must, in a short time, be placed in a very satisfactory position.

The following gentlemen, being all members of the old Board, were elected Directors of the Company for the ensuing year, viz: Charles J. Brydges, Esq., Thomas Reynolds, Esq., Hamilton, C. W.; Edmund A. Brush, Esq., Nelson P. Stewart, Henry N. Walker, Esq., Detroit; Robert Gill, Esq., Thos. Cullen, Esq., Alexander Hayes, Esq., London, England; and William Govan, Esq., Glasgow, Scotland.

Marquette and Ontonagon Railroad.

It is stated that this company intend this Spring to commence operations at the Cleveland Mountain, and finish twenty miles westward this season. The land granted in aid by Congress, 4,840 acres per mile, then becomes available for the distance of constructed road. On the 20 miles immediately west of this place, the grant is overlapped by those of the Bay de Noquet and Marquette, and the Chicago, St. Paul and Fond du Lac Co.'s.

By the construction of the second section of 20 miles, the M. and O. Co. realize the entire amount of land granted per mile, instead of a portion of it, and open up valuable iron lands which fall to their selection. It is understood that running connections are to be established with the Bay de Noquet and Marquette Co., by which this section as soon as opened will be available.—*Lake Superior Journal*.

TREATISE ON THE PRINCIPLES OF CIVIL ENGINEERING AS APPLIED TO THE CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, *Civil Engineer,*
And late *Chief Engineer of the N. Y. & Erie R. R.*

(Continued from p. 325.)

EXAMPLE D.

Take a bridge with trusses of the "Howe" arrangement. Height of truss between chords 18 feet. Clear span 150 feet divided into 15 panels of 10 feet.

Greatest load on bridge at one time, exclusive of its own weight.

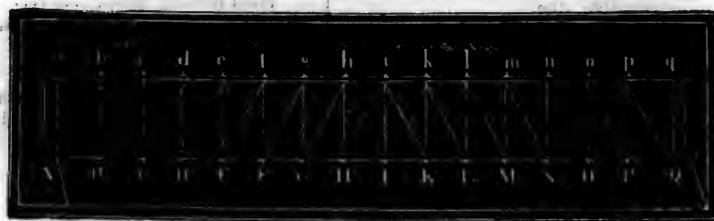


Fig. 68.

If 135,000 lbs. be divided by the number (15) of panels in the truss the result is a weight of 9,000 lbs. per panel. Each vertical tie must sustain this weight, taking half a panel on either side.

The ties Hh and Li will then be subjected to a tension of 9,000 lbs. each. But in transferring these vertical strains to the points of support of the truss (AQ) the ties Gg and Kk become loaded each with the weight of two panels or 18,000 lbs.; the ties Ff and Ll with the weights of three panels etc.

Next suppose a weight of 15,000 lbs. to be applied successively at the points A, B, C . . . Q.

The maximum weight to be sustained by each of the vertical ties will be as follows:—

On Hh and Li	9,000+15,000=24,000 lbs.
" Gg " Kk	18,000+15,000=33,000 "
" Ff " Ll	27,000+15,000=42,000 "
" Ee " Mm	36,000+15,000=51,000 "
" Dd " Nn	45,000+15,000=60,000 "
" Cc " Oo	54,000+15,000=69,000 "
" Bb " Pp	63,000+15,000=78,000 "
" Aa " Qq	67,500+15,000=82,500 "

The weights which act vertically upon the braces will differ from these somewhat, on account of the 15,000 lbs. not being uniformly distributed over the truss.

When the weight is applied at A it can act vertically, only, and of course can produce no horizontal or oblique strain upon the system of timbers, etc., composing the truss.

Applying a weight of 15,000 lbs. at B it is found (§ 76) that 14,000 lbs. must be sustained at A, and 1,000 lbs. at Q. The pressure of 14,000 lbs. is transferred from B to A through the medium of the vertical tie Bb, and the oblique strut or brace Ab. The 1,000 lbs. pressure is transferred from B to b by means of the vertical tie, and thence in a direct line bQ which is the resultant of its strains upon the part of the system from Bb to Qq.

One locomotive engine	84 tons.
One tender	20 "
Four loaded cars, at 24 tons each	96 "

Total weight of train 150 "

Of this load nine-tenths (135 tons) may be considered as uniformly distributed over the whole length of the bridge, and the remaining one-tenth (15 tons) as being an excessive weight of the driving wheels of the engine.

One-half of these weights will be sustained by the truss on either side of the bridge. Therefore, each truss will be subjected to a vertical pressure of 135,000 lbs. uniformly distributed, and to another of 15,000 lbs. acting successively upon each point of the length of the truss, as the engine passes across the bridge.

The length of each brace is $(18^2 + 10^2)^{1/2} = 20.59126$ feet, and the ratio of the length of brace to the height of panel is $\frac{20.59126}{18} = 1.14396$. The

oblique strain upon the brace Ab, in the direction of its length is, then $14,000 \times 1.14396 = 16,016$ lbs.

Next, applying the weight (15,000 lbs.) at C, it is found that 13,000 lbs. are sustained at A, and 2,000 lbs. at Q. The pressure of 13,000 lbs. is first transmitted through the brace Bc producing an oblique strain of $13,000 \times 1.14396 = 14,871$ lbs.

Pursuing the calculations in this manner the maximum strains upon each brace in the truss are determined. In this case those strains are exhibited in the following tabular form:

TABLE OF MAXIMUM STRAINS UPON BRACES.								
Designation of braces.	Vertical Pressures.			Oblique Strains.			Total Effect.	Total Effect.
	Effect of 15,000 lbs.	Effect of 135,000 lbs.	Total Effect.	Effect of 15,000 lbs.	Effect of 135,000 lbs.	Total Effect.		
A	15,000	67,500	82,500	15,000	67,500	82,500	82,500	82,500
Ab	14,000	63,000	77,000	16,016	72,069	88,085	88,085	88,085
Bc	13,000	54,000	67,000	14,871	61,774	76,645	76,645	76,645
Cd	12,000	45,000	57,000	13,728	51,478	65,206	65,206	65,206
De	11,000	36,000	47,000	12,584	41,182	53,776	53,776	53,776
Ef	10,000	27,000	37,000	11,439	30,887	42,326	42,326	42,326
Fg	9,000	18,000	27,000	10,296	20,591	30,887	30,887	30,887
gh	8,000	9,000	17,000	9,152	10,296	19,448	19,448	19,448
Ki	8,000	9,000	17,000	9,152	10,296	19,448	19,448	19,448
Lk	9,000	18,000	27,000	10,296	20,591	30,887	30,887	30,887
Ml	10,000	27,000	37,000	11,439	30,887	42,326	42,326	42,326
Nm	11,000	36,000	47,000	12,584	41,182	53,776	53,776	53,776
On	12,000	45,000	57,000	13,728	51,478	65,206	65,206	65,206
Po	13,000	54,000	67,000	14,871	61,774	76,645	76,645	76,645
Qp	14,000	63,000	77,000	16,016	72,069	88,085	88,085	88,085
Q	15,000	67,500	82,500	15,000	67,500	82,500	82,500	82,500

Now,—in addition to the support they give to the weight of the bridge itself, the track, etc., the braces are subjected to the concussions indicated by the weights given in the last column of this table.

The concussions acting upon material more or less elastic, produce violent compressions, or extensions, as the case may be, of the fibre of the

material, followed by equally violent reactions until the elasticity of that fibre becomes injured and finally destroyed.

The yielding to compression of the fibre of the timber, as the weight of the train goes upon the bridge, and the consequent reaction as it goes off, are the principal causes of that vertical vibration to which this and most other trusses are subject, and to which more than to any other cause they owe their premature and rapid destruction.

Were it in other respects practicable and a site for a bridge could be obtained across a stream having a solid rock bottom, a chain might be attached, by one end to the lower extremity of each of the vertical ties in the truss, and anchored by the other end, perpendicularly, to the rock bottom.

Then by means of turnbuckles or other device, a tension could be produced upon each chain exactly equal to the maximum weight which, on the passage of the train, would be sustained by the vertical tie-rod to which it is attached.

In this case the tension on the chains would be equal to the weight sustained by the ties, as before stated, at—

B and P.....	78,000 lbs. each,
C " O.....	69,000 " "
D " N.....	60,000 " "
E " M.....	51,000 " "
F " L.....	42,000 " "
G " K.....	33,000 " "
H " I.....	24,000 " "

Now it must be evident to every person, who will give the subject the least reflection, that, in this condition without any train upon the bridge, the truss, at every point, is subjected to a strain equal to what would be a maximum strain at those points on the passage of the train. It follows, then, that the transit of the train will produce upon the truss no additional vertical, or other strain, and, consequently, no deflection or vertical vibration, but each chain, in succession, will be, momentarily, relieved of its tension.

The method of loading a bridge by means of chains is, however, so infeasible that resort must be had to some other expedient for the accomplishment of this end. The counter-brace is the most practicable appliance for the purpose.

It has been ascertained by the preceding calculations, that while a maximum weight of 78,000 lbs. acts at B, 77,000 lbs. only are sustained vertically by the brace Ab. The other 1,000 lbs. act upon the opposite end of the system, at a moment when it does not incur a maximum strain: the vertical pressure upon the brace Qp being but 63,000+1,000=64,000 lbs. It is found, also, that with a maximum of 69,000 lbs. at C, the vertical pressure on the brace Bc is 67,000 lbs., while upon Po it is but 54,000+2,000=56,000 lbs., etc., etc.

Moreover, it is found that an oblique thrust of 88,085 lbs. on the brace Ab is the result of the maximum pressure of 78,000 lbs. at B,—and a thrust of 76,645 lbs. on the brace Bc, the result of 69,000 lbs. vertical pressure at C, and so on for each brace, as given in the last column of the 'table of maximum strains upon braces.'

If a weight of 78,000 lbs., at B or b, acts in the direction bA, with a force of 88,085 lbs. it is clear that a resistance, or thrust, of 88,085 lbs., in the direction Ab, will be necessary to sustain the weight of 78,000 lbs.

It is, also, quite as obvious that, if the 78,000

lbs. be removed from B, and, in the opposite diagonal of the panel, another brace aB be inserted and made to act in the direction of its length with the force of 88,085 lbs., it will press downward at B with the same vertical effect as was produced upon the brace Ab by the maximum weight of 78,000 lbs.

Between the brace (Ab) and its counter-brace (aB), there is a perfect equilibrium of strains, each sustaining a vertical force of 77,000 lbs.—1,000 lbs. being sustained by the opposite end of the system. By replacing the 78,000 lbs. at B, the counter-brace (aB) is simply relieved from all strains, while upon the direct brace (Ab) the strains remain, as before, subjected to their maximum pressures, as well while the train is off the bridge as when upon it.

From the foregoing considerations it is to be inferred that the only duty of the counter-braces, is to counteract the strains resulting from the passing load; while the office of the direct brace, is to resist all the vertical pressure which results from both weight of structure and passing load.

The necessary dimensions of the materials composing the bridge may be computed as follows:—

1. Of the Counter-braces.

The braces were found to be 20.6 feet or 247 inches long. The counter-braces will be the same. Taking them of a uniform thickness of 9 inches, width-wise of the bridge, they will be 27.5 diameters long, and if of white pine (table VI.) will withstand a compression of about 380 lbs. per square inch of section. But if firmly bolted or clamped to the braces crossing them at the middle, they may be considered as reduced in length one-half, or to 13.75 diameters, and be capable of withstanding a force of 800 lbs. per square inch. Their depth will then be—

$$Ba \text{ and } Pq \frac{88,085}{9 \times 800} = 12\frac{1}{2} \text{ inches.}$$

$$Cb \text{ " } Op \frac{76,645}{9 \times 800} = 10\frac{1}{2} \text{ "}$$

$$Dc \text{ " } No \frac{65,206}{9 \times 800} = 9\frac{1}{2} \text{ "}$$

$$Ed \text{ " } Mn \frac{53,766}{9 \times 800} = 7\frac{1}{2} + \frac{1}{2} = 8 \text{ inches.}$$

$$Fe \text{ " } Lm \frac{42,326}{9 \times 800} = 6 + \frac{1}{2} = 6\frac{1}{2} \text{ "}$$

$$Gf \text{ " } Kl \frac{30,887}{9 \times 800} = 4.3 + 1.7 = 6 \text{ "}$$

$$Hg \text{ " } Ik \frac{19,448}{9 \times 800} = 2.7 + 2.3 = 5 \text{ "}$$

Where the depth is less than 9 inches a correction is made to provide against deflection in that direction.

These counter-braces in a single truss will contain 150 cubic feet and weigh 4,500 lbs. at 30 lbs. per cubic foot.

2. The Lower Chord.

The panels being 10 feet long, the chord is divided into stretches of 10 feet, each of which may be treated as a beam for the support of the floor-beams, track, train, etc.

The maximum load upon the chord in each panel will be the 15,000 lbs. excess of engine driving wheels, 9,000 lbs. of the train and say 1,250 lbs. of floor, track, etc., in all 25,250 lbs. which, if uniformly distributed, will be equivalent to 12,125 lbs. at the middle of the panel.

To be quite safe, however, the 15,000 lbs. may be considered as applied directly at the middle and the remaining 10,250 lbs. uniformly distributed. The effect at the middle will then be 15,000 + 5,125 = 20,125 lbs. And (by § 44)

$$10^2 \times 20,125 \times 0.01168 = 23,506 = BD^3;$$

that is, the breadth multiplied by the cube of the depth, in inches, must give a product of 23,506. If the depth be taken at—

10 inches the breadth will be.....	23.5 inches.
11 " " " " " " " " " " " "	17 " "
12 " " " " " " " " " " " "	13.6 " "

with sections of 235,194 and 163 inches, either of which will answer the conditions of cross strain, but may not those of horizontal strains to which the chord is subjected.

The weight of materials which will compose the truss being yet unknown, the horizontal strain upon the chord can be determined at this stage of the investigation, only approximately.

The whole weight of the bridge may be assumed at 180,000 lbs. The equally diffused portion of the train is 270,000 lbs. These weights, 450,000 lbs. evenly distributed are equivalent to 112,500 lbs. at the middle of each truss. Add to which, half the extra weight of the driving wheels (15,000 lbs.) and the result is a maximum vertical pressure of 127,500 lbs. at the middle of the truss. The horizontal strain at that point will be—

$$18 : 75 :: \frac{127,500}{2} : 265,625 \text{ lbs.}$$

and at 1,000 lbs. per square inch the chord will require a sectional area of 265½ square inches.

If desirable to make the breadth 28 inches, a depth of 9.5 inches will be sufficient, provided the chord is made entirely solid.

The difficulty of obtaining a solid chord, of such dimensions, leads to the necessity of adopting a combination of smaller timbers, secured together by means of splices, packing blocks, keys, bolts, etc. In this case the width of the chord may be made up of 4 pieces, each 7 inches in thickness.

A splice in each panel will cause a reduction of about 4 inches, and if the packing blocks, or combination keys, cut off half an inch on each side, a further reduction of three inches will be made, reducing the width of chord available for resisting the horizontal strain, to 21 inches.

The depth will then be increased to 12½ inches of solid timber, but as the angle-blocks and packing bolts will cut away about 2½ inches of the depth, it must be increased to 15 inches.

It is usual in packing a chord of this kind, to allow a space of an inch or more, between the pieces, for the vertical tie-rods; for ventilation of the timber and for arranging the width of the chord to suit the width which may be necessary for the braces and counter-braces. The length of bolts, the thickness of packing blocks and of the splicing pieces, will depend on the spaces so allowed.

The weight of the bottom chord may be estimated as follows:—

16 pieces of pine, 40 ft. long, 15×7 in.	
=466½ cub. ft.....	14,000 lbs.
240 iron bolts, 33 in. long, ½ in diameter,	
nuts, washers, etc., at 6 lbs.....	1,440 "
Packing and splicing blocks, straps,	
keys, etc.	560 "

Weight of lower chord complete.....16,000 lbs

3. The Top Chord.

The breadth of the top chord, will, of course, correspond to that of the bottom one, and as it is liable to compression only, the whole section can be made available to resist that strain, which, at the middle of the truss, is 265,625 lbs. as in the case of the lower chord.

If the depth be made 11 inches, the length of each panel will be 11 diameters, and the chord will be capable of resisting a thrust of 875 lbs. per square inch. Then $11 \times 28 \times 875 = 269,500$ lbs., an excess of 3,875 lbs. Its weight will be—
16 pieces pine, 40 ft. long, 11×7 in., 342
cub. ft. 10,260 lbs.
240 iron bolts, heads and nuts complete 1,440 "
Packing blocks, splicing pieces, straps,
etc. 300 "

Weight of top chord complete...12,000 lbs.

4. The Principal Braces.

It has been assumed that the half weight of the bridge is 90,000 lbs. which is at the rate of 6,000 lbs. per panel. Adding the effect of this weight to that of the train as given in the table of maximum strains upon braces, the result will be—

	Vertical, lbs.	Oblique, lbs.
On braces <i>Gh</i> and <i>Ki</i>	23,000	26,311
" " <i>Fg</i> " <i>Lk</i>	39,000	44,614
" " <i>Ef</i> " <i>Ml</i>	55,000	62,918
" " <i>De</i> " <i>Nm</i>	71,000	81,221
" " <i>Cd</i> " <i>On</i>	87,000	99,525
" " <i>Bc</i> " <i>Po</i>	103,000	117,828
" " <i>Ab</i> " <i>Qp</i>	119,000	136,131

If each of these oblique strains be divided between two braces, having a uniform thickness of 7.5 inches, and the half length of those braces be taken as was done with the counter-braces, they will resist a thrust of 740 lbs. per square inch, and their depth will be very nearly equal to their corresponding counter-braces.

The depths of the braces will then be—

<i>Gh</i> and <i>Ki</i>	$\frac{26,311}{740 \times 7.5 \times 2} = 2\frac{1}{2} + 2\frac{1}{2} = 4\frac{1}{2}$ inches.
<i>Fg</i> " <i>Lk</i>	$\frac{44,614}{740 \times 7.5 \times 2} = 4 \times 1\frac{1}{2} = 5\frac{1}{2}$ "
<i>Ef</i> " <i>Ml</i>	$\frac{62,918}{740 \times 7.5 \times 2} = 5\frac{1}{2} + \frac{1}{2} = 6\frac{1}{2}$ "
<i>De</i> " <i>Nm</i>	$\frac{81,221}{740 \times 7.5 \times 2} = 7\frac{1}{2} + \frac{1}{2} = 8\frac{1}{2}$ "
<i>Cd</i> " <i>On</i>	$\frac{99,525}{740 \times 7.5 \times 2} = 9$ "
<i>Bc</i> " <i>Po</i>	$\frac{117,828}{740 \times 7.5 \times 2} = 10\frac{1}{2}$ "
<i>Ab</i> " <i>Qp</i>	$\frac{136,131}{740 \times 7.5 \times 2} = 12\frac{1}{2}$ "

An addition is made to the resulting depths of the first four sets of braces, to provide against upward or downward deflection.

These braces contain 233½ cubic feet, and weigh 7,000 lbs.

5. The Vertical Ties.

The weight to be sustained by the vertical ties, will be increased by the pressures growing out of the weight of the bridge, and which have been added to the vertical effect upon the brace.

As there will be the thrust of two braces, and of a counter-brace, intermediate, upon an angle block; and as there may be three open spaces in the chord, through which vertical rods can be passed without cutting away any of the fibres of the chord: every vertical tie may be composed of

three separate iron bolts or rods, each sustaining one-third of the stress.

The length of these bolts will be about 21.25 feet, to which, for the purpose of estimating their weight, 9 inches may be added as an equivalent for their heads and nuts, making their whole length 22 feet.

Diameters and Weights of Bolts.

Designation of the ties.	Weights to be sustained. lbs.	Weight per bolt. lbs.	Diameter of bolts. inches.	Weights of bolts. lbs.
<i>Hh</i> and <i>Ii</i>	30,000	10,000	1½	438
<i>Gg</i> " <i>Kk</i>	45,000	15,000	1½	655
<i>Ff</i> " <i>Ll</i>	60,000	20,000	1½	915
<i>Ee</i> " <i>Mm</i>	75,000	25,000	1½	1,218
<i>Dd</i> " <i>Nn</i>	90,000	30,000	2	1,386
<i>Cc</i> " <i>Oo</i>	105,000	35,000	2½	1,564
<i>Bb</i> " <i>Pp</i>	120,000	40,000	2½	1,754

Total weight of 42 bolts.....7,930

When the bridge is not loaded, each of the counter-braces *Ba* and *Pq* has a vertical pressure of 77,000 lbs. which must be resisted by ties at *Aa* and *Qq*. If three iron bolts 1½ inches in diameter, be used for each of these ties, the six bolts will weigh 1,218 lbs., and the total weights of the 48 bolts will be 9,148 lbs.

The screw end of the bolts should be enlarged so that the whole thread will project beyond the diameter of the body of the bolt; otherwise the diameter for the entire length should be increased as much as the depth cut to make the thread.

6. Angle-blocks and Counter-clamps.

Cast iron angle-blocks and counter-clamps, of a length equal to the width of the chord, and a width and depth proportionate to the force exerted upon them, should be used to equalize the pressures and prevent any crushing of the chords transversely of their fibre, by the tension of the rods, or the thrust of the braces and counter-braces.

At 300 lbs. per square inch the width required for these at *B* and *b* will be 14.3 inches, and at *H* and *h* 3½ inches. If 200 lbs. be taken as the limit the extremes of width will be 21.5 and 5.5 inches. To suit the depth of the braces and counter-braces, the angle-blocks at *B* and *P* should have a bearing of about 18 inches, and at *G* and *K*, 6 inches.

The weights of the angle-blocks and clamps will depend very much on the judicious disposition of the metal in giving them a proper form. They will probably range from 200 to 1,600 lbs. for each vertical tie and average 650 lbs. making the total weight for the truss 10,400 lbs.

7. The Lateral Braces.

The trusses should be connected at the top by lateral ties and braces, or one brace and two ties for each panel will be sufficient. The dimensions will be most likely to depend upon the violence of winds, and the surface exposed thereto. To resist a pressure against the top chord, of 20,000 lbs. per panel, the following will be sufficient:—
16 pine braces, 16 feet long, $7 \times 8 = 100$
cubic feet.....3,000 lbs.
30 iron ties, 26 ft. long, 1½ in. diameter, 2,622 "

Total top lateral bracing.....5,622 lbs.
One-half on each truss.....2,811 "

The bottom chords require a very thorough

system of lateral bracing, to resist the surges of the engine and train. Much depends upon the fidelity with which the ends of the floor beams are bolted to the chord, and the track stringers clamped to the floor beams. Braces and ties may be conveniently inserted below the floor beams, when these rest upon the chords.

The following may suffice:—

260 bolts, 3 ft. long, 1 inch in diameter, 2,100 lbs.	
64 stirrups for track stringers	1,000 "
30 pine braces, 19 ft. long, 6×7 in., 167 cubic feet.....	5,010 "
16 iron ties, 21.5 feet long, 1½ inch dia- meter	1,728 "
32 angle-blocks, at 30 lbs. each.	960 "

Total bottom lateral bracing...10,798 lbs.

One-half on each truss 5,399 "

8. Miscellaneous Items.

The end posts *Aa*, *Qq*, unless they are depended upon for ties have no office to perform, in sustaining the bridge or load, but to serve as abutments for the support of the half angle-blocks. Their dimensions are, therefore, of no very great importance. If they be made with a section of 6 by 30 inches, the four posts will contain 92 cubic feet and weigh 2,760 lbs.

The principal weights have now been computed and are as follows:—

Counter-braces	4,500 lbs.
Bottom chord	16,000 "
Floor-beams, track, etc., 160 feet.....	20,000 "
Top chord	12,000 "
Vertical ties	9,148 "
Angle-blocks and counter-clamps	10,400 "
Lateral bracing, top.....	2,811 "
Do. do. bottom	5,399 "
End posts	2,760 "

Total weight one-half of bridge90,018 lbs.

It should be noticed here that this estimate is for a truss, 160 feet long, while the weight assumed (90,000 lbs.) was for 150 feet, the distance unsupported between the abutments. The end posts and ½ of the chords, floor-beams, track, etc., are estimated to weigh 5,760 lbs., which, if deducted, leaves the actual weight of the 150 feet 84,258 lbs. or 5,742 lbs. less than was assumed.

The maximum weight which will bear upon the abutments at one end of the truss, to wit:

½ of weight of bridge.....	45,009 lbs.
½ of train less extra weight of drivers.....	67,500 "
½ of extra weight of drivers	15,000 "

Total at end of truss127,509 lbs.

The chord will require a fair bearing of 23 by 28 inches, at 200 lbs. per square inch; but, if a white oak bolster or *corbel* be interposed, its bearing upon the wall plate may be reduced to 16 by 28 inches, if the wall plate be also of oak.

9. Of Horizontal Strains.

The maximum vertical strains, at *B* and *P* are each 120,000 lbs.—still assuming the whole weight of the bridge at 180,000 lbs.—of which strain 105,000 lbs. may be considered as constant and 15,000 lbs. as variable.

When this variable pressure acts at *B* it produces a vertical effect of 14,000 lbs. upon the brace *Ab* and 1,000 lbs. upon the brace *Qp*.

The horizontal effect upon the brace *Ab*, of these constant and variable pressures taken separately will be,

18 : 10 :: 105,000 : 58,333½ lbs. constant, and
18 : 10 :: 14,000 : 7,777½ " variable, or

Total...119,000; 66,111½ "

acting on the whole length of the chord from A to Q and b to p.

When the variable weight acts at C, the maximum vertical pressure at that point is 105,000 lbs.; of which 90,000 lbs. are constant and 15,000 lbs. variable. Of this variable 13,000 act upon A through the brace cB and bA, and 2,000 lbs. upon Q through all the braces on the opposite side.

Then 18 : 10 :: 90,000 : 50,000 constant effect, and 18 : 20 :: 13,000 : 14,444 variable do. the first of which acts only between the points B and P of the bottom chord, and c and o of the top chord, while the last acts from A to Q and b to p.

The maximum horizontal strain between B and P is $1,041\frac{1}{2} + 58,333\frac{1}{2} + 50,000 + 14,444\frac{1}{2} = 123,819\frac{1}{2}$.

The first item is the effect of the weight of one-half the extreme panel, that is—

$$18 : 2.5 :: 7,500 : 1,041\frac{1}{2} \text{ lbs.}$$

Taking the effects of the maximum weights at each point, the following will be the results:—

At	Vertical pressures.		Horizontal strains.			Application.
	Variable.	Constant.	Variable.	Constant.	Maximum.	
A	15,000	112,600	.....	.....	.....
+	.....	7,600	.....	1,041	.....
B	14,000	105,000	7,777	58,333	67,252	A to B
C	13,000	90,000	14,444	50,000	123,819	B to C
D	12,000	75,000	20,000	41,666	171,041	C to D
E	11,000	60,000	24,444	33,333	208,719	D to E
F	10,000	45,000	27,777	25,000	237,152	E to F
G	9,000	30,000	30,000	16,666	256,041	F to G
H	8,000	15,000	31,111	8,333	265,486	G to H
×	7,500	.....	31,250	.....	265,625	H to I

Note. X Refers to the centre point of the truss, and + to the half panels at the ends of the truss.

Taking the horizontal strain at the middle of the chord as a unit of comparison, the percentage of horizontal strains to each panel will be—

G to K and h to i	.....	100 per cent.
F to G and g to h	.....	97 " "
E to F and f to g	.....	90 " "
D to E and e to f	.....	79 " "
C to D and d to e	.....	65 " "
B to C and c to d	.....	47 " "
A to B and b to c	.....	26 " "

Thus it appears that there exists a large surplus of material and strength in the chords towards their extremities.

The horizontal strains in this example are subject to considerable reduction, as will appear from the following considerations.

The height of truss was assumed to be 18 ft. This height was used in calculating the lengths of the braces, etc., consequently the half depths of the chords should be added, which will make the truss 19 $\frac{1}{2}$ feet high from centre to centre of chords.

The weight of the truss is 84,258 lbs. as computed, or 5,742 lbs. less than was assumed.

The weights of braces, counter-braces, vertical ties, angle-blocks and counter-clamps, are not evenly distributed. Without going into a close calculation of these, it will be sufficiently accurate to assume that they are in proportion to the weights sustained by the vertical tie-bolts. Reckoning from H to A, their weight will not vary much from $(800 + 1,200 + 1,600 + 2,000 + 2,400 + 2,800 + 3,200 + 1,524) \times 2 = 31,048$.

The vertical effect at the middle of the truss,

produced by 2,800 lbs. at C, 20 feet from the abutment A is 746 $\frac{1}{2}$ lbs., for 75 : 20 :: 2,800 : 746 $\frac{1}{2}$.

Making a similar calculation for each tie, the 31,048 lbs. unevenly distributed will be found to produce a vertical effect at the middle of the truss equal to 11,745 lbs.

The maximum load at the middle of the truss may be summed up as follows:—

	Lbs.
135,000 lbs. of the train uniformly distrib'd.	67,500
53,210 " " " bridge " "	26,605
31,048 " " " unevenly " "	11,745
15,000 " extra weight of engine at middle.	15,000

Total load at middle..... 120,850

The horizontal strain at the middle will be—

$$19\frac{1}{2} : 75 :: \frac{120,850}{2} : 237,478 \text{ lbs.}$$

This will admit of reducing the top chord to 10 inches, and the bottom chord to 14 inches in depth.

All dimensions of materials in this example have been calculated on the principle that their elasticity must not be impaired by use.

By avoiding joints and splices near the middle of the bottom chord; by a judicious disposition of the metal in the angle-blocks, etc., and by a careful revision of the whole arithmetical operations—substituting proportions different from those here assumed—something of a reduction may still be made in the quantity of materials, and much may be done to improve the structure.

(To be continued.)

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending May 23, 1859.

	BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	68	83
Covington and Lexington, 2d Mortgage	68	60
Cinc. & Ham. and Dayton, 2d Mortgage	78	85
Indianap. & Cincinnati, do.	78	89
STOCKS.			
Cincinnati, Hamilton & Dayton	60	
Columbus and Xenia	87	
Indianapolis & Cincinnati	60	
Little Miami	69	

Railroad Earnings.

The receipts of the Grand Trunk Railway of

Canada for the week ending May 7,	
were.....	\$46,923 76
Week ending May 8, 1858	42,083 89

Increase.....	\$3,839 87
Total traffic from July 1st.....	\$1,954,086 17
Same period last year	2,037,481 51

Decrease.....	\$87,235 21
The earnings of the Erie Railroad for the month of April, 1859, were.....	\$380,342 75
Earnings April, 1858	558,129 28

Decrease.....	\$177,786 53
The April earnings of the New York Central road were in 1858.....	\$668,424
1859	443,500

Decrease.....	\$224,924
The April receipts of the Lake Erie and Western road (Wabash Valley) were:	
Passengers.....	\$21,594 09
Freight.....	43,754 92
Miscellaneous.....	3,333 00

Total.....	\$68,682 01
April, 1858	93,812 62
Decrease.....	\$25,130 61

The following is a statement of the earnings of

the Pittsburg, Fort Wayne and Chicago Railroad for April, 1858-9:

	1858.	1859.
Freight.....	\$61,737 57	\$60,325 00
Passengers.....	72,356 31	70,324 67
Mails.....	4,482 29	7,825 00
Miscellaneous.....	1,229 17	3,000 00

Total.....\$139,805 34 \$138,774 67

Comparative statement of earnings and expenses for the month of April, 1858 and 1859, of the Buffalo and State Line Railroad:

	1858.	1859.
Passengers.....	\$46,007 16	\$35,793 61
Freight.....	40,547 60	27,111 81
Other sources.....	1,150 00	1,624 50

Totals.....\$87,704 76 \$64,529 92

	1858.	1859.
Construction.....	\$493 90	.....
Maintaining road.....	13,886 71	15,105 64
Repairs of machinery.....	6,325 84	4,064 75
Operating.....	20,975 52	15,231 21

Totals.....\$41,681 97 \$34,401 60

Decrease in gross earnings.....	23,174 84
" expenses.....	7,280 37

net earnings..... 15,894 47

The earnings of the Rock Island Railroad in April were.....\$72,319 09

April, 1858..... 92,120 00

\$19,800 91

The earnings of the Macon and Western road for April were:

1858.....	\$25,034 69
1859.....	24,681 84

Decrease.....\$35,285 27

The receipts of the Cattawissa Railroad Company for April, 1859, were.....\$34,201 93

Less due connecting roads..... 6,097 14

Net receipts for April, 1859.....\$28,104 84

Net receipts for April, 1858..... 23,079 57

Increase, 22 per cent..... \$5,025 27

The following statement shows the business of the Reading Railroad for the month of April:

	1859.	1858.
Received from coal.....	\$134,514 98	\$137,416 35
Do. merchandise.....	47,537 18	32,644 20
Do. travel, etc.	33,422 43	33,904 76

Total.....\$215,474 59 \$203,965 31

Transportation, road-way, dumpage, renewal Fund, and all charges.....112,374 83 113,914 98

Net profit for the month, 103,099 76	\$90,050 33
Do. for previous 4 mos. 295,959 97	239,502 54

Total net profit for 5 months.....\$399,059 73 \$329,552 87

Main Trunk of Georgia.

The iron is laid on this road some 15 miles beyond the terminus of the Savannah, Albany and Gulf Railroad, and 93 miles from Savannah. The road is graded some 15 miles further, with all the materials for construction prepared and on the ground.

Railroad on the Western Side of Lake Champlain.

Measures are again being taken for the construction of a railroad on the western side of this Lake. A meeting was lately held at Elizabethtown, to devise means for furthering the project.

Liberal subscriptions and releases of land for the track, it is said, could be easily procured. A. C. Hand of Elizabethtown, George W. Goff of Port Henry, and Oliver Keese, Jr., of Keesville, were appointed a committee to learn what encouragement and aid can be derived from all sources.

American Railroad Journal.

Saturday, May 28, 1859.

Weekly Summary.

Milwaukee and La Crosse Railroad.—This road was sold on the 21st inst., under the third mortgage, for seventy-five per cent. of the amount due, being over \$1,500,000, thus winding up by far the most gigantic railroad swindle ever perpetrated. From the commencement, this road has been the victim of designing men, who have used it, and only too successfully, in fleecing the public. By dexterous appeals to it, aided by the daily press of this city, a considerable portion of which were undoubtedly directly subsidized, this scheme for a time obtained an extraordinary degree of popularity. The favor with which its stock and securities were held, was met by extraordinary, and in many cases fraudulent issues, till the amount reached some \$18,000,000, and for a road which did not probably cost \$6,000,000. What would seem extraordinary in this case is, that no attempt has ever been made to bring any of the offending parties to justice, or even to make them disgorge their ill-gotten gains. This was the company that bought up the Legislature of the State, as a means of obtaining a land grant, inflicting a deep stain, not only upon the State of Wisconsin, but upon our National character.

Only a few years since, Wisconsin was regarded with very great favor, as one of the safest of the Western States for the investment of capital, particularly its railroads. It now occupies the lowest position of any State. Everything there is in default—cities, municipal bodies of all kinds, as well as railroad companies. There is a general repudiation of farm mortgage bonds—which ingenious and pleasant contrivance whereby to raise money, was first devised in this State, and by which millions were drawn into it, to be squandered and lost in her railroads. At all these acts of repudiation the State Legislature connives. The courts will very probably follow the inclination of the people, leaving but a poor hope for the unlucky parties who have sent their money into this State.

Shipments of Specie.—Since and including the 30th of April, there have been shipped from this country to England \$11,458,000 in specie. On Saturday, the 28th inst., \$2,000,000 will probably go forward, making a total shipment for the month of \$13,458,000; a sum larger than all the Banks in this city were accustomed to hold previous to 1858. That such a sum could be exported in so short a time, without disturbance to the money market, and without apprehension for the future, is gratifying evidence of the general soundness of the country, and we have learned a useful lesson in political economy—that a gold producing country may ship this metal with the same propriety and safety as any other of its products.

Railroad competition continues without any abatement, and without any immediate prospect

of its ceasing. We presume that the managers of the Penn., and the B. and O. Railroad, feel that they cannot meet the terms of the New York Central without forfeiting their places. These roads were built mainly to advance the trade of the cities of Philadelphia and Baltimore. Their geographical position has been supposed to give them an advantage over New York for the trade of some portions of the interior. To admit that they do not possess such advantage would be to give up ideas that have become traditional with the people of these cities. One cannot help appreciating the difficulty of their positions, but we do not see that it is in fact much more difficult than that of the managers of the New York Central, who do not like to admit what would seriously impair their moral position, if not their revenues.

Railroad Earnings.—We give below a comparative statement of the earnings of a number of our leading roads for the month of April for three years past. Many show a regular and most extraordinary decrease. That of the roads terminating at Chicago is the most marked. The aggregate of their receipts do not equal one-half of what they were two years ago. The loss must, in a great measure, be due to the small crops of the two years past, and to the almost entire stop put to emigration from the east to the west. There are 600,000 people in the State of Iowa, 800,000 in Wisconsin, and 200,000 in Minnesota—more than a million of whom have been carried there, with all their effects, within the past nine years. The transportation of this immense crowd was of itself a lucrative business to East and West lines. This particular kind of traffic is nearly at an end. It cannot be doubted, however, that the commerce which this population will create, when a sufficient time shall have elapsed to have them profitably employed, will supply a traffic to the roads far greater than the mere carriage of persons. Subjoined is the comparative statement referred to:—

Roads.	1857.	1858.	1859.
N. Y. and New Haven...	\$76,212	\$68,595	\$77,861
New York and Central...	713,988	668,424	486,697
New York and Erie...	526,029	558,129	380,342
Michigan Central...	298,299	223,010	143,143
" Southern...	237,455	180,183	144,612
Galena and Chicago...	194,217	139,439	90,041
Chicago and R. I.	155,710	92,120	72,319
Illinois Central.	206,341	179,991	152,512
Chic., Burlington and Q. 115,832		83,180	79,987
Milwaukee and Miss....	45,086	76,089	.....
Terre Haute and Alton...	68,076	75,832	.....
Wabash Valley.....	31,468	93,312	68,082
Little Miami.....	81,153	91,804	84,823
Clev., Columbus and Cin.	95,244	94,547	81,425
Pittsbg., Ft. W. and Chic.	162,742	139,807	138,774
Pennsylvania.....	488,165	550,595	.....
Baltimore and Ohio.....	464,948	485,596	369,067
New Jersey Central.....	63,049	70,907	81,824

The Prospect for the Future.—We have in the United States, in a degree possessed by no other country, a corrective of commercial revulsions, or of an excessive stimulus of any particular interest, (whereby the production, or the means for production exceeds the demand,) in the rapid growth of our population; or the equally rapid increase in their capacity to consume. For example: the annual increase of our population is at the rate of 3.50 per cent. Our total population in 1850 was 23,200,000, the annual rate of increase, consequently, has been 812,000, which at the present time would give us a total of 31,000,000. Assuming a similar rate for the future, the

annual increase would be 1,080,000. There is no doubt whatever, that the present increase of population in the United States is at a rate exceeding a million of souls. We have, therefore, an annually increasing domestic demand for our products, equalling the wants of one million of people. Our industry can safely expand in a similar ratio. But we cannot expect that population and production will always proceed at a uniform pace; the one moves forward by a regular law; the other is influenced by extraordinary causes, by which some one department of industry is always pushed to excess. Fortunately, however, a pause, or a slight decrease in production, is all that is necessary to let demand ever take it. The aberrations of trade, or commercial excesses of any kind, have with us consequently, healthy correctives, working with all the regularity of law and in a manner so speedy, that a year or two is all that is needed to give to our most depressed interests activity and life.

We have now an excellent illustration of the correctness of these remarks, in the prosperous condition of the manufacturing districts at the East, particularly in New England. Only a short time since, the manufacture in cotton goods was pushed to a point far exceeding the demand. This, necessarily, checked the construction of new works. The demand in the meantime has so far increased, that embarrassed as is a portion of the country—particularly the north-western States—our cotton mills are full of work, with a better demand than has existed for years. A prosperous period of considerable duration may now be safely counted upon for this branch of industry. The same is true of many others. With the exception of iron, all the manufacturing interests of the country are in a prosperous condition.

The only portion of the country really embarrassed at the present time, is the northwestern States, owing mainly to the unproductive seasons. Should the present prospects of good crops be realized, they will go far towards restoring the wonted prosperity of this section. A million more mouths upon our own soil are to be fed every year, and the consumption of food of all kinds is likely to keep pace pretty nearly with the supply.

Another constantly increasing source of demand is the increasing ability of our people to purchase and consume. This is in much greater ratio than the gain of our population. It is in ratio to the progress of inventions and the arts, and to the means that are supplied for the interchange of commodities. The internal and foreign trade of the country, which measures the degree of consumption, has more than doubled within ten years past. Our population in the meantime has increased at the rate of only 31 per cent. We are as likely to witness as rapid progress for the next, as for the past ten years. These elements have been little regarded, heretofore, in the science of political economy, from the slow progress of population in the old States, and from the fixed and unchanging condition of the great mass of their population. Here labor receives all it earns, and is stimulated to extraordinary exertions from the rewards it brings. We consume, consequently, vastly more than any other people in proportion to our numbers. The activity of demand is certain in all cases to overtake production, should that happen from any accidental course to slacken. No inter-

est can long remain depressed. For similar reasons, our railroads cannot long remain in their present depressed state. The same law that restores all other's interest, will soon come to the aid of this. With a good crop the coming season, we are confident that our roads have seen their worst, and that they will soon show the favorable results of their most prosperous days.

The prices for the week of the leading securities in the market have been as follows:

	May 19.	20.	21.	23.	24.	25.
Missouri Gs.	83½	83½	83½	83½	83½	83½
Del. and Hud.	94	94	94	94	94	94½
Pacific Mail.	75	73½	74	72½	73	74½
N. Y. Central ...	72½	72½	72½	71½	72½	72
Hudson River.	31½	31½	31½	..	31½	..
Panama 118	118½	117	..	118	118	..
Harlem Pref.	36	37	37½	37½	..	36½
Reading 45½	45	45½	45½	..	44	..
Michigan S'th'n. 9	9½	9½	..	..	9½	..
" Pref.	32	31½	31½	32	32	..
" C't'l.	41	41½	41½	41½	42	42
Ill. Cent'l shares. ..	55	..	55	53	53½	..
" 7s.	80	79	78	78	77½	74½
Gal. and Chicago. 62½	63½	62½	63½	63½	64	..
Clev. and Toledo. 27	27	26½	27	27	27½	27½
Chi. and Rock I. 62	62	62½	61	62	61	..
Tennessee Gs. ...	90½	90½	91½	90½	90½	90½
Virginia Gs.	94½	95½	94½	96	97	97

The closing prices for the week ending the 25th inst. were as follows:

Ohio Gs, 1860	102½
Erie, 4th mortgage, 75	42½
Hudson River, 1st mortgage, 7s	105
Do. do. 2nd do.	96½
Michigan Southern, 2nd mortgage	56
Hannibal and St. Joseph R. R. Bonds	65
Erie Railroad Shares	7½

New City Loan.

Proposals are invited, as will be seen by an advertisement in another column, for \$300,000 of "the Central Park Improvement Fund" for the city of New York. Tenders will be received to June 16th. Other conditions to be complied with may be learned by reference to the advertisement.

A list of the principal makers of *Engineering, Surveying, and Drawing Instruments* will be found on another page. For the past year or two but little has been done by the "Profession"—hence but few demands have been made upon the manufacturers. The latter have not, however, been idle; but have improved the time, by making and laying by a stock, in order that they may be prepared to fill orders which must flow in upon them apace on the revival of business. A number of removals, changes, etc., have recently been made, which are noted in their cards, and to which we desire to directed attention.

Dubuque and Pacific Railroad.

We invite attention of contractors and capitalists to a notice in another column calling for proposals for the completion of this road. It is an enterprise that offers remarkable inducements to parties having means, as the road has an excellent route for business, and valuable land grant, equal in value to what the road can be built for. Notwithstanding the depressed condition of railroads, we believe it will not be long before this project is favorably entertained by capital as a matter of investment.

Name of Road.	Length.	Capital p'd in.	Indebtedness.	Cost of r'd & equipment.	Rec'd from pass'gers.	Rec'd from freight.	Do. Miscellaneous.	Gross receipts.	Current expenses.	Net earnings.	Interst p'd.	Amount of Divid's.
New York and New Haven.....	62	\$2,980,839	\$2,194,051	\$5,324,527	\$145,254	\$141,406	\$19,950	\$386,610	\$607,501	\$229,109	\$142,640	\$90,000
Hartford and New Haven.....	72	2,350,000	964,000	3,320,667	871,906	215,557	40,781	698,245	306,854	321,391	56,545	230,000
Norwich and Worcester.....	66	2,122,300	775,280	2,613,694	111,229	157,872	14,454	283,556	183,189	100,367	46,267	..
Providence, Hartford and Fishkill.....	122	2,042,539	2,161,691	4,205,966	160,664	122,394	16,537	298,595	163,588	135,007	..	..
New London, Willimantic and Palmer.....	66	510,900	1,052,000	1,573,568	42,297	53,194	8,993	104,484	73,972	30,512	..	..
Housatonic.....	74	2,000,000	355,175	2,438,847	90,929	138,918	21,426	271,273	227,570	43,703	96,050	..
Naugatuck.....	57	1,031,800	334,095	1,578,301	69,118	116,753	18,655	199,536	133,206	66,330	26,643	..
Danbury and Northampton.....	24	279,050	93,256	384,925	26,728	26,127	3,189	56,044	35,426	20,618	6,342	..
New Haven and Northampton.....	55	922,500	5,000,000	1,400,000	77,218	77,217	..	154,436	103,656	50,800	35,000	..
New Haven, New London and Stonington.....	62	738,538	840,452	1,454,010	59,969	8,823	7,600	76,758	67,818	8,940	1,270	..
New York, Providence and Boston.....	50	1,508,000	306,500	2,158,000	117,843	83,095	..	208,439	111,867	96,572	21,455	..
Totals.....	691	\$18,727,367	\$11,256,092	\$26,452,545	\$1,773,155	\$1,161,367	\$188,451	\$3,117,976	\$2,014,627	\$1,103,349	\$432,212	\$423,825

The above table shows the following result:

	Per ct.
Rate of gross earnings to capital invested.....	11½
" net	3½
" expenses of all kinds to receipts.....	65
" dividends on capital stock paid.....	2½

The New London, Willimantic and Palmer, the New Haven, New London and Stonington, and the Providence, Hartford and Fishkill, paid neither dividends on their stock, nor interest on their indebtedness. The New London, Willimantic and Palmer, is in the hands of its mortgage bondholders, who are about foreclosing their mortgage. The Providence, Hartford and Fishkill is in the hands of its creditors. The amount paid to capital stock of these roads may be considered as lost. Also a great portion of the capital stock of the Housatonic Railroad, which has perpetual leases of three unproductive roads, on account of which it pays out of its net earnings about \$76,000 annually. This amount absorbs nearly all the net earnings of this road. The New York and New Haven loses about \$30,000 annually on its lease of the New Haven and Northampton Railroad. These two roads have been badly victimized by unscrupulous parties, who got control of them at an early day. The only eminently successful road in the State has been the Hartford and New Haven. Since its final completion, it has never failed to pay 10 per cent. annually to its stockholders; the road in the meantime being maintained in excellent condition. The Naugatuck for a number of years earned a dividend on its stock, and may, very probably, do so again. For a detailed view of the working of all the roads in the State, we refer to the tabular statements in the JOURNAL of the 30th of April.

To Bridge Builders.

Attention is invited to an advertisement in another column calling for proposals for the construction of an extensive bridge over the Savannah river, 13 miles above Savannah, on the line of the Charleston and Savannah railroad. The bridge is to be of wood, in 6 spans of 144 feet each—in all 1,070 feet. All materials for its construction are easily obtainable. It is thought that at least two years will be required for its completion.

New York Central Railroad Company.

PRESIDENT'S OFFICE,
Albany, May 24th, 1859.

To the Editor of the AM. RAILROAD JOURNAL:

Sir:—My attention has been called to a letter published in your JOURNAL of the 14th inst., from the President of the New York and Erie Railroad Company in reference to the present low rates of passenger fare and of freight charges.

The Buffalo and Corning Railroad, of which Mr. Moran speaks, is the western end of the Erie Railroad, on which its principal business is transacted. Mr. Moran admits that he controls this road, and that they first reduced passenger fares and cattle rates. This company was of course obliged to do the same. In regard to freights generally, Mr. Moran charges that the reductions originated with this company. I had hoped to have been spared newspaper discussion on this subject, but as Mr. Moran has seen fit to commence it, I feel called upon to say in the most decided manner, that this statement in all its material parts is wholly unfounded, and that he knew, or certainly ought to have known, when he wrote his note to you, that

in the reductions to which he refers, we only followed the course of his road, or its immediate connections, which he might and should have controlled. The management of Mr. Moran has been such as to inflict a vast injury on all the leading railroad interests of the country. He initiated a system which has led to the most disastrous results; and now that the effects of it are visited with peculiar force on the road over whose interests he presides, he seeks to throw the odium upon others. But this will not do. The great body of the intelligent railroad managers of the country know that he is responsible for the present low rates. All the attempts thus far made, the last, since Mr. Moran's article appeared, to induce the Erie Railroad to return to former rates, have failed, and while willing to make certain advances on freight, in which they are most deeply interested, they have utterly refused to consent to restore passenger fares to their former standard.

This company insists on an increase in both passenger and freight charges, and they are entirely persuaded that time will prove the correctness of the course they have pursued under the circumstances which surround the questions at issue.

Yours, &c.,

ERASTUS CORNING, President.

Journal of Railroad Law.

CORPORATE SUBSCRIPTIONS TO RAILROAD STOCKS—POWER TO ISSUE BONDS.

In the case of Oelrichs vs. The City of Pittsburgh, very recently tried in the United States Circuit Court in Pennsylvania, the principles of law regulating the validity of municipal subscriptions to the stock of railroad companies, were brought quite fully under review.

This action was brought by the plaintiffs, who are a mercantile firm in Hamburg, Germany, against the Mayor, Aldermen and citizens of Pittsburgh, to recover \$16,985 alleged to be due to the plaintiffs as interest on certain railroad bonds issued by the city and held by plaintiffs.

The plaintiffs produced in evidence coupons cut from the railroad bonds in question, each for six months' interest on \$1,000—thirty dollars each. One class of these coupons were cut from bonds issued by the city to the Alleghany Valley Railroad. These bonds were issued by the city under an act of the State Legislature passed in April, 1857. Another class were coupons from bonds issued by the city under acts passed in April, 1852, and May, 1854, to the Pittsburgh and Steubenville Railroad Company. Still a third class were from bonds issued under an act passed in February, 1853, to the Chartiers Valley road.

The bonds in question were issued under seal of the corporation, were signed by the Mayor, and attested by the Treasurer. The execution of them was not denied; but the defence claimed that they were invalid in law. Justice Grier gave the jury the following instructions among others:

The municipal corporation of the city of Pittsburgh, though it acts through a special legislature elected by the citizens, is entrusted with special, not general powers. It may pass ordinances in regard to its internal affairs, to preserve the peace and the health of the citizens, to regulate the streets of the city, and, in fine, all other matters connected with it which come under the denomination of internal police for the better government of the city. It may borrow money for the special purposes of the trust and authority confided to them, and lay taxes to raise money for these purposes. But it has no power, by virtue of its act

of incorporation, to exercise any discretion in making ordinances for the construction of canals, turnpikes or railroads, beyond the territorial limits of its jurisdiction. It cannot compel the citizens to become partners or stockholders in private corporations, or pledge, or encumber the individual property of the citizens in speculative undertakings. Its powers are only co-extensive with its duties. Hence the necessity of a special license from the Legislature to a municipal corporation to subscribe for stock in such corporations.

Whether the Legislature of the State may confer upon the officers of such municipal corporations the power to bind the people of a city or county by bonds, and to burthen them with taxes to raise money for external objects even of general interest, or to compel them to become partners in any and every incorporated association, is a question on which much difference of opinion exists. In this State, however, this question has been decided by your own Supreme Court, the only authoritative expounders of your constitution and statutes. To their decision, it is our duty to submit, without questioning its propriety.

Assuming, then, that the Legislature has the constitutional power to authorize the officers of a municipal corporation to bind the corporators by instruments such as those now declared on, with or without their individual consent, have they conferred it in clear and distinct terms? It is too important and dangerous a power to be assumed from inference or construction.

A statute may invest a corporation with powers contrary to the general rules of law, but they must be granted in clear and unambiguous terms; they will not be implied or presumed, and they must be exercised according to the strict interpretation of the grant. (Wilcox on Corp.; Kirk vs. Norvill, 1 D. & E., 124.) "This jurisdiction of a municipal corporation is local; its duties and its powers are local; and any power to act on subjects without, must be conferred by the legislature in language which cannot be mistaken."

1. The second section of the act of April, 1857, which is supposed to authorize the execution of the bonds in question, authorizes "any incorporated company, city or borough to subscribe to the stock of the railroad as fully as any individual." It is bare authority to *subscribe* for stock, or to become a stockholder in another corporation, as any individual might do. If the subscriber has money to invest in stocks, he may invest it in this railroad stock. The law gives the municipal officers permission, and nothing more. It confers no authority to issue bonds with or without coupons, or to tax the property of the corporators to pay for the stock or lift the bonds, or pay the interest on them.

The fourth section of the act of 14th of April, 1852, authorizes them to pay the amount of their subscriptions by transfer of other stocks held by them in other corporate companies; and the sixth section of the same act provides that the acts limiting the amount of corporate debts shall "not prevent either of said cities from subscribing" to the stock of the railroad. Here they are authorized to pay in stocks owned in other corporations, but not to contract debts or give bonds. And the release of a former disability cannot be construed to confer a power not before granted.

To support the plaintiff's case on this point, we must decide that the officers of the corporation have an unlimited power to subscribe the whole stock to build the road, say five to ten millions of dollars; and not only so, but to issue bonds, binding the corporators to pay principal and interest, and to lay taxes on their property for that purpose. In other words, to mortgage the whole income of the people of Pittsburgh. The court must instruct you that such an enormous and irresponsible power as is here claimed, is not to be found either in direct terms or by any legitimate inference in the acts of Assembly. The power is to the full extent I have stated or it does not exist at all. You are therefore instructed that the officers of the corporation, defendant, had no authority whatever to issue the bonds and coupons, declared upon and now produced. This disposes of the case so

far as regards the 403 coupons on the bonds issued to the Alleghany Valley Railroad.

2. Let us now examine the authority to issue the bonds to the Pittsburgh and Steubenville Railroad Company. These are issued under two several acts of the Assembly, which we will examine separately. The first issue is by virtue of the authority conferred by the third section of the act of 21st April, 1852—which is as follows: (Justice Grier here read from the act.) Here we have a direct authority given, not only to subscribe for 5,000 shares of the stock of the railroad company, but also to borrow money to pay therefor, and make provision for principal and interest of the money so borrowed. But it is also enacted "that no certificate of loan or bond shall be for a less sum than \$100, and shall be transferable only on the books of the city." Are these bonds and coupons within the authority thus conferred. The bonds do not set forth how they are to be transferred, but refer to this act which authorizes their issue. This suit is on the coupons. But the covenant of the bond is to pay to the railroad company and their assignees. On the back of the bond is endorsed a blank power of attorney to make an assignment on the books, but no assignment has been made. The interest is but an incident to the debt, and unless the plaintiff had the bond assigned to him according to the act, he has no right to demand the interest. There is no covenant to pay to the holder or bearer of the bond, and the interest is due only to the legal holder by assignment, and cannot be made payable to a third person. The act gives no authority to the city officers to make such negotiable instruments, having a different mode of transfer from the bonds to which they were attached.

Where a bond is payable to bearer, the bearer of the coupon shows a *prima facie* title to have the interest, because he was owner or holder of the bond when he cut it off. But where no one can show a legal title to the bond, but an assignee of the bond, there can be no presumption that he is entitled to the interest by mere possession of a coupon. The plaintiffs cannot, therefore, recover on the evidence, or any of the coupons taken from the bonds of the first issue.

As to the second issue. The act is different. It does not restrict the bond to assignees on the books of the city, and provides for and authorizes the issue of the coupons.

3. Lastly, the Chartiers Valley road. (Justice Grier here read to the jury the act of February 7, 1853.) Here is full authority to make the bond and coupons transferable as shall be directed by the city corporation. There is no city ordinance shown directing that the bonds shall be coupon bonds, but the corporation have issued them in that form. It will be presumed that it was so directed by them. I see no reason why plaintiff should not recover on these coupons on the ordinance in the case, if believed by the jury.

The plaintiffs have a right to interest on the coupons which the jury shall find to have been legally issued under the previous instructions, with interest from the day of payment.

On the conclusion of the charge, the plaintiff's counsel desired that a non-suit be entered with regard to the Alleghany Valley bonds, and those of the first issue to the Pittsburgh and Steubenville road.

The jury returned the following verdict: "We find for plaintiff the sum of \$2,400, with interest, to be computed by agreement of counsel on the forty-six coupons of the second issue of the Pittsburgh and Steubenville Railroad Company, and thirty-four coupons of the Chartiers Valley Railroad Company given in evidence."

The result of the trial as respects the interests immediately involved may be stated thus. The plaintiffs having been non-suited on the Alleghany Valley bonds, and the first issue of the Pittsburgh and Steubenville bonds, he will be obliged to sue anew upon these. As to the Chartiers Valley bonds, and those of the second issue to the Steu-

benville road, it is understood that the case will be carried before the Supreme Court of the United States for review; on exceptions taken by defendants to the rulings of the court. The decision on that appeal will determine the constitutionality or unconstitutionality of the law authorizing these subscriptions.

Notice to Bridge Builders.

ENGINEER'S OFFICE C. & S. R. R.
Charleston, May 23, 1859.

SEALED PROPOSALS WILL BE RECEIVED AT THIS Office until 12 M., on Saturday, 18th June next, for the construction of a single-track railroad Bridge across the Savannah River, about thirteen miles above the City of Savannah.

The said Bridge will have (6) six spans of (144) one hundred and forty-four feet each; and a swing bridge (190) one hundred and ninety feet long. (giving two openings of 80 ft. each.) The entire length of the Bridge will be about (1070) one thousand and seventy feet.

The superstructure of the Bridge to be of the most substantial character, and on the plan of Howe's Patent Truss.

The piers and abutments to be composed of cast-iron cylinders, (6) six feet in diameter; sunk by Pott's pneumatic process, through an average depth of (20) twenty feet of mud, sand, and gravel, and securely based upon the impenetrable substratum which underlies the bed of the river.

Proposals will be received at the same time for constructing the said Bridge on piers and abutments of brick, resting on piled foundations.

The plans and specifications, bills of timber and iron, may be seen, and all other information obtained, at this office, on and after Monday, 6th June.

EDWARD MANIGALT,
Chief Engineer, C. & S. R. R.

LOCOMOTIVES.

2 LOCOMOTIVES, about 13 tons, (second hand), 4 ft. 8 1/2 in. gauge, in excellent order for sale at a bargain.

GEO. T. M. DAVIS,
New York, May 24, 1859. 2nd 47 Exchange Place.

HAND CARS.

FOR sale SIX HAND CARS, first class in complete order.
A. BRIDGES & Co.,
64 Condit st.

ROLLING MILL FOR SALE.

A MERCHANT IRON AND WIRE ROD ROLLING MILL, situated in the City of Wheeling, Va., with Coal banks in rear of the mill containing an abundance of good bituminous coal.

The cost of the fuel delivered to the furnaces is but two and a-half cents per bushel.

Attached to the mill is a WIRE FACTORY and its appendages. Also a KIRK STEAM HAMMER for Forging Car Axles, etc. There is extra shafting and surplus of power for other work if required.

The extraordinary cheapness of the fuel, and the facilities for obtaining metals, and for shipping, both by water and rail, to all parts, particularly west and south, makes the locality a desirable one for the manufacture of IRON in any or all its branches.

For particulars address either of the subscribers.

P. A. BURDEN, Lansingburg, N. Y.
C. DEWEY, Cadiz, Harrison Co., Ohio.
E. M. NORTON,
P. C. HILDRETH, Wheeling, Va. \$250

PROPOSALS for \$300,000 CENTRAL PARK IMPROVEMENT FUND STOCK—Sealed proposals will be received at the Comptroller's office until THURSDAY, June 16, 1859, at 2 o'clock, P. M., when the same will be publicly opened, for the whole or any part of the amount of THREE HUNDRED THOUSAND DOLLARS OF THE CENTRAL PARK IMPROVEMENT FUND STOCK OF THE CITY OF NEW YORK, authorized by an Act of the State Legislature entitled "An act for the Regulation and Government of the Central Park in the City of New York," passed April 17, 1857, amended April 13, 1859, and by an ordinance of the Common Council, approved by the Mayor, May 13, 1859.

The said Stock will consist of Three Thousand Shares, of One Hundred Dollars each share, bearing interest at the rate of six per cent per annum, payable quarterly, and the principal sum redeemable on the 1st day of August, 1887.

The proposals will state the number of shares desired, and the price per share; and the person whose proposal is accepted will be required to deposit with the Chamberlain of the city, within three days after the opening of the bids, the whole sum awarded and covered by their bids respectively, including the premium, if any, thereon, and on presenting the receipt of the Chamberlain to the Comptroller, will be entitled to receive a certificate for the par value of the number of shares, bearing interest from the date of such deposit.

Each proposition should be sealed up and indorsed "Proposals for Central Park Improvement Fund Stock," and the proposals, thus sealed and endorsed, put in a second envelope sealed and addressed to "Robert T. Haws, Comptroller, New York." The right is reserved on the part of the Comptroller to reject any or all of the bids, if considered necessary to protect or promote the interests of the Corporation.

Department of Finance, Comptroller's Office, New York, May 17, 1859. ROBERT T. HAWS, Comptroller.

Notice to Contractors.

OFFICE OF THE DUBUQUE AND PACIFIC R. R. CO.,
Dubuque, Iowa, May 7th, 1859.

PROPOSALS WILL BE RECEIVED AT THE OFFICE of the Dubuque & Pacific Railroad in Dubuque, Iowa, for the construction of said road from its western terminus to Sioux City.

The following are approximate estimates of the amount of embankment and excavation

	Embankment Yards.	Excavation in earth. Yards.	Excavation in rock. Yards.
From end of present track, 2 miles beyond Nottingham to Winthrop, 20 miles.	125,000	56,500	700
Next 20 miles, west of Winthrop.	140,000	92,000	
From there to Cedar Falls, 20 miles.	165,000	105,000	
From Cedar Falls to Fort Dodge 92 1/2 miles.	1,116,000	150,000	6,500
From Ft. Dodge to Sioux City, 180 miles.	1,300,000	300,000	

The original estimates were for different gradings from those we now propose to adopt. The above estimates of work to be done are merely approximate, but are believed to be substantially correct. A large portion of the grading between the end of the present track and Cedar Falls, is already done; many of the culverts are put in; and the cross-ties for about fifty miles are delivered. Timber will be substituted for masonry. Proposals will be received for road bed and superstructure, without fencing and without buildings, except water tanks; and the company will furnish rolling stock for construction.

The amount of grading, as will be seen by the above estimate, is exceedingly small; the material as a general thing, is black loam soil. Timber is convenient of access in the vicinity of all the principal streams as far west as Fort Dodge; from there to Sioux City it is quite scarce; there is considerable, however, in the little Sioux, and occasional groves and patches scattered over the intermediate country. The Big Sioux and other streams in the vicinity of Sioux City, furnish an abundance of good timber. Bituminous coal of fair quality exists in abundance on the Iowa, Boone, Des Moines and Big Sioux rivers. The Missouri river is navigable for steamboats from Sioux City to Fort Benton, 1,900 miles, as ascertained by actual measurement by several United States officers. The United States appropriated one hundred thousand dollars to open a military road from Fort Benton to Fort Walla Walla, the head of navigation of the Columbia river; and Lieut. Mullan, U. S. A., is now at work with a strong force opening that road. When that is done, and the Dubuque & Pacific Railroad finished to Sioux City, this must become the main route to Washington, Oregon, and the Northwestern British Possessions. The region of country near the head waters of the Columbia and Missouri rivers, is one of the most beautiful and desirable in the world, according to the reports of the U. S. officers who made the Pacific Railroad surveys. All who visited that region for a great distance north and south, east and west, again and again, express their delight and agreeable surprise, in finding a country so contrary to all their preconceived notions. It has a fine climate and fertile soil, and is in every respect considered a country capable of sustaining a dense population. Nineteen hundred miles of navigable water through such a country, to say nothing of the great thorough route to the Pacific, must be a powerful feeder to our road. In view of these facts, the company deem it advisable to commence work at the west end as well as at the east. Payment will be made in construction bonds, drawing seven per cent interest, which are a lien on the road and on the lands granted by Congress; in county bonds, and in such local means as can be raised on the line of the road. The land grant is three thousand eight hundred and forty acres per mile, the same as the Illinois Central; the greater portion of the lands lie between Fort Dodge and Sioux City; all are within fifteen miles of the road. The construction bonds are receivable at par in payment for lands; when land is paid for with these bonds, the mortgage by its own terms ceases to be a lien upon it. Two hundred and thirty thousand four hundred acres of land belonging to the portion of road now completed, will be offered for sale on the 6th of June next, for construction bonds at par, at an average price of about four dollars an acre. The company intend to put the bonds and lands at rates which will induce capitalists, in these times, to undertake the building of the road. We are well aware that no one will undertake a work of this magnitude without strong inducements.

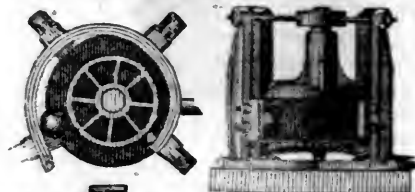
At least forty miles of road must be completed by the first of December next; this can easily be done, as the grading and bridging is far advanced, and the cross-ties are delivered. However, the forty miles to be completed by that time may be in two pieces of twenty miles each, one at each end of the road. Proposals will be received for the building of the whole line, or for portions of twenty, forty or sixty miles. As each twenty miles of road are completed, the company are entitled to sell an additional seventy-six thousand eight hundred acres of the land grant. The building of the west end of this road offers a favorable opportunity for founding a half dozen or more colonies on a large scale.

The company own, with but few exceptions, each alternate section (mile square) of land for fifteen miles on each side of the road. Twelve to fifteen stations may be located on the lands of the company; and the lands at the stations, except depot grounds and right of way, will be set aside to the contractors. The vicinity of Sioux City is a favorite spot for German emigrants. It is believed that most of the work can be paid for in lands and goods. Considerable work was done at the east end of the road last year, for goods, at lower prices than the same work could formerly be done for money. Maps and profiles may be seen, and further information had at the office of the company, in Dubuque, Iowa.

Adopted by order of the Board

F. S. WINSTON,
PLATT SMITH } Corresponding Com.
J. M. REDMOND.

HENRY BURDEN'S PATENT REVOLVING SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this Machine for the United States, now offers to make transfers of the Right to run said Machine, or sell to those who may be desirous to purchase the Right for one or more of the States.

This Machine is now in successful operation in ten or twelve Iron Works in and about the vicinity of Pittsburgh, also at Phoenixville, and Reading, Pa., Covington Iron Works, Md., Troy Rolling Mills, and Troy Iron and Nail Factory, Troy, N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are numerous:

Considerable saving in first cost; saving in power; the entire saving in shingling, or hammerman's wages, as no attendance whatever is necessary.

It being entirely self-acting; saving in time from the quantity of work done, as one machine is capable of working the iron from sixty puddling furnaces; saving of waste, as nothing but the scoria is thrown off, and that most effectually; saving of staffs, as none are used or required.

The time required to furnish a bloom being only about six seconds, the scoria has no time to set, consequently is got rid of much easier than when allowed to congeal, as under the hammer.

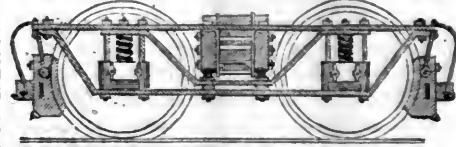
The iron being discharged from the machine as hot, rolls better and is much easier on the rollers and machinery.

The bars roll smoother, and are much better finished.

The subscriber feels confident that persons who will examine for themselves the machinery in operation, will find it possesses more advantages than have been enumerated.

For further particulars address the subscriber at Troy, N. Y.

P. A. BURDEN.



THE HUMPHREYSVILLE MANUFACTURING COMPANY, (SUCCESSORS TO DWIGHTS, FRENCH & CO.) SEYMOUR, CONN.,

ARE prepared to fill, at short notice, of the best materials and workmanship, orders for Wrought and Cast Iron Work, fitted ready for use, for the building or repairs of Passenger and Freight Cars, complete or in part.

A sample wrought iron truck can be seen at our office.

No. 5 Gold st., NEW YORK.

We also manufacture—
BEST FAGGOTTED CAR AXLES,
SALISBURY IRON CAR WHEELS,
WROUGHT IRON BOLTS, NUTS AND WASHERS,
RAILROAD JACK SCREWS, ETC.

RAYMOND FRENCH, President, Seymour, Conn.
WM. H. MARSHALL, Treasurer, No. 5 Gold st., N.Y.

WEISSENBORN'S PATENT Incrustation Preventer FOR STEAM BOILERS,

EFFECTUALLY obviates the Formation of Scale on the Plates by separating the incrusting matter from the water before it enters the boiler, at the same time condensing a large portion of the steam and supplying the purified water to the boiler at about boiling heat. The apparatus is compact, simple, and applicable to all kinds of Engines. Recent modifications render it still more efficient than an heretofore.

Testimony as to its successful operation in preventing scale, and also as a HEATER AND CONDENSER, can be furnished by the subscriber.

Probably no modern improvement connected with Steam Power combines so many advantages as this. The economy of Fuel alone from its use soon repays the cost of the apparatus. Prices reduced. Terms easy.

STEWART KERR, Engineer,

Agent, 15 Broadway, NEW YORK.

FREIGHT CARS FOR SALE.

27 CARS—Have been run about two years,—viz:—
5 long 8-wheel Box Cars, 2 with apartment for conductor
3 " " Cattle Cars.
19 " " Platform Cars.

These Cars are made in the best manner, with large axles, safety beams, brakes, lighter boxes, and have been newly painted and will be sold low for cash.

WILLIAMS & PAGE,
2nd 41 Water st., Boston.

IMPROVED BEARING SPRING

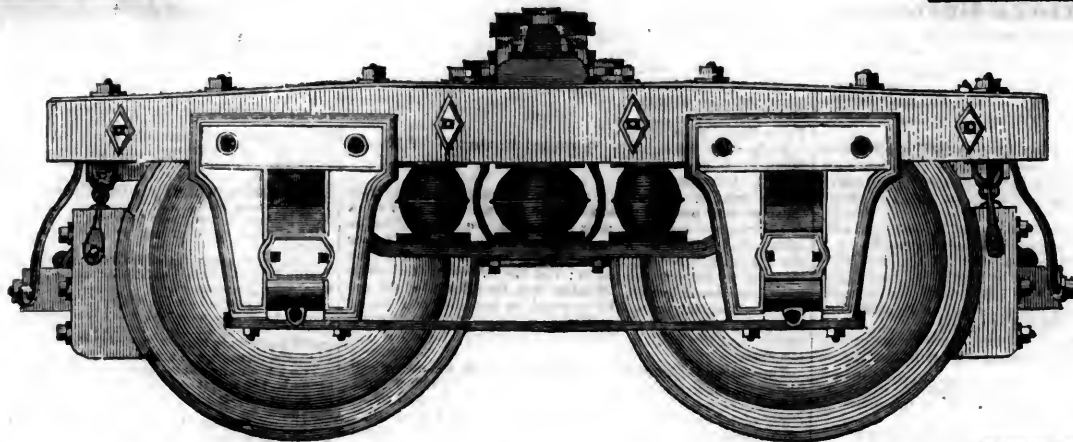
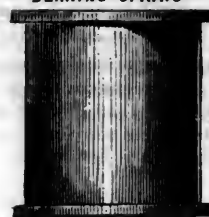


New England Car Spring Co.

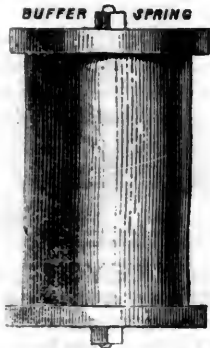
SOLE MANUFACTURERS

OF THE

BEARING SPRING



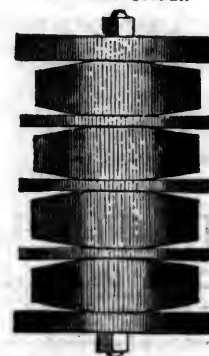
BUFFER SPRING



India Rubber Car Springs.

OFFICE, 61 CHAMBERS STREET,
NEW YORK.

IMPROVED BUFFER



JOURNAL

OF THE

American Geographical and Statistical
SOCIETY.

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Subscription Price, \$3.00 per year, or 25 cents per copy.
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PHENIX BLACK LEAD CRUCIBLES.

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Leather Belting and India Rubber Hose.
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MANUFACTURER of Superior Oak Tanned Stretched and Riveted **MACHINE LEATHER BELTING.** Best Lace Leather and Steel Hooks, always on hand; also Dealer in Vulcanized India Rubber Goods—viz, Croton and Steam Hose of all sizes. Steam and Piston Packing.

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FOR LOCOMOTIVE ENGINES,

Brass Domes, Escape Pipes, Steam-Chest Covers,
Cylinder Heads, Jackets, Raised Bands for Boilers, etc., etc.,

Also, **Smoke Stacks and Russia Iron Jackets.**

Also, **COPPER FLUES OF SUPERIOR QUALITY,** and

All other Copper Work for Locomotive and Stationary Engines.

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WHATMAN'S TURKEY MILL DRAWING PAPER, Tracing Paper, Plan and Profile, Protractors, Drawing Pins; Faber's, Jackson's, and other makers' Pencils; Field, Lovell and Memorandum Books of various patterns, Mathematical Instruments, Tape-lines, Mouth Glue, Cross Section paper, Triangles, Label Brushes, Gum Bands, Maiden Gum, Red Tape, Ink, Inkstands and Stand, Water Colors, Palettes, Patent Binders for letters, Portfolios, etc.,

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Swiss Drawing Instruments.

SUPERIOR to all others. Catalogues gratis. Sold only by
C. T. AMSLER, 635 Chestnut st., PHILA., Pa.

Dubuque & Pacific Railroad Company.

THERE will be an election of seven directors of said Company on Monday the 8th of June, 1859, at the office of the Company in Dubuque.

5t19

JAMES M. MCKINLAY,
Secretary.

WIRE ROPE.

THE subscribers having erected the most improved Machinery, are prepared to execute orders for **WIRE ROPE**, of all sizes and descriptions,

FOR COLLIERIES, INCLINED PLANES, STANDING RIGGING FOR VESSELS,
Also, for **MARINE TELEGRAPH PURPOSES.**

TUCKER, COOPER & CO.,
70 South st., New York.

Also, manufacturers of Patent Manila and Tarred Cordage, Packing Yarn, etc.

JAMES C. LANE,

Ex-Chief Engineer of Explorations in South-America, etc.

MECHANICAL AND CONSULTING ENGINEER,
Times Building, 41 Park Row.
Room No. 4, NEW YORK.

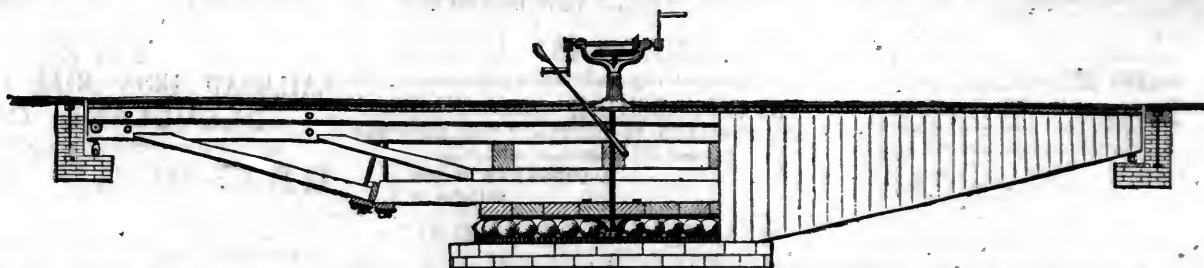
PATENTS NEGOTIATED.

DRAWINGS, Specifications, and Models, (metal or wood.) Applications for Patents, and all business whatever connected with Patents attended to with economy and despatch. Application for **PATENT**, including drawings, specifications and Patent Office fees, \$50.

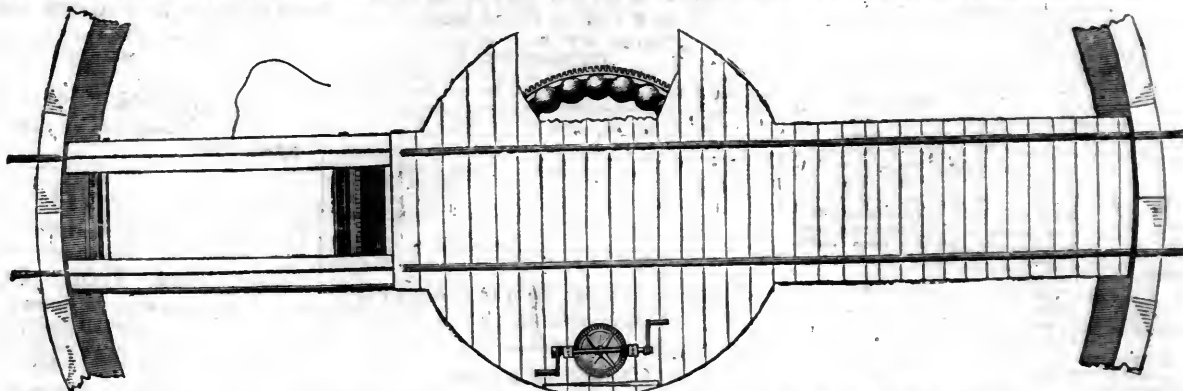
Patents for Inventions.

T. D. STETSON, Agent for procuring patents, No. 5 Tryon St. Row, (near City Hall). A circular with full information sent free by mail.
American correspondent *Prac. Mechanics' Jour* from 1854.

WARD'S PATENT SELF-CENTERING TURN-TABLE.



THIS TABLE is adapted to all localities and climates—is constructed without the Central-Pivot, or Rubbing Journals, thereby improving with use.—It is cheap, strong and durable, and works with ease and freedom, requiring less expensive foundations, and suitable for the turning platforms of swing-bridges, mortar-beds, pivot-gun-carriages, etc.



These TABLES are already introduced, and give general satisfaction.—They are manufactured in TOLEDO, Ohio, by R. F. RUSSELL, of the "Toledo Novelty Works," and in ALEXANDRIA, Virginia, by THOMAS S. JAMELSON, to either of whom orders may be sent, or to the undersigned, patentee, at AUBURN, Cayuga County, New York.

May 2nd, 1859.

W. H. WARD.

FINANCIAL.

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Messrs. Sewell, Ferris &	"	Hon. Franklin Steele, Minne-
Co.	"	sota.
Geo. P. Rogers, Esq.,	"	A. & W. A. Saunders, Bankers,
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THE MARKET VALUE OF SECURITIES WILL NOT BE SUP-
PRESSED OR ALTERED, AND DECEPTIVE OR IRRESPONSIBLE
CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last
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Esq., (President Excelsior Ins. Co.), John G. Storm, Esq.,
(President Lenox Ins. Co.), L. G. Irving, Esq., (Secretary
Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq.,
John H. Griscom, M.D., Rev. Edwin F. Hatfield, D.D., Rev.
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BUYS and sells MINING SHARES, MINES and
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report on their value, etc., etc.

REFERENCES:—P. Clouton, Jr., & Co., New York and St.
Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A.
Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., Frost
& Forrest, Com. Mer's N.Y., John F. Butterworth, Esq., N.Y.,
G. O. Williams & Co., Detroit, Mich., Capt. D. Tyler, Norwich,
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HENRY MEIGS, Jr. WM. ALEX. SMITH.
 New York, May 11, 1858.

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THE undersigned has devised and patented the only system of ventilation for *Buildings, Vessels, Railroad Cars, &c.*, by which spontaneous ventilation can be effectually carried out; and is willing to dispose of the same to parties desirous of purchasing at a reasonable price.
 Address **HENRY RUTTAN,**
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TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by **STEPHENS & JENKINS**, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:—
 The "Tubular Rail" of 60 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.
 Its density is greater,
 Its welding nearer perfect, and
 Its durability superior.
 Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.
 The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.
 Reference is made to the officers of all the railroads in the vicinity of Cincinnati.
 Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
 Cincinnati, Ohio.

RAILROAD IRON AND COMMON BARS.

THE UNDERSIGNED,
 Sole Agents to Messrs. **GUEST & CO.,**
 The Proprietors of the Downish Iron Works,
 Near Cardiff, South Wales,
 ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.
R. & J. MAXIN, 70 Broad st.

STEEL, FILES, &c. R. GROVES & SONS, SHEFFIELD, ENGLAND.

MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.
 A stock of the above goods constantly on hand.

CORPORATE MARK



CHAS. CONGREVE & SON, Agents,
 18 CHURCH STREET, N. Y.

RAILROAD IRON.

The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER Free on Board at Shipping Ports in England, or At Ports of Discharge in the United States, **RAILS OF SUPERIOR QUALITY,** And of Weight or Pattern as may be required.
VOSE, LIVINGSTON & CO.,
 New York, Aug. 1, 1858. 9 South William Street.

RAILROAD IRON.

THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

JAMES TINKER,
 54 Exchange Place,
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Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

RAILROAD IRON.

The undersigned, Agents for leading Manufacturers in **STAFFORDSHIRE AND WALES,** ARE PREPARED TO CONTRACT FOR DELIVERY On board ship at Liverpool, or Welsh port,
G. CONGREVE & SON,
 18 CHURCH ST., N. Y.

RAILROAD IRON. CONTRACTS FOR RAILS,

AT A FIXED PRICE OR ON COMMISSION, DELIVERED AT AN ENGLISH PORT, Or at a Port in United States, WILL BE MADE BY THE UNDERSIGNED, **THEODORE DEHON,**
 10 Wall st., near Broadway, New York.
 300 tons T rails on hand 54 to 57 lbs. per linear yard.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.
NORRIS & BROTHER,
 6m35 BALTIMORE.
 And 17 Nassau st., New York.

IRON BOILER FLUES.

Lap-Welded Boiler Flues, 1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes, from ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.
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The Subscribers, Agents for the Manufacturers, ARE PREPARED TO CONTRACT FOR THE DELIVERY OF RAILROAD IRON AT ANY PORT in the United States or Canada, or at a shipping port in Wales.
WAINWRIGHT & TAPPAN,
 Boston, June, 1851. 29 Central Wharf.

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IRON MERCHANTS,
 MARKET AND SIXTEENTH STREETS,
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IN ALL THEIR VARIETIES.
 BOILER PLATE, CAR AXLES,
 BOILER RIVETS, RAILROAD IRON,
 OUT NAILS and SPIKES, FIG IRON, etc.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854

1739

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THE subscribers are prepared to contract for **RAILS** delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.
JOHN W. HULL & CO.,
 No. 41 Exchange Place, NEW YORK.

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The Crescent Manufacturing Company,
WHEELING, VA.,
 ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address
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THE
RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,
 MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.
 Apply to

ALBERT G. SMITH,
 President of the Incorporation.
 February, 1858.

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WOOD, MORRELL & CO.,
 Having leased the extensive Works of the **Cambria Iron Company,**
 Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,
 And purchased all their real estate,
 ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.
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STAFFORDSHIRE, ENGLAND.

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OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

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IRON AND COAL COMPANY,
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Samples of Rails and Merchant Iron may be seen at the office of the Company, 46 Exchange Place, New York.
 Address **J. H. SCRANTON, President,**
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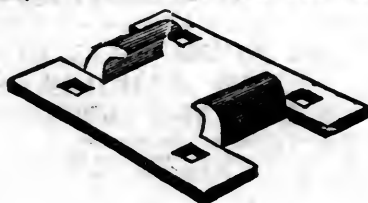
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4011

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New York Wrought Iron Railroad Chair Company.
Office, No. 51 Exchange Place, New York.



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New Jersey Central Railroad Company,
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Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company.

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The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

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All inquiries in reference to the above articles will receive immediate attention.
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Of all kinds for Shops and Tracks.
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MANUFACTURERS' AGENTS

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STEAM ENGINES;
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ORDERS for any quantity of Wheels executed with dispatch, and Wheels and Axles fitted in the very best manner, and at the lowest rates.

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**THE JERSEY CITY
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SUCCESSORS TO
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MANUFACTURE COAL or WOOD BURNING
LOCOMOTIVES, Steam Fire Engines,
Portable ENGINES and BOILERS, Cast Steel
SPRINGS for Engines, Tenders, Passenger or Freight
CARS; SHAFTING and ALL KINDS OF RAIL-
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They also furnish to order TYRES, DRIVING WHEELS
and AXLES, CASTINGS and FORGINGS.

Boiler Work furnished with dispatch.

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PLATE CAR WHEELS and CHILLED TYRES, equal
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WHEELS and AXLES fitted for use.
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of all kinds for Gas Works.

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Locomotive & Machine
WORKS,**

SUCCESSORS TO

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HAVING extensive facilities, are now prepared to furnish
promptly of the best and most improved description, either

COAL or WOOD BURNING

LOCOMOTIVE ENGINES

AND OTHER VARIETIES OF

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WM. S. HUDSON, Supt. {

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HAVING erected an extensive Shop, with the most ap-
proved Machinery and Tools, are prepared to execute
orders for the various classes of Freight and Passenger Loco-
motive Engines and Tenders, in the best manner and on the
most favorable terms.

Also, Stationary Engines, and the various Tools suitable for
furnishing Repair Shops.

The business of Machine making, heretofore carried on by
Charles Danforth & Co., is continued by the present firm, and
all orders will receive prompt attention. 1849

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LOCOMOTIVE WORKS,**
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HAVING large facilities, are prepared to receive and ex-
ecute orders for

LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and
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BRASS and IRON CASTINGS; LOCOMOTIVE TYRES
welded and blocked to exact sizes, and every thing connected
with the building or repairing of Locomotives furnished on
short notice.

These Works being located on the New York Central Rail-
road, near the centre of the State, possess superior facilities
for forwarding their work to any part of the country, without
delay.

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RICHARD NORRIS & SON,

LOCOMOTIVE STEAM ENGINE

BUILDERS,

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ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

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MANUFACTURE to order, Locomotives of any Arrange-
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Workmanship, the Locomotives produced at these Works,
are equal to, and not excelled by any.

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Manufacturer of Marine and Stationary

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WATER PIPES, BOILERS, IRON BUILDINGS,

CASTINGS & FORGINGS OF ALL KINDS.

WM. KEMBLE, Agents

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MACHINERY OIL.

REFINED NEAT'S FOOT OIL

WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all
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New York.

**THE IMPERIAL
LUBRICATING OIL,**

MANUFACTURED BY

J. C. HULL & SONS,

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108, 110, 112, 114, 116 and 118 CHURCH ST.,

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FOR RAILROADS,

STEAMSHIPS, MILLS, MACHINE SHOPS, ETC.

THIS OIL, having been before the public for a long time,
and having been extensively used in different parts of the
country, and on each occasion meeting with unqualified ap-
proval, renders the manufacturers confident when making the
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1st. Its first cost is vastly less than that of any Oil in use,
of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any
journal or bearing, all the gum in the Oil being entirely decom-
posed.

3rd. It will keep all journals and bearings cool, clean
and bright as new, thus not only saving wear and tear, but
saving also no inconsiderable amount of motive
power.

4th. It is fully as durable as any Oil in the market, and
consumers are invited to make their experiments on such jour-
nals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all
odor or unpleasant smell.

Also,—

**J. C. HULL & SONS'
REFINED BURNING OIL.**

Buyers are requested to give this OIL a trial, as it is be-
lieved that it will be found the

**CHEAPEST, CLEANEST AND BEST
OIL FOR BURNING,**

(all things considered), in the market.

CERTIFICATES from a large number of Railroad
and Steamboat officers, also, prominent Manufacturers
and Machine Builders, can be seen by application as above.

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DEALERS IN

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GREASE**

**FOR RAILROAD CARS
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THIS celebrated GREASE has been in use upwards of
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The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or descrip-
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IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of
Thousands of Gallons, prove this Oil to be superior
for Burning, and TWENTY-FIVE per cent. more
durable than Sperm Oil for Lubricating, and the only Oil
that is in all cases reliable, that will keep bearings cool,
and

WILL NOT GUM

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after
testing this Oil, pronounce it superior to any other for Lu-
bricating. For sale ONLY by the Inventor

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Reliable orders filled for any part of the United States or
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AMERICAN RAILROAD JOURNAL

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 23.]

SATURDAY, JUNE 4, 1859.

[WHOLE No. 1,207, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, June 4, 1859.

New York and Erie Railroad.

Affairs on this road appear to be rapidly coming to a crisis, with a result which threatens the loss of a very considerable portion of the capital invested in it. It is perhaps needless to comment upon the causes which have brought about the present state of things. To describe briefly the condition of the company, we may say that it is without credit; is unpopular throughout the country; has its revenue largely reduced; has neither harmony in its councils nor the hearty good-will and co-operation of the great body of employees in its service. It has been steadily losing ground in all these particulars for two years past. Such being the fact, the alternatives that seem inevitable are—either that the road must go into the hands of the mortgage bondholders, or into new hands, under the hope that with the inauguration of a new system, or policy of management, it can at least be made to pay the interest on its entire debt.

Can such a result yet be secured? We think it can. We assume, what no one we believe will question, that with a proper system of management, the earnings could be easily carried up to \$6,000,000. Forty per cent. of this amount would

produce \$2,400,000—a sum equal to the interest on \$33,000,000—\$4,000,000 more than the present debt of the company.

How is such a result as this to be effected? *By leasing the road to a private company to operate it on their own account.* Such is the confidence felt in it by those best able to form a correct opinion of its merits, that we are assured a party entirely competent to such a task, both by their means and railroad experience, and entitled to carry with them the public confidence, stand ready to take a lease of the road for a period of 10 years, agreeing to pay therefor a sum equal to the interest on the entire indebtedness of the company; and to maintain the road, and deliver the same, at the termination of the lease, in as good condition as received. We have, in fact, authority to make such a proposition, and to make known the names of the parties, should there seem to be any disposition, on the part of the stock and bondholders, to favorably entertain such a proposition.

The parties to whom we refer are thoroughly acquainted with the resources of the road, and reason, in the premises, in this manner: Assuming that it can be run by the company at 70 per cent., they believe that, as private individuals, they can make a saving on current expenses of at least 10 per cent. That at the same time they can, by pushing the business, add very largely to the present revenues. Under this conviction, they are prepared to take the road on the terms proposed, and assume the proper responsibilities.

As a condition precedent, the road shall be put in good repair, and its exact condition ascertained. To determine whether it was well maintained, it should be thoroughly examined once a year. We see no difficulty in the way of protecting the rights of all parties. Those having the road in charge would have only one object, that of making the most money out of it for a long series of years, and would manage accordingly—not by certain preconceived dogmas which are made, by an iron will, to apply to every variety of case. The difference between the management of the road as a private enterprise, or by such organizations as at present prevail, is the difference which results from attending one's affairs in person, or by deputation—In other words, the difference between

success and failure. While we believe the plan proposed would have been vastly better for the interest of the company in its most prosperous days, we see no other way of saving it at the present time. Whether Mr. Moran remains in the road or goes out of it, the result will be pretty much the same, without a radical change for the future. As far as he is concerned, he does not seem to see, what is apparent to every one else, that the battle is lost. Had he every qualification for the post he occupies, it would not help the matter. He has alienated the popular favor, and lost the confidence and prestige of success. There is no time in which to recover the ground so lost. In one year more, as matters are going on, the road will be in the hands of receivers. It will then be worth to its owners about as much as a ship on shore, and in the hands of *wreckers*. We warn all classes of bondholders not to suffer such an event to happen. If the road, to use a nautical phrase, can be kept off the breakers, it has the capacity of carrying the entire load with which it is charged. If it once gets into the clutches of the law, it will become an object of common plunder, which may leave nothing to any class of creditors. To avoid a catastrophe which so seriously threatens, why not place the roads in the hands of parties who will manage it with ability and integrity, as the truest and best method of making the utmost penny out of it?

Shall there be a response to the proposition now presented?

North-East and South-West Alabama R. R.

The line of this road commences at Chattanooga, Tenn., and runs thence diagonally across Alabama 295 miles, to Meridian, on the Mobile and Ohio railroad, 135 miles north of Mobile, and about 75 miles east of Brandon, Miss., the present eastern terminus of the Southern Mississippi road.

The heavy earth work on the first 100 miles, between Meridian and Tuscaloosa, was let to contract in 1856, to be completed in the fall of 1859. Most of this work will be done within the time stipulated, and the balance as soon thereafter as required. The contracts were for the most part in payment of subscriptions to the stock of the company; but in a few cases the work was to be paid for partly in cash, and partly in stock.

The work upon the upper portion of the line, between Chattanooga, and the northern boundary of St. Clair county, is being prosecuted under the charter of the Wills' Valley Company. Although an agreement has been entered into, to consolidate the stock of these companies, it is deemed inexpedient to consummate the arrangement at present, as it might have a tendency to release from liability each subscriber to the stock who did not personally assent thereto. When the stock shall be finally paid up, the arrangement can be perfected without embarrassment to either company. This portion of the line is 88 miles in length, 67 miles of which are under contract, and in progress—the grading and culverting being provided for to that extent.

The entire amount of earth work and culverting between Meridian and Tuscaloosa, done and to be done, at the date of the company's report, 16th December last, was\$576,280
of which there had been done and paid for in stock\$155,122
In cash 105,010

Leaving to be done\$316,148
To be paid for in stock 121,144

In cash\$195,004
The bridges across the Warrior and Tombigbee rivers, to be completed Jan., 1860, will cost about\$124,000
of which there has been paid in cash 7,160

To meet which the company has:—
Of good subscriptions unpaid ..\$266,600
Cash 23,796

Leaving\$21,448
Add officers, salaries to Jan. 1, 1860 25,000

Showing a deficiency of\$45,448
Add for small bridges and trestle work\$242,000
Less subscriptions in land, cross ties, and lumber 20,230

Which shows that there is still required ..\$268,218
to prepare the road for the iron to Tuscaloosa.

The subscriptions available for the construction of the road from Tuscaloosa to Elyton amount to\$239,345
The estimate for the grading is 323,100

Showing a deficiency of\$83,750

In order to cover this deficiency, the Chief Engineer proposed the establishment of temporary exceptional grades, say 90 feet to the mile, upon six miles of the route next above Tuscaloosa, whereby a saving of about \$87,000 may be effected. This amount expended upon the line between Tuscaloosa and Elyton, will suffice for the grading to that point. The balance of the distance to Mills' Creek, 56 miles, with the exception of subscriptions to the amount of \$24,250, is almost entirely unprovided for.

The bridges across the Tombigbee and Black Warrior rivers, are being constructed by Messrs. DEXBY, of Chicago. They were let to contract in July last, and are to be completed by January 1, 1860. The McCALLUM plan was adopted for both, and arrangements made for having them framed

and put up under the immediate supervision of an agent of the patentee. In reference to this bridge the Chief Engineer says: "This plan of bridge has been so thoroughly tested as to leave no doubt on my mind, that it is, for our purposes, and generally, the best plan of wooden bridge now in use."

The following is a statement of the receipts and disbursements during the year:—

RECEIPTS.
Amount in treasury, Jan. 1, 1858.\$11,696 76
From subscribers to Dec. 8, 1858 105,760 65
" interest account 511 38
" miscellaneous sources 2,029 48

DISBURSEMENTS.
For graduation and masonry\$53,057 38
" work on bridges 7,171 17
" labor 3,070 17
" right of way 2,825 00
" salaries, office exp., int., com., etc. 16,474 41
" bills payable June 1, 1859, in treas. 24,946 66
Cash in treasury 11,853 48

OFFICERS.
N. L. WHITFIELD, *President*.
R. E. RODES, *Chief Engineer*.
H. A. SNOW, *Treasurer*.
WM. S. FOSTER, *Secretary*.

New Orleans, Opelousas and Great Western Railroad.

The line of this road is 253 miles in length. It commences at Algiers, opposite New Orleans, and runs thence, via Brashaer, New Iberia, Opelousas and Pine Prairie, to Thompson's Bluff on the Sabine river, in lat. 31°. At this point the line of the Sabine and Rio Grande Railroad commences, which is to run in a south-westerly direction, via Clarksville, Huntsville, Henderson and San Antonio, to some point on the Rio Grande, suitable for its extension and construction through the Mexican States of Coahuila, Durango and Sinaloa, to the Pacific seaport Mazatlan. About nine miles of the line of the Sabine and Rio Grande Railroad, from the Sabine river to Burkesville, was surveyed and located in December last, and work thereon commenced. At Burkesville commences the line of the Texas Great Western Railroad, running north-west to Dallas, and thence to Red River. The town of Dallas will probably be the point of intersection of the Great Western Railroad with the Southern Pacific, the Memphis and El Paso, and the Houston and Texas Central Railroads.

The north-western, north-eastern and northern counties of Texas, or that portion north of the Sabine terminus of the New Orleans and Opelousas Railroad, constitute by far the most fertile, populous and wealthy portion of the State. The Sabine river alone, which penetrates far into those counties, and which is navigable for steamboats carrying 1,000 bales of cotton for several hundred miles above Thompson's Bluff, will, without the construction of the Great Western Railroad, throw the trade of all this section of country upon this road, which strikes the eastern boundary of the State just at the lower limit of this fertile producing region, which, according to the Texas Almanac for 1859, is capable of producing 60,000,000 bushels of wheat, and of making and exporting flour one month earlier than can be done elsewhere in the United States.

The report of this company for 1858 gives the following comparative statement of the gross earnings of the road as far as completed, viz.: from Algiers to Brashaer, or Berwick's Bay, a distance of 80 miles:

	1856.	1857.	1858.
January..	\$16,095 18	\$18,068 33	\$33,249 64
Feb.	20,568 59	22,704 77	30,385 95
March....	15,603 54	15,803 69	32,629 01
April....	18,392 74	22,460 59	
May	14,520 00	23,340 06	
June....	12,788 47	19,345 38	
July	15,687 20	20,989 15	39,630 77
August... 14,704 96	22,871 35		
Sept. 18,816 20	24,330 69		
October .. 18,650 17	30,766 47		
Nov. 18,857 02	28,229 77	40,962 55	
Dec. 21,681 87	35,267 59	48,719 30	
	\$206,365 44	\$284,177 84	\$225,577 22

It will be observed that during seven months of the past year, from April to October, inclusive, scarcely one month's business was done; this was owing to the fact that a considerable portion of the track was inundated during that time, causing an entire abandonment of the freight business, although the passengers and mails were conveyed by steamboats and mail coaches past the overflowed portions of the track, without serious inconvenience, or detention of either. The damage done to the road bed and track, was but trifling, and was repaired as the water receded. In the meantime the rolling stock was overhauled, so that the road and its equipment is now in a condition to do all the business that may offer with profit to the company, and satisfaction to the public. The earnings of the road during the year were as follows:

From passengers.....\$64,390 28
" freight..... 144,263 42
" mails..... 16,464 32
" express..... 459 50
Total.....\$225,577 52

The distance from the present terminus of the road to the Sabine is about 178 miles; the whole line is staked out, the crossing on the Sabine fixed, lands entered for depots, etc., and nothing remains but to raise the means for its construction. For the accomplishment of this, bonds were prepared in 1857, based upon a mortgage of the road to Berwick's Bay; but owing to the financial trouble of that year, the company were unable to negotiate a sale of them; they were equally unsaleable in 1858, while the track was inundated. They now propose to withdraw this issue of bonds, none of which have been disposed of, and substitute therefore, others at from 20 to 30 years, and these are now being prepared. The floating and mortgage debts together, which were in 1857, \$750,000, are stated in the general financial statement of 1858, at \$518,330 93—this has since been reduced to \$470,348 39.

To clear off the greater part of this indebtedness, the company have arrears of stock and tax subscriptions due, which together with the State quota, some real estate, and the estimated net earnings of the year, will be sufficient for that purpose. For the continuance of the road to the Sabine, the company propose to issue \$2,000,000 of bonds, secured by a first mortgage of the complete and separate first grand division of the road, terminating at Berwick's Bay, and sales of lands between New Orleans and Opelousas; the interest to

be provided for by special monthly deposits in bank, secured against withdrawal for any other purpose, and from sales of about 500,000 acres of land beyond Opelousas. A sinking fund is also to be established for the final redemption of the bonds.

GENERAL FINANCIAL STATEMENT.

	Dr.	
Private stock	\$656,629	70
City and parish taxes	346,329	91
New Orleans subscription in bonds ..	1,500,000	00
Louisiana	621,000	00
Passenger earnings	\$315,180	94
Freight	514,693	07
Mails	24,196	71
Express	1,959	51
Bills payable	856,030	23
Sundries—pay rolls, etc.	518,330	93
	31,665	97
	\$4,529,986	74
	Cr.	
Construction	\$2,302,808	35
Depots and stations	217,274	81
Bridges	88,551	07
Rolling stock	362,291	41
Machinery	17,249	24
Maintenance of way	230,367	04
Real estate	43,779	30
Steamboat and barges	24,246	30
Discount State and City bonds	308,113	24
Interest	271,956	85
Expenses	164,093	89
Right of way	12,900	15
Transportation expenses	396,172	45
Bills receivable	\$13,353	24
Cash	76,829	40
	90,182	64
	\$4,529,986	74

OFFICERS:

WM. G. HEWES, *President*.
A. B. SEGER, *Vice President*.
BENJ. F. FLANDERS, *Treasurer*.
G. W. R. BAYLEY, *Chief Engineer*.

Journal of Railroad Law.

CORPORATE SUBSCRIPTIONS TO RAILROAD STOCK—COMMISSIONER'S CERTIFICATE.

In our last issue we referred to the late case of *Oelrichs vs. The City of Pittsburg*, involving the validity of subscriptions by a municipal corporation to railroad stock. In connection with the questions there discussed, a decision rendered in the New York Supreme Court, between the Bank of Rome and the village of Rome, will be found to possess interest.

The facts of that case were as follows:—In 1853 the Legislature of New York passed an act, empowering the president and trustees of the village of Rome to subscribe for, take and hold stock in the Ogdensburg, Clayton and Rome Company, to an amount not exceeding \$150,000. This stock was to be paid for by bonds of the corporation. Five commissioners were appointed by the act, who were empowered to sell the bonds, or exchange them for stock in the railroad company. But it was provided that these commissioners should have no power to negotiate, sell or transfer such bonds, or create any liability, except upon the express condition that \$500,000 should have been first subscribed by others to the capital stock of the railroad company; and that, before negotiating or transferring any of said bonds, the commissioners should make and subscribe a certificate in writing, that such subscription of \$500,000 had been actually made, and that, in their judgment and belief, the same had been made in good faith,

and by persons able to pay their subscriptions. This certificate was directed to be filed with the clerk of the village.

The commissioners made and signed and filed the certificate prescribed by the act, and subsequently negotiated some of the bonds. In course of time an action was brought against the village of Rome, upon one of these bonds. The village corporation defended in part, upon the ground that the certificate of the commissioners was untrue; that there had not been \$500,000 subscribed in good faith before the bonds were negotiated; and therefore, they contended, the bonds were invalid.

But the court held that the making and filing the certificate by the commissioners was *conclusive* on the parties as to the facts stated in it; and that the village corporation could not go behind the certificate, and show that, in point of fact, valid subscriptions to the amount stated had not been made.

The following are the principal reasons assigned by the court for this decision:

BACON, J.—After stating the facts. My opinion at the circuit was, and still is, that the act intended that this certificate should furnish the evidence, and be held declarative of the fact, that such subscriptions had been made—that these commissioners, who acted as the representatives in effect and on behalf of the defendants, were expressly constituted by the act, the parties to examine and become satisfied that the amount required by law had been subscribed to the stock of the company, and it never could have been the intent of the law makers that every dealer in the bonds of the village should take them at the risk of having them declared invalid, if it should turn out that for some reason, utterly unknown to him, and incapable of ascertainment by any means within his control, a portion of the subscriptions (it might be to the amount of a hundred dollars) was invalid, or incapable of being collected. It cannot be that every holder of these bonds may be called on to litigate not only the amount, but the *bona fides* of every subscription up to the \$500,000, which the railroad were required to have before the commissioners could be called upon to make their certificate and negotiate the bonds. If such a contingency had been supposed to be attached to the possession of these bonds, it may safely be affirmed that not a dollar of them would ever have passed from the hands of the commissioners. I do not say that this might not ultimately have been highly to the advantage of the citizens of Rome; but we must remember that at the time of the passage of the act in question, it was deemed to be greatly to the benefit of the inhabitants of that village, that the railroad should be rapidly pushed forward, and they probably felicitated themselves on the great gains and profits which were likely to accrue to the corporation from holding the interest on their bonds, but ultimately contribute to the village a handsome annual surplus above the interest, by way of dividends on the stock subscribed to the road by the village authorities. Time has, of course, served to dispel these visions; but they were not the baseless fabric they have since become, at the time these bonds were issued and the subscription made, to meet which they were executed. The strong desire of the defendant was to raise money on its negotiable bonds, and the object of the law

was not to create obstacles in the way of the attainment of that desire, but to facilitate its accomplishment. But no man would have been insane enough to take these bonds, if he supposed that upon him was to be cast the burden of sustaining, by proof, not only the good faith with which the subscriptions were made, but the actual ability of every person, whose name appeared on the roll, to pay his subscription. In my judgment, the act intended to provide a simple process, as well as a decisive test, by which not only the defendant should be saved from imposition, but every holder of, or dealer in the bonds, should be warranted—on ascertaining that the certificate had been made and filed pursuant to the act—in dealing freely in them, without incurring the extraordinary risk of having them defeated by showing, either that the commissioners were imposed upon, or were themselves participants in a gross fraud upon the public.

These commissioners were the agents of the defendant, and their act was substantially the affirmation of the defendant, that the conditions of the act had been complied with, and as between them and the innocent holders of the bonds, it creates a moral, if not a legal, estoppel of the most emphatic character.

Cleveland and Toledo Railroad.

The annexed circular has been issued by the Cleveland and Toledo Company:

CLEVELAND & TOLEDO R. R. CO. OFFICE,
CLEVELAND, May 23, 1859.

To the Stockholders of the Cleveland and Toledo Railroad Co.:

Erroneous reports having lately been circulated for some unapparent purpose, in regard to the affairs of this company, and that various law suits had been commenced against it by the towns along the Northern Division, and that the floating debt had largely increased, &c.; it is deemed proper, in advance of the regular annual statement, to correct any wrong impressions that may have arisen from such sources.

No suits have yet been commenced against the company by any of the towns along the Northern Division.

The floating debt is less than it was at the time of the annual report a year ago. The bills payable of the company, May 1, 1859, were \$341,636.09.

The business of the road, sympathizing with the general prostration felt in the Western States, has been exceedingly depressed, and the earnings show a large falling off from previous years. The running expenses, however, have been more than proportionately reduced.

The earnings for the past year, ending May 1, 1859, (partly estimated,) were \$797,432 84, about \$350,000 less than for the year ending June 1, 1857.

The running expenses for the past year, (partly estimated,) were \$398,858 25, about \$160,000 less than for the year ending June 1, 1857.

The running expenses at present are about \$30,000 per month. The interest on the entire bonded debt has been met as it became due.

There have been purchased by the Commissioners of the Sinking Fund, during the past year, \$25,700 of the company's outstanding bonds for the sinking fund account.

Very respectfully,

J. B. WARING, *President*.

The result of the year's business, from these figures, would be as follows:

Gross earnings	\$797,432	84
Expenses, 50 per cent.	398,858	25
Total	\$398,594	59
Interest on bonded debt, sinking fund and lease of Cleveland, Columbus and Cincinnati road	\$354,700	
Net earnings	\$43,974	56

Iron Trade of the United States.

We copy from Lesley's Iron Manufacturer's Guide the following statement, prepared by Chas. E. Smith, Esq., Iron Manufacturer of Philadelphia, showing the production and consumption of Iron in the United States for the year 1856:

1.—Product of Anthracite Pig Iron in 1856.

	Furnaces.*	Tons.
Massachusetts.....	3	4,443
Connecticut.....	1	1,000
New York.....	14	47,257
New Jersey.....	4	26,117
Pennsylvania.....	93	306,972
Maryland.....	6	10,720

Total anthracite.....	121	396,509
1856, average value \$25 in Phila.,		\$9,862,725
1858, " " 20		7,890,180

Product of Coke Pig Iron in 1856.

Pennsylvania.....	21 furnaces,	39,953
Maryland.....	3 " "	4,528

Total coke.....	24	44,481
1856, average value \$25.....		\$1,112,025
1858, " " 21.....		934,101

Product of Raw Bituminous Coal Pig Iron in 1856.		
Pennsylvania.....	6 furnaces,	8,417
Ohio.....	13 " "	16,656

Total raw coal.....	19	
1856, average value \$25.....		\$626,825
1858, " " 21.....		526,533

Product of Charcoal Pig Iron in 1856.

	Furnaces.	Tons.
Maine.....	1	2,100
New Hampshire.....	1	0,000
Vermont.....	5	2,420
Massachusetts.....	7	8,564
Connecticut.....	14	12,876
New York.....	29	21,774
New Jersey.....	6	2,100
Pennsylvania.....	143	95,154
Maryland.....	21	26,470
Virginia.....	39	14,828
North Carolina.....	3	450
South Carolina.....	4	1,506
Georgia.....	7	2,807
Alabama.....	3	1,495
Tennessee.....	41	28,476
Kentucky.....	30	36,563
Ohio.....	41	70,355
Indiana.....	2	1,800
Illinois.....	2	1,900
Missouri.....	7	10,138
Wisconsin.....	3	2,500
Michigan.....	7	3,678

Total charcoal.....	416	
1856, average value, \$30.....		\$10,465,620
1858, " " 24.....		8,392,496

Total product of pig iron in 1856.....	812,017	
Total number of furnaces running, or in running order.....		580

Product in Blooms and Bar made direct from the Ore by the Bloomery or Catalan Process in 1856.

	Bloomeries.	Tons.
Vermont.....	5	1,650
New York.....	142	18,710
New Jersey.....	48	4,487
North Carolina.....	36	36,182
South Carolina.....	2	640
Georgia.....	4	40
Alabama.....	14	252
Tennessee.....	50	1,222
Michigan.....	3	450

Total product of.....	204	28,633
Of this quantity 7,000 tons were bars, 21,633 " " blooms.		

1856, average value \$50 00.....		\$1,081,650
1858, in Troy, N. Y.† 37 50.....		811,237
Grand total product of iron from the ore, 1856.....		841,550

† The largest market for this kind of iron.

* The works here set down are only those running, or in running order.

2.—Statement of the total quantity of iron of all kinds consumed in domestic forges, rolling mill and foundries, viz:

Domestic product from the ore above stated.....	841,550 tons.
Deduct quantity sold in bars immediately to consumers by bloomeries, and therefore not entering into the manufactures embraced by this table.....	7,000—834,550
Scraps imported.....	10,323
" domestic (estimated).....	25,000
Old rails.....	100,000
Scotch pig imported.....	55,400
Total.....	1,025,273

Of this total, excepting Scotch pig therefrom, the following are the proportion of pig, scrap and old rails respectively consumed by domestic forges, rolling mills and foundries:

Amount last stated.....	1,025,273
Deduct Scotch pig.....	55,403—969,870
By forges, product.....	53,244
Waste.....	17,748—70,992
By rolling mills, prod't.....	498,081
Waste.....	124,520

Total.....	622,601
Deduct blooms†.....	60,877—561,724
By foundries, domestic pig....	337,154—969,870

The Scotch pig imported was all consumed by the foundries in making, with the domestic pig, a total for this class of works, of 392,557 tons of pig.

It is impossible to make such an analysis of the foregoing statement as shall show, separately, the exact amount of pig, and of scrap, respectively taken by the forges and the mills; but an approximate estimate may be made. Assuming that the country, or refinery forges take no scrap; and that the others use only scrap, (which is very nearly the fact) we shall obtain the following as the consumption of domestic pig iron:

Domestic pig consumed by the forges.....	52,320
" " " " rolling mills.....	423,435
" " " " foundries.....	337,155

Making the tot. stated on the previous page. 812,910

3.—The product in 1856, of the forges, not bloomeries, consuming pig and scrap, was as follows:

	Forges.	Tons.
New Hampshire.....	1	600
Massachusetts.....	5	1,850
Connecticut.....	6	1,950
New York.....	3	1,360
New Jersey.....	2	671
Pennsylvania.....	111	31,727
Maryland.....	2	491
Virginia.....	43	2,992
Kentucky.....	4	4,513
Tennessee.....	9	6,190
Missouri.....	3	900

Total product of.....	189	53,244
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Of this quantity there were made into bars, car and carriage axles, locomotive tire, shafts, anchors, and various shapes, about... 14,000 tons. And into blooms..... 39,244 "

1856, average value, Bars, etc. \$120... \$1,680,000	
" " Blooms, 80... 3,139,520	

Total.....	\$4,819,520
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1858, average value, Bars, etc. \$100... \$1,400,000	
" " Blooms, 70... 2,747,080	

Total.....	\$4,147,080
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† The total blooms produced from ore is 28,633 Sold direct in bars..... 7,000

Total blooms by refinery forges.....	53,244
Made into bars and shapes.....	14,000

The waste in making which is added under the head of forges in the text. 39,244

Total blooms going into mills..... 60,877

4.—The product of the Rolling Mills in 1856 was as follows:

	Mills.	Tons.
Maine.....	1	4,500
Massachusetts.....	19	55,292
Rhode Island.....	2	4,475
Connecticut.....	5	5,759
Vermont.....	1	500
New York.....	13	55,172
New Jersey.....	10	28,403
Pennsylvania.....	91	242,484
Delaware.....	4	2,111
Maryland.....	13	14,812
Virginia.....	12	26,355
North Carolina.....	1	215
South Carolina.....	3	1,210
Georgia.....	1	900
Tennessee.....	3	2,680
Ohio.....	15	30,980
Kentucky.....	7	16,865
Indiana*.....	1	000
Illinois*.....	1	000
Missouri.....	4	4,420
Michigan.....	2	1,848

Total.....	209	498,081
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5.—Looking at our subject from the point of view of consumption, we find that the following statement will represent the quantity of iron of all kinds used in every form of domestic manufacture for general consumption, viz:

Total of domestic iron produced from ore as above stated.....	841,550
Pig iron†..... imported.....	55,403
Rolled and hammered†.....	293,275
Scraps†.....	10,320

Total.....	363,998
------------	---------

To which add by estimate, old rails re-worked..... domestic. 100,000
Scrap collected and sold. " 25,000—125,000

Grand total.....	1,330,548
------------------	-----------

6.—Examining the history of this total to ascertain the quantity and kinds of rolled and hammered iron, obtained from all sources, consumed in the United States during 1857, we find the following details:

	Domestic product.	Imp'd. consum'd.	Total.
	Tons.	Tons.	Tons.
Rails.....	142,555	167,400	309,955
Boiler and sheet.....	38,639	15,053	53,692
Nails (2,645 machines).....	81,462		81,462
Bar, rod, band & hoop.....	235,425		
Ham'd bars & shapes.....	21,000	115,822	372,247

Amount of finished wrought iron which entered into gen'l consumption in 1856..... 519,081 298,275 817,356

7.—To ascertain the per centage respectively, of foreign and domestic iron of all kinds, which entered into general consumption in the year 1856, we have—

	Domestic.	Foreign.	Total.
Roll'd & ham'd as above.....	519,081	298,275	817,356
Pig iron.....	337,154	55,403	392,557

Total.....	856,235	353,678	1,209,913
------------	---------	---------	-----------

Which results give the proportion of 70 per cent. domestic to 30 per cent. foreign.


The 21,000 tons mentioned above as domestic hammered bars and shapes were produced as follows:

By bloomeries, bars.....	7,000 tons.
By forges proper.....	14,000 "

Total.....	21,000 "
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* Not completed at this date.

† To obtain the closest practical approximation of imports for the calendar year 1856, the official returns, for the fiscal years ending the 30th of June, 1856 and 1857, have been averaged together. The result is in the text.

 The State of Kentucky gives notice that the State will deposit in the Bank of America, in this city, \$150,000 to redeem, on the 1st January next, the bonds of the State issued to the Lexington and Ohio Railroad, on which the power of redemption was reserved. After the day named, the interest on the bonds will cease. Notice is also given that \$70,000 of bonds issued Oct. 7, 1846, and June 15, 1848, with which a similar privilege was reserved, will be redeemed at the same Bank at the end of fifteen years from the date of each bond.

TREATISE

ON THE

PRINCIPLES OF CIVIL ENGINEERING

AS APPLIED TO THE

CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, Civil Engineer,
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 343.)

EXAMPLE E.

In the last example there was observed to be a large excess of material towards the ends of the chords, not available for strength in that form of truss. In other words, the sections of the chords, on either side of the central panels, are greater than the horizontal strains require.

Suppose another case of a truss 18 feet deep in the middle, clear span 150 feet.

Weight uniformly distributed, 225,000 lbs.

Extra weight at middle, 15,000 lbs.

Equivalent weight at middle, 127,500 lbs., and greatest horizontal strain 265,625 lbs. as in example D.

It has been established (§ 24) that the strength of a beam is in proportion to the square of its depth; and (§ 27) that the load it can support, when applied at different points, is inversely as the product of the segments, into which the length of the beam is divided by the position of the weight.

If these laws apply as well to a truss, or open beam, as to a solid one, they require that at every section, the square of its depth multiplied into the square of one half the length of the span, shall be equal to the square of the depth in the middle multiplied into the rectangle of the segments into which the span is divided by that section.

Applying the maximum weight to the several sections of the truss (Fig. 69) the depths of those

lengths will be reduced altogether, about 206 feet, and the consequent diminution in their weight will be 2,250 lbs. or very nearly 25 per cent.

The Chord.

The uniformly distributed weight of the bridge and load acting through the braces, produces the following tensions upon the chord:—

17.95 : 10 :: 15,000 :	8,356 lbs. of brace G <i>h</i> .
17.63 : 10 :: 30,000 :	17,016 " " " F <i>g</i> .
16.97 : 10 :: 45,000 :	26,517 " " " E <i>f</i> .
15.92 : 10 :: 60,000 :	37,688 " " " D <i>e</i> .
14.40 : 10 :: 75,000 :	52,083 " " " C <i>d</i> .
12.24 : 10 :: 90,000 :	73,531 " " " B <i>c</i> .
8.98 : 10 :: 105,000 :	116,926 " " " A <i>b</i> .

Total 332,117 "

To which add the horizontal effect of 15,000 lbs. at the middle of the truss for the maximum horizontal strain at that point—

18 : 75 :: 7,500 : 31,250 lbs.

Effect of uniform load 332,117 "

Maximum horizontal strain, 363,367 " Example E
Do. do. 265,625 " " D

Difference 98,742 " = 37 $\frac{1}{8}$ per cent.

To compensate for this increased horizontal strain 98.75 square inches, or 21×4.7 inches, of available section must be added to this chord. On account of a splice it will be necessary to increase this section to 28×4.7=132 square inches of section. This will add 31 per cent. to the section; 146 cubic feet to the solid contents, and 4,380 lbs. to the weight of the chord.

The Arched Top.

The section of the arched top, at 875 lbs. per square inch, must be increased 28×4 inches=112 square inches which is equal to 36 per cent. of the original section in example D; 124.5 cubic feet and 3,735 lbs.

This truss requires, then, an increment in the weight of the top and bottom chords of 8,115 lbs. And a decrement in the weight of the braces and counter-braces of 1,645 "

Difference in timber against this truss .. 6,470 lbs.
from which take difference of vertical ties 2,250 "

Total difference in weight 4,220 lbs.

Of the Horizontal Strains.

The horizontal strain at any given point of the chord may be determined in the following manner:

Applying a weight of 15,000 lbs. at the middle of the truss, the horizontal strain upon the whole length of the chord is found to be 31,250 lbs.

Applying the same weight successively at each of the vertical ties is found to produce the following strains upon the chord:

18. : 75 :: 7,500 :	31,250 lbs.
17.95 : 70 :: 8,000 :	31,198 "
17.63 : 60 :: 9,000 :	30,630 "
16.97 : 50 :: 10,000 :	29,464 "
15.92 : 40 :: 11,000 :	27,638 "
14.40 : 30 :: 12,000 :	25,000 "
12.24 : 20 :: 13,000 :	21,242 "
8.98 : 10 :: 14,000 :	15,590 "

Taking the tension produced at any given point, by the uniform weight of the load and structure, and adding to it the tension caused by the application of the 15,000 lbs. at that point, the result will be the maximum horizontal strain upon that point of the chord.

The horizontal thrust of brace A*b* was 116,926 lbs. To which add effect of 15,000 lbs. at *b* 15,590 "

Max. horizontal strain betw'n A and B. 132,516 lbs.

Fig. 69.



sections necessary to support that weight, will be found as follows:

75×75 : 70× 80 :: 18×18 :	322.56=(17.96) ² at H <i>h</i>
: 60× 90 :: :	311.04=(17.63) ² at G <i>g</i>
: 50×100 :: :	288. =(16.97) ² at F <i>f</i>
: 40×110 :: :	253.44=(15.92) ² at E <i>e</i>
: 30×120 :: :	207.36=(14.40) ² at D <i>d</i>
: 20×130 :: :	149.76=(12.24) ² at C <i>c</i>
: 10×140 :: :	80.64=(8.98) ² at B <i>b</i>

These relative depths are represented in Fig. 69, and give to the top chord between *b* and *p* the curvature of an ellipse.

This truss would be greatly improved by making all the panels of the same relative width and height, so as to maintain the parallelism of the braces, as in Fig. 70. But for comparison with Fig. 68, this form is presented.

Putting the depth A*a* and Q*q* 5.5 feet, and, adopting for each panel the weights used in example D, the lengths and oblique strains of the several braces and counter-braces may be determined.

Counter-Braces.

The lengths of the counter-braces will be:—

(5.5×5.5+10×10) ^½ =(130.25) ^½ =	11.4127=aB.
(80.64 + 100) ^½ =(180.64) ^½ =	13.44 =bC.
(149.76 + 100) ^½ =(249.76) ^½ =	15.804 =cD.
(207.36 + 100) ^½ =(307.36) ^½ =	17.53 =dE.
(253.44 + 100) ^½ =(353.44) ^½ =	18.8 =eF.
(288. + 100) ^½ =(388.) ^½ =	19.7 =fG.
(311.04 + 100) ^½ =(411.04) ^½ =	20.27 =gH.

Their oblique thrusts will be:—

5.5 : 11.4127 :: 77,000 :	159,778 lbs. on aB.
8.98 : 13.44 :: 67,000 :	100,276 " " bC.
12.24 : 15.804 :: 57,000 :	73,597 " " cD.
14.4 : 17.53 :: 47,000 :	57,216 " " dE.
15.92 : 18.8 :: 37,000 :	43,693 " " eF.
16.97 : 19.7 :: 27,000 :	31,344 " " fG.
17.63 : 20.27 :: 17,000 :	19,546 " " gH.

Their number, dimensions, cubic contents and weight will be:—

	Feet long.	Inches.	Cub.ft.	lbs.
2 counter-braces	11.5	9×18.5	=26.6	=798
2 do.	13.5	9×12	=20.2	=606
2 do.	16	9× 9	=18	=540
2 do.	17.5	9× 7.5	=16.4	=492
2 do.	19	9× 7	=16.6	=498
2 do.	19.75	9× 6.25	=15.6	=468
2 do.	20.25	9× 5	=12.6	=378

Total counter-braces 126=3,780

This result shows 24 cubic feet,—equal 720 lbs., equal 16 per cent.—less material required for counter-braces in this form of truss than was found to be necessary in the form, Fig. 68, example D.

The Braces.

The oblique thrust of the braces will be:—

8.98 : 13.44 :: 119,000 :	178,102 lbs. on A <i>b</i> .
12.24 : 15.804 :: 103,000 :	132,991 " " B <i>c</i> .
14.4 : 17.53 :: 87,000 :	105,910 " " C <i>d</i> .
15.92 : 18.8 :: 71,000 :	83,844 " " D <i>e</i> .
16.97 : 19.7 :: 55,000 :	63,848 " " E <i>f</i> .
17.63 : 20.27 :: 39,000 :	44,840 " " F <i>g</i> .
17.95 : 20.55 :: 23,000 :	26,331 " " G <i>h</i> .

Their number, dimensions, cubic contents and weight will be:—

	Feet long.	Inches.	Cub.ft.	lbs.
4 braces	13.5	7.5×13.5	=38	=1,140
4 "	16	7.5×10.75	=36	=1,080
4 "	17.5	7.5× 9	=32.8	=984
4 "	19	7.5× 7.25	=28.7	=861
4 "	19.75	7.5× 6.25	=25.7	=771
4 "	20.25	7.5× 5.25	=22.1	=663
4 "	20.5	7.5× 4.5	=19.2	=576

Total of braces 202.5=6,075

This result, also, shows 30 $\frac{5}{8}$ cub. ft.=925 lbs., equal 13.2 per cent. less material than was required for the braces in example D.

Vertical Ties.

The vertical iron bolts having to sustain the same weights, as in the other case referred to, their diameters will remain the same, but their

Horizontal thrust of brace Bc..... 73,531 lbs.
Add thrust of brace Ab..... 116,926 "
Do. effect of 15,000 lbs. at *c*..... 21,242 "

Max. horizontal strain betw'n B and C, 211,699 lbs.
Horizontal thrust of brace Cd..... 52,083 lbs.
Thrusts of Ab and Bc..... 190,457 "
Effect of 15,000 lbs. at *d*..... 25,000 "

Max. horizontal strain betw'n C and D, 267,540 lbs.
Horizontal thrust of brace Dc..... 37,688 lbs.
Thrust of Ab, Bc and Cd..... 242,540 "
Effect of 15,000 lbs. at *e*..... 27,638 "

Max. horizontal strain betw'n D and E, 307,866 lbs.
Horizontal thrust of brace Ef..... 26,517 lbs.
Thrust of braces Ab, Bc, Cd and De..... 280,228 "
Effect of 15,000 lbs. at *f*..... 29,464 "

Max. horizontal strain betw'n E and F, 336,209 "
Horizontal thrust of brace Fg..... 17,016 lbs.
Thrust of braces Ab to Ef..... 306,745 "
Effect of 15,000 lbs. at *g*..... 30,630 "

Max. horizontal strain betw'n F and G, 354,391 lbs.
Horizontal thrust of brace Gh..... 8,356 lbs.
Thrust of braces Ab to Fg..... 323,761 "
Effect of 15,000 lbs. at *h*..... 31,198 "

Max. horizontal strain betw'n G and H, 363,315 lbs.
Horizontal thrust of brace Hg..... 332,117 lbs.
Effect of 15,000 lbs. at middle..... 31,250 "

Max. horizontal strain betw'n G and K, 363,367 lbs.

The 112,500 lbs. uniformly distributed over each half truss may be regarded as being concentrated at the centre of gravity of the truss at one fourth the span from the middle. In such a case the weight would act upon the middle point with a vertical force equal to one-half or 56,250 lbs., and upon the abutment with a vertical force of 112,500 lbs.

Add half the variable weight of 15,000 lbs. at the middle to the whole 15,000 lbs. at the abutment and the maximum vertical pressures at other points will be—

56,250 + 7,500 = 63,750 lbs. at middle,
112,500 + 15,000 = 127,500 " " abutments.

But each half span acts alike at the middle and the total vertical pressure at that point becomes 127,500 lbs. It will also be the same for all intermediate points (§ 28, 75, 76).

§ 95. The strength of a solid beam depends upon the power of the fibres to resist tension and compression; and the strain upon these fibres is greater or less in proportion as the square of the depth of the beam is greater or less, (§ 24).

When the depth of the beam is not varied, the strain upon the fibres is greater or less as the weight is nearer the middle, or farther from it; and the load a beam can support, when applied at different points, is *inversely as the products of the segments* (§ 27).

To combine these two laws into one rule, suppose the depth of a beam in the middle to be 18 feet, the depth of this truss. Then $18^2 = 324$ will represent its strength when compared with that of another beam of the same length.

For instance, if that other beam be 9 feet deep its relative strength will be $9^2 = 81$.

The ratio of the strength of one beam to that of the other will be as $9^2 : 18^2$, or as $18^2 : 9^2$, or $81 : 324$, or $324 : 81$, or $\frac{18^2}{9^2} = \frac{324}{81} = 4$, or $\frac{9^2}{18^2} = \frac{81}{324} = \frac{1}{4}$.

Suppose the length of the beams to be 150 ft.

Then $75 \times 75 = 5,625$,—equal the rectangle of the segments, and equal the square of half the length of the beam when the segments are alike,—represents the strain to which the fibres of the beam are subjected at the middle of the beam when any weight whatever is placed at that point.

If that weight be transferred to a point of the beam 5 feet from the middle, the relative strain upon the fibres at this point will be as the rectangle of the segments into which the beam is divided by this point, that is, $70 \times 80 = 5,600$.

It the weight be removed to a point 15 feet from the middle $60 \times 90 = 5,400$ will be the relative strain.

Then the horizontal effect of any weight when applied at the middle, is to the same applied at 15 feet from the middle, as 75^2 is to 60×90 ; that is, as 5,625 : 5,400, or $\frac{5,400}{5,625}$, and reciprocally as

75^2 5,625
 $60 \times 90 = 5,400$

But the load the beam can support is *inversely* as the rectangle of the segments; that is, the weight that the beam can sustain increases as the rectangle diminishes, therefore 5,400 : 5,625 is the ratio of increase of the weight at 15 feet, and the ratio of weight is reciprocal to the ratio of strain.

Now if a given weight, applied at the middle of a beam, 18 feet deep and 150 feet long, will produce a certain tension of the fibres of that beam, the same weight will produce the same tension of the fibres of the beam of the same length and 9 ft. deep, if applied at a point 64.95 feet from the middle; for

$18^2 : 9^2 :: 75^2 : 139.95 \times 10.05$; or,
 $324 : 81 :: 5,625 : 1,406.25$.

§ 96. A solid beam, then, which at every point of its length, has the square of its depth, of the same proportion to the rectangle of the segments of the beam, is of uniform strength, and will support a certain weight at any point of the beam wherever it may be applied; and, reciprocally, the strain upon its fibres will be the same wherever the same weight shall be applied.

The depths of the truss, in example E (Fig. 69), were taken in conformity to this law of a solid beam. But the application of a given weight at different points, does not produce a uniform tension upon the chord, and, in this case at least, no very clear analogy exists between the open and the solid beam.

§ 97. In example E allusion was made to the importance of giving the same relative height and width to all the panels of a truss in order to give parallelism to the braces. When the top and bottom chords are parallel, this arrangement easily and naturally follows; but, when the top of the truss is a curve and the bottom straight, the exact heights and widths of the panels will not be so readily determined, without an accurate geometrical drawing or an arithmetical computation.

§ 98. If an arc of a circle be adopted for the outline of the top of a truss, and a straight line for that of the bottom of the truss, the heights of the panels, from the middle towards the ends of the truss, will diminish as the ordinates, taken at right angles to the diameter of that curve, will diminish.

In the circle every ordinate—or straight line drawn from the diameter to the curve at right

angles to the diameter,—is a mean proportional to the abscissas (segments) of the diameter. In other words, the square of the ordinate is equal to the rectangle of the abscissas.

Putting *a* to represent the length of the radius, or half diameter of any given circle, of which the arc is a portion; *x* any horizontal distance from the centre of the circle to the foot of an ordinate, and *y* the length of the ordinate, or perpendicular distance from a point in the diameter to the arc, $y^2 = (a+x) \times (a-x)$ will express the relations just stated; that is, the square of any ordinate, represented by *y* is equal to the product of the radius (*a*) plus the distance (*x*), from the centre of the circle to the foot of the ordinate, into radius minus the distance (*x*).

But $(a+x) \times (a-x)$ is also equal to $a^2 - x^2$, therefore $y^2 = a^2 - x^2$ which is called an equation of the circle, and means that the square of the ordinate is equal to the difference between the square of the radius and the square of the distance from the centre to the ordinate.

§ 99. The equation of the ellipse is $y^2 = \frac{b^2}{a^2}(a^2 - x^2)$, where *a* represents half the longest diameter, or transverse axis, and *b* half the shortest diameter, or conjugate axis, *x* represents any distance from the centre of the ellipse, along the transverse axis to the foot of an ordinate, and *y* the length of the ordinate. The equation simply means that the square of the ordinate (y^2) is equal to the rectangle of the abscissas $([a+x] \times [a-x] = a^2 - x^2)$ multiplied by the ratio of the squares of the two semi-diameters ($a^2 : b^2 = \frac{b^2}{a^2}$). The equation

is susceptible of being changed to the more convenient form $y^2 = b^2 - \frac{b^2 x^2}{a^2}$, which means: Multiply the square of half the shortest diameter (b^2) into the square of the distance (x^2), from the centre to the ordinate; divide the product by the square of half the longest diameter (a^2); subtract the quotient from the square of half the shortest diameter, and the remainder will be the square of the ordinate (y^2). From this last result extract the square root for the length of the ordinate (*y*) sought.

This rule is applied in proportioning the panels of the truss in the next example.

(To be continued.)

Hannibal and St. Joseph Railroad.

This road appears to be doing well, as will be seen by the annexed extract from a letter from the office at Boston:

The gross receipts of the Hannibal and St. Joseph Road, since its opening on the 22d February last to the 15th of May, amount to \$155,248 15.

Although a through train was run on the 22d February, the road could not be considered fairly open for business until some time after the 1st of March. And during the whole month of March and the first part of April we had to contend with a flood through the whole extent of the road, which severely washed the banks of the cuts, and of course unsettled an entirely new track, and materially lessened our ability to do the business presented to us.

The track is now in first-rate order, and the trains making exact time. We are not yet sufficiently provided with locomotives and cars, but this want is in the way of being very shortly supplied, and the prospects of a remunerative business are highly satisfactory.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending May 30, 1859.

BONDS.	Per cent.	and int
Little Miami, 1st Mort.	6a.....83	
Covington and Lexington, 2d Mortgage.	6a.....60	
Do. do. Income	10.....10	set.
Cinc. Ham. and Dayton, 2d Mortgage	7a.....85	
Indianap. & Cincinnati, do.	7a.....85	
STOCKS.		
Cincinnati, Hamilton & Dayton	60	
Columbus and Xenia	88	
Indianapolis & Cincinnati	82	
Little Miami	90	

American Railroad Journal.

Saturday, June 4, 1859.

Railroad Reports.

It is a very difficult thing to get a railroad company to disclose what the public are often most interested to know. Take for instance the Michigan Southern railroad. The main line of this road is 242 miles long; the branches 283 miles:—making a total of 525 miles. It strikes us that a stock and bondholder has as much interest in knowing the cost, earnings and expenses of these branches as of the whole road. Upon all these subjects the late report of the President of this company is silent—except in reference to the cost of the Toledo and Detroit branch. It may be that the branches are run at a heavy loss. If so, ought not the stockholders to be informed of it? An exact knowledge of these facts would point out the way in which to get rid of an incubus that is eating up the earnings of the only valuable portion of the road.

Why is the information called for not furnished? We take it that the managers well know that it is as important to be stated as any communicated. We presume that separate accounts are kept of the operations of each branch. What then is the motive for concealment? Every one must judge for himself. It is clear, however, that the managers have a real or fancied interest not in harmony with the owners of the road. They keep back important information that should be laid before them. Why should the former be allowed to possess information, gained by virtue of their positions, not given outside parties having equal, or greater, interests? Is it because they wish to act upon such information in speculating in the stock or bonds of the company; or to preserve their places; or to divest themselves of large pecuniary interests in the road, from a knowledge possessed by themselves alone as to the real condition of its affairs?

From reading the late report of the Company one would hardly know whether it had Treasurer, Secretary or Superintendent. Nothing is heard directly from either of these gentlemen, if there be such in the service of the company. There must be such, as the chief executive is too feeble a person to discharge all their duties. There are a great many things these gentlemen should have told us. The Treasurer should have given us a regular balance sheet. Think of a railroad report of a company owning 525 miles, costing some \$20,000,000, without a balance sheet! The Superintendent should have told us as to the condition of the road and machinery, and tried to have given us some idea as the prospects for the future. If it should cost 80 per cent. of earnings to run the road for the year to come, it would create no surprise. The President would feel entirely ex-

culpated in telling us that he has done the best he could. He takes very good care in the meantime not to have any uncomfortable record or precedent outstanding against him. He has told nothing, nor promised anything, so that nothing that can happen will compromise him. He stands equally strong without one qualification for his place, as with a thousand. He is in the position of the *non me recorder* witness. Whether more positive and outspoken men can be got into our railroads, remains to be seen. The feeling is that if you displace one person, the probability is that you may get one less qualified for the place made vacant. One thing, however, is clear: the first step to reform is an intelligent idea of the condition of our roads and the manner in which those having them in charge, are doing their duty.

Boston, Concord and Montreal Railroad.

The annual meeting of this company was recently held at Concord, at which the report for the year ending March 31st, was presented.

The capital account was stated as follows:

	DR.
To cost of road	\$2,560,134
" " equipment	283,450
" " material including wood land	48,249
" sinking fund	26,500
" assets of various kinds	77,556
	\$3,015,880
	CR.
By stock (old)	\$416,600
" " preferred	800,000
" " new	540,400
" " assessments	1,962
" " dividends	25,816
" scrip	15,222
" mortgage bonds, 6 per cent.	200,000
" " " 7 " "	300,000
" " " 6 " "	150,000
" " " 7 " "	200,000
" sinking fund 6 " "	200,000
" bills payable	47,100
" other items	118,780
	\$3,015,880

The total receipts for the year were:—

From passengers	\$64,238
" freight	151,314
" mails, etc.	12,168
	\$227,720
Operating expenses	141,382

Net earnings.....\$86,338

Some two years since this road was placed in the hands of trustees under an assignment made to protect parties who were guarantees of the company's indebtedness, amounting to some \$250,000. At a meeting of the stockholders held on the 3rd of April, 1857, a committee was appointed, charged with the task of settling all the company's indebtedness and of restoring the road to the stockholders. At the late meeting of the stockholders the committee reported that the floating debt of the company (with the exception of \$49,100) had been paid by the proceeds of sale of bonds. The balance due is payable in one, two and three years, in bonds at par, or in cash, at the rate of 75 cents on the dollar.

The judgment recently recovered in favor of W. H. Smith for \$64,685, is not included in the amount of floating debt represented as outstanding in the general account, but is a special debt, to be paid out of the net earnings, at the rate of \$10,000 annually.

The road is in better condition than at any former period, being relieved from the pressure of a floating debt. Its first mortgage, however, of \$500,000, falls due Aug. 15, 1860. To retire these, the company have on hand an equal amount of bonds of another issue, which, on payment of the bonds falling due the next year, become a first mortgage on the road.

During the past year the company leased the White Mountain Railroad for a period of 5 years, agreeing to pay therefor a rent of \$10,000 annually.

By the adjustment of the floating debt, the road has again vested in the hands of the stockholders.

Hydraulic Cements.

Cements have been chemically defined as substances capable of taking a liquid form, and of being in that state applied between the surfaces of two bodies, so as to unite them by solidifying. There are two classes of cements—those which are applied through the agency of liquids, as oils, water, etc., and those which combine separate bodies by fusion with heat.

Hydraulic Cements, of which the *Rosendale* is the most approved kind, is made from certain rare descriptions of limestone, containing from 8 to 25 per cent. of foreign matter, such as alumina, magnesia, selicia, etc., which, when calcined and pulverized, possess the property of hardening under water in a few days. Though calcined, it does not slake when moistened; and when pulverized, will absorb water without swelling up or heating.

The *Rosendale Hydraulic Cement*, which, in this country, has superseded the Roman cement, at about one-fourth its cost, is being used in large quantities in the construction of public buildings, fortifications, etc. The Croton Water Works, in this city, the Nassau Water Works, in Brooklyn, and the Water Works and Capitol Extension in Washington, were principally supplied with this cement. The foundations of many splendid warehouses, dug far below water mark, are indebted to this adamantine bulwark for perpetual protection against the incursion of water. As an agent in the construction of bridges, dams, conduits, reservoirs, etc., it is indispensable.

The *Newark and Rosendale Hydraulic Cement Company* was organized, and factories built, in Newark, N. J., in 1848. The works at that place having been twice destroyed by fire, the company resolved, in 1853, to re-build them in the immediate vicinity of their quarries, which are situated in Rosendale, Ulster Co., N. Y. This property was formerly owned by Hon. Hugh White, from whom it was purchased by this company in 1848; since which time, extensive improvements have been made in the mills and quarries, in sinking shafts and tunneling the mountain, thus affording greater facilities in working, while a better quality of stone was obtained. The district of country in which these quarries are situated, lies between the Highland and the Catskill range. The works comprise a number of large buildings, including shops, storehouses, etc., besides two water mills of 25 horse power each, and one steam mill, furnished with an 80 horse power engine. About 150 men are constantly employed in the various occupations of quarrying, burning, teaming, coopering, etc. The cooperage belonging to this establishment is probably the most complete in the United States. As an in-

stance of the amount of work performed in one day, it may be mentioned that 600 barrels are begun in the morning from the rough stove, and finished while the cement is being ground, and the barrels filled and headed up by the time the day is ended. The kilns, which are 25 feet high by 9 in diameter, possess the capacity of calcining 50 barrels a day each. They are "perpetual," burning night and day. The fuel used is a small-sized hard coal, of which 2,500 tons a year are consumed. The cement manufactured by this company is the genuine Rosendale, warranted pure and free from quick lime. The present officers of the company are: JOHN H. STEPHENS, President; J. M. HARRISON, Vice President; H. WILDE, Secretary and Treasurer. The offices of the company are at Newark, N. J., and 90 Wall street, New York.

Mississippi Central Railroad.

This road, which is the last unfinished link connecting New Orleans with the railroad system of the country, is making a progress so rapid as to leave little doubt of its completion in the month of October, which will be in season for the fall business. The graduation is nearly, if not quite, complete; the iron either on the ground or at New Orleans, and an efficient contractor, with an ample force, is rapidly placing it on the track.

The road will possess some extraordinary advantages for business, and will, at the same time, confer a great blessing on the traveling public. From its northern terminus two routes are opened—one running in a direct line to Washington, Baltimore, Philadelphia and New York; and the other to Chicago, with branches to St. Louis, Louisville and Cincinnati. It will sustain to the travel of the Valley of the Mississippi the relations that that river does to its commerce, while it must be the route of travel to New Orleans for the east and north, as well as west. It will be a great day when the traveler can be released from the frightful perils of the Mississippi River, and the wholesale slaughter of valuable lives which every few months take place upon it. When the road shall be opened from Cairo to New Orleans, the time by rail will be only one-sixth of that now consumed by the river trip, and with greatly reduced expense.

Northern (N. J.) Railroad.

This road, extending from Jersey City to Piermont, was opened on the 26th ult. by an excursion, in which some two thousand persons joined. An entertainment was provided at the Piermont depot, and speeches were made by Gen. Nye, Ex-Superintendent Talmadge, Gen. Wright, Dr. English and others. The contractors of the road were Messrs. B. F. Seymour, formerly of the Hecla Works, Oneida co., and M. Towers, of Waterville in that county.

Great Western (Ill.) Railroad.

Under the provisions of the new charter of the Great Western Railroad Company, the stockholders met at Springfield, Ill., recently, for the purpose of organization. L. Tilton, Geo. Griswold, Jr., F. T. Freelinghuysen, and E. T. H. Gibson were chosen directors in addition to the five already appointed by the provisions of the charter, which latter are the incorporators. The new directors appointed the following officers: L. Tilton, President; W. B. Corneau, Secretary; J. N. A. Griswold, Treasurer. Executive Committee—L. Tilton, James L. Lamb, and James Dunlap.

Security Market.

The prices for the week of the leading securities in the market have been as follows:

	May 26.	27.	28.	30.	31. J'e 1.
Missouri 6s.	83½	83½	84	84½	84
Del. and Hud.	94½	94½	94½	94½	93
Pacific Mail.	75	75	74	74	71
N. Y. Central ...	72½	73	74	72½	73
Hudson River ...	...	31½	31½	...	31
Panama.	119	119	...	119	118½
Harlem Pref. ....	...	...	37	37	36½
Reading.	42½	44½	44½	43	43½
Michigan S'th'n. ...	9½	...	...	9½	9½
" Pref. ...	32½	32	32½	32	31½
" C'n't'l. ...	53½	43½	42½	42	41½
Ill. Cent'l shares. ...	53½	59½	57	56½	55½
" 7s. ...	79	80	80	79	79½
Gal. and Chicago. ...	64½	64½	60½	64	63½
Clev. and Toledo. ...	28	28½	28	27	26½
Chi. and Rock I. ...	61½	62	60½	59½	57½
Tennessee 6s.	90½	...	90½	90½	90
Virginia 6s.	95½	96½	97	96½	96

Northern Railroad Company.

The annual meeting of the stockholders of the Northern Railroad was held at Concord, N. H., and the old Board of Directors unanimously re-elected for the ensuing year. They are as follows:—Onslow Stearns, John A. Burnham, George W. Nesmith, Uriel Crocker, Josiah Minot, Joseph W. Clark, Geo. A. Kettell.

Illinois Central Railroad.

The annexed circular gives the details of the new financial scheme of the Illinois Central Railroad Company:

The Directors of the Illinois Central Railroad Company request the shareholders to consider the following plan, which has been suggested for the purpose of placing at the immediate disposal of the Company that portion of the annual revenue derived from the sale of its lands. New expenditures are not contemplated; it is very desirable, however, to take early steps to provide for the debt on free lands, maturing Sept. 1, 1860, and obviate the inconvenience attending the terms of the mortgages, by which the current receipts from the sales of land are absorbed in the redemption of the principal.

Although the first mortgage of \$17,000,000 is nominally due in 1875, it is substantially undergoing the process of daily liquidation, because the moneys received, as fast as they are received, must be applied to the payment of the bonds. Thus far, \$1,110,000 have been paid.

The funded debt is now \$18,899,000, the annual interest upon which is \$1,282,510. During the past three years the net earnings and collections from the lands have been \$3,567,296 12, of which \$1,050,263 09 has been applied to the extinction of the funded debt.

It is proposed to set apart a fund for the payment of interest, by placing in trust the \$2,657,087 of Freeland Notes held by the Company, which notes, with the proceeds of 149,186 acres of land, valued at \$4,464,240 03. This trust fund will, it is believed, afford an ample provision for interest until dividends are earned upon the capital stock.

The plan suggested is the voluntary payment by the shareholders of the unassessed \$40 upon their shares, and upon receipt thereof, the Company will issue full paid certificates of \$100, with interest warrants attached for \$4 per annum, which will be equivalent to 10 per cent. upon the \$40 contributed—the amount is to be applied, first to the wants of the Company for the current year, then to the payment of the Freeland Bonds, and to the purchase of the Construction Bonds, to be held for the wants of the Land Department. The extinction of the lien upon the Freelands will release the property for the purposes of the trust, and render available for the purposes of interest all the collections in the Land Department. It will be seen that no new lien is placed upon the

road, and the obligation to pay interest terminates when dividends are earned.

The means of the Company to pay four per cent. to the shareholders who may choose to pay in full are apparent, even if all pay. \$40 per share on 175,000 shares is \$7,000,000. The liability for interest is increased \$210,000 per annum. The cash receipts in the Land Department in each of the three last years have been sufficient to cover the increased interest; \$1,050,263 09 is the aggregate for the three years, applied to the purchase and cancellation of bonds.

The London agents of the Company, Messrs. Robt. Benson & Co., have issued a circular to the stockholders, calling upon them to conform to this scheme, and pay up \$40 in each share.

Norristown and Allentown Railroad.

We learn from the *Montgomery Ledger* that the survey of the Swamp Creek route of the Norristown and Allentown Railroad, by the corps of engineers under Mr. Mifflin, was completed last week. The line leaves Wilson's Survey, about a mile below Zeiglersville, Montgomery Co., and runs up Swamp Creek to near Schultzville, Berks Co., where it strikes the west branch of the Perkiomen Creek. It then follows that stream some eight or nine miles, and crosses the range of mountains that divides the waters of the Schuylkill from those of the Lehigh at a gap near Trexler's Iron Works, and intersects the East Pennsylvania Railroad at Mertztown. The line is a fraction over twenty-six miles long, from the place it leaves Wilson's Survey to Mertztown, or about forty-one miles from Mertztown.

The cost of the road by this route would be small compared with the Perkiomen route. Mr. Mifflin estimates the saving to be half a million of dollars, besides the expense of the tunnel that would be necessary by the other route, which would be about three hundred and fifty thousand more, or in all about eight hundred and fifty thousand dollars. There is no grade on the Swamp Creek route of more than sixty feet per mile, and less curvature than railroads generally have.

The probabilities are now, we understand, that if this railroad is built, a connection will be made with the Philadelphia and Reading Railroad, at or near the junction of the Perkiomen Creek and the river Schuylkill.

Cheraw and Coalfields Railroad.

We learn from the *Cheraw Gazette* that the preliminary survey of this road has been commenced under the general direction of S. S. Solomons, Esq., Engineer and General Superintendent of the Northeast Railroad.

Sheboygan and Mississippi Railroad.

The *Sheboygan Times* states that this road is opened, and two trains running daily to Decca, 10 miles from Sheboygan; and that the track is also laid two miles beyond Decca, making 12 miles in all; and that the road will shortly be opened to Plymouth, 15 miles. The time will then be three hours between Sheboygan and Fond du Lac.

Important Railroad Decision.

James H. Hotchkiss, of Prattsburg, Steuben Co., bought a ticket on the Erie Railroad at New York for Rochester. It was marked "Good for six days only." After the expiration of six days, Mr. H. presented the ticket between Bath and Rochester; it was refused, and he was ejected from the cars. He commenced a suit, which was recently tried before Referees designated by the Supreme Court, and they have awarded the plaintiff \$150 damages.

Finances of Rhode Island.

The general treasurer of Rhode Island reports that the revenue of the State for the year ending April 30, was \$173,947, while the expenditures were \$179,729, showing a deficiency of \$5,782. There was a deficiency the year previous of \$10,648.

Railroad Earnings.

Traffic of the Great Western (Ca.) Railroad, for the week ending May 21, 1859:

Passengers.....	\$22,449 62
Freight and live stock.....	9,564 41
Mails and sundries.....	1,466 85

Total.....	\$33,480 88
Corresponding week of last year.....	\$37,471 58

The receipts of the Grand Trunk Railway of Canada for the week ending May 14, were.....	\$42,486 49
Week ending May 15, 1858.....	46,137 21

Decrease.....	\$3,650 71
Total traffic from July 1st.....	\$1,996,572 67
Same period last year.....	2,083,618 72

Decrease.....	\$87,046 05
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The earnings of the Sandusky, Mansfield and Newark Railroad Company, for April, were:—

1859.....	\$17,156 60
1858.....	16,702 23

Increase.....	\$454 37
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The business of the Watertown and Rome railroad, for April, was as follows:—

EARNINGS FROM—	1858.	1859.
Passengers.....	\$11,942 50	\$11,350 66
Freight.....	21,398 25	17,395 02
Miscellaneous.....	2,702 60	1,781 68

Total.....	\$36,043 36	\$30,537 36
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EXPENSES.	1858.	1859.
Maintaining road.....	\$7,706 22	\$3,435 82
Repairs to machinery ..	2,515 92	1,652 91
Operating road.....	11,123 91	8,537 17
Overcharges refunded ..	3 58	156 05

Total.....	\$21,349 73	\$14,982 65
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Net.....	\$14,693 63	\$15,554 31
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Regulation and Economy of Steam Engines.

With all the improvements which have been introduced in steam machinery, very few engines run at a uniform speed when there are very great variations in the amount of machinery to be driven. The ingenious contrivance called a governor, is intended to make the machine self-regulating; but, whether acting through the agency of the old throttle valve, or changing the point at which the admission of steam is cut off, it is usually only an assistant, a large part of the regulation being done by the hand of the engineer applied to another valve, and this involves a loss of power by weakening the steam. The advantages of regulating by the cut-off, as it is called, are pretty well understood by all who have intelligently investigated the subject. The steam is admitted at full pressure during the early part of each stroke of the piston, and allowed to act by expansion alone during the last part, the part of the stroke during which the steam is admitted being variable, the steam following further when the speed slackens, and being "cut off" earlier when it is too great. This system allows the steam to be used with its full effect, instead of with a fraction, as in the ordinary system, and the governor can be caused to effect the desired changes with some degree of perfection; but there are faults which the governor alone has not yet been successful in rectifying, and engines thus regulated often persist in going slow when the steam is low, and much faster when it is high, to the great damage of the machinery.

Messrs. Todd & Rafferty, the well-known engine builders at Paterson, N. J., have lately ap-

plied to stationary engines a combination of a cam motion and link motion, whereby the regulation is all effected by changing the point of "cut-off," and also whereby complete provision is made for modifying, by a touch of the hand, the regulation produced by the governor.

There is a species of valve motion introduced very successfully on locomotives within a few years, known as Uhry & Luttgen's Improvement. The device in question is substantially this, but still further improved, and applied to stationary engines. Only a single slide valve is employed, as in ordinary engines. The governor unaidedly makes all the adjustment necessary to compensate for sudden changes in the resistance, thus keeping the speed of the machine very nearly uniform; while, if the motion thus regulated be found to average rather too slow or too fast, the hand of the engineer applied to a small hand-wheel, adjusts it by means of a screw, to any rate desired. The silk manufactory of Messrs. Fuller Brothers, near the depot at Paterson, is driven by one of these engines, and the complete success of this improvement, in rendering this great agent of civilization perfectly controllable, entitles it to much attention.

Southern Pacific Railroad Company.

At a meeting of the stockholders of the Southern Pacific Railroad Company, held at No. 54 Wall st., pursuant to public notice at 12 o'clock, May 30, 1859, Jonathan Trotter, Esq., was appointed Chairman, and R. M. Stratton, Secretary. The President, Dr. J. Fowlkes, made an able and full exposition of the affairs of the Company, in the form of a report to the Stockholders, which was unanimously accepted and adopted. The following preamble and resolutions were also unanimously adopted:

Whereas, a new policy of the Southern Pacific Railroad Company was adopted and inaugurated at Marshall, Texas, on the 10th day of April, 1859, which policy appears to be eminently calculated to relieve the Company from its embarrassments, and, in fact, is vitally necessary for the continuance of its existence; therefore

Resolved, That this meeting of Stockholders cordially approve the same and warmly recommend to every Stockholder to comply with the requisition either to make the loan of fifty cents a share or pay up all past due instalments, or make a surrender of a portion of his stock in the manner proposed; and

Whereas, A large number of stockholders have, either by paying up all back instalments, by loans of money or by surrenders of stock, shown their desire to protect their own interests, and have thereby secured the protection of their stock; and

Whereas, A large number of stockholders are still delinquent in their payment of instalments, or in their loans to the company, or in their surrenders of stock; and

Whereas, It would be a manifest act of injustice to those stockholders who have entitled themselves to protection to allow such delinquent stockholders to be protected at the expense and cost of such paying stockholders; therefore

Resolved, That it is an act of justice and duty which the Directors of the Company owe to those who assist and contribute to the relief of the Company to exclude all who still refuse to aid the Company, by every fair, legal, and honorable means, from any participation in the advantages to be derived from the adoption of the new policy of the Southern Pacific Railroad Company.

Resolved, That the compromise and settlement of all difficulties and claims, as recently effected by the President of the Company in Texas, are entirely satisfactory to this meeting of stockholders, and that they feel assured that, to the energy, perseverance and good judgment of the President of the Company, they are mainly indebted for the accomplishment of the same.

Resolved, That the stockholders will hail with great pleasure the accession of Texan stockholders to their numbers, and that they fully appreciate the importance of building up in the State of Texas a home influence which will be of a conservative and protective character, and which will insure the speedy continuation of the road.

Resolved, That we duly appreciate the liberality of Texas in her legislation for us, and that it is our duty as well as our interest not to disappoint her citizens in what they so much desire, viz: the construction of a great railroad from Vicksburg to El Paso; and

Whereas, By terms of compromise, \$50,000 is to be paid in thirty days after dismissal of the State suit; and \$50,000 more in ninety days from dismissal of said State suit; and

Whereas, It is very important that the officers of the Company should know positively what the stockholders intend to do as speedily as possible; therefore

Resolved, That it is the opinion of this meeting that all stockholders who do not protect themselves, either by making a loan, surrendering their stock in part, or paying up all back instalments on or before the 10th day of June next, should be precluded from so doing for ever after.

Resolved, That all stockholders whose concurrence may best be consulted by transacting their business in New York, may carry out the details of arrangements necessary for the adoption of the new policy of the Company, may do so by calling on Edwin Post, Agent, No. 54 Wall st., Room No. 6.

Resolved, That the foregoing resolutions be published, and circulars be sent, as far as possible, to stockholders, showing the necessity of their prompt action by the 10th of June next.

New York, May 30, 1859.

JONATHAN TROTTER, Chairman.

R. M. STRATTON, Secretary.

Funded Debt of the City of St. Louis.

The bonded debt of this city on the ninth day of May, 1859, amounted to five millions three hundred and twenty-one thousand two hundred and ninety-six dollars, and was created for the following purpose, viz.:

For general municipal purposes.....	\$520,400
On account of waterworks.....	518,896
To improve harbor.....	259,000
To improve wharf.....	167,000
To construct public sewers.....	426,000
To renew bonds and pay past indebtedness.....	719,500
To purchase real estate.....	437,000
To construct district sewers.....	224,500
Stock in railroads.....	1,790,000
Old limit improvements.....	259,000

\$5,321,296

The floating debt at the same date amounted to \$46,437. Of the outstanding bonds, \$141,896 will fall due the present year.

FOR SALE.

2,250 TONS English Rails, (about), 54 lbs. to the lineal yard, Erie pattern, Bars 24 feet long. Terms, Cash. Gt O. T. M. DAVIS, New York, June 1, 1859. 4123 47 Exchange Place.

TRANSIT FOR SALE.

A TRANSIT, nearly new and in perfect order. Price \$100. Inquire of— J. T. HOBBY, 156 Water st., N. Y.

OFFICE OF THE ILLINOIS CENTRAL R. R. Co., { New York, May 23, 1859. }

THIS COMPANY is now prepared to receive payment in full upon its capital stock, as set forth in the circular addressed to the shareholders on the 5th of March last. The Freedland Bonds and all other obligations of the Company, except the Construction Bonds, due in 1875, will be received at par, and accrued interest in payment of the balance of \$40 per share now unpaid.

Certificates of full-paid shares will be issued, upon which the Company will pay an interest dividend of TWO DOLLARS per share semi-annually, upon the conditions recited in the circular.

By order of the Board. J. N. PERKINS, Treasurer.

RAILROAD CHAIRS, SPIKES, ETC.
SOLID AND FOLDED LIP. RAILROAD CHAIRS,
SPIKES, NAILS, STEEL, etc., manufactured at
Troy by the "ALBANY IRON WORKS," and sold for
cash or approved paper on favorable terms by

GEO. T. M. DAVIS, Agent,
NEW YORK, June 1, 1859. 47 Exchange Place.

CEMENT, PLASTER, ETC.

THE HUDSON RIVER CEMENT CO.
HAYE commenced manufacturing for the season, and can
now furnish a very superior article of fresh Rosendale
Cement, Calcinced Plaster, Farmers' Plaster and
Marble Dust. Address

HUDSON RIVER CEMENT COMPANY,
12 Jersey City, N. J.

Rosendale Hydraulic Cement.

THE NEWARK AND ROSENDALE CEMENT COMPANY
are now receiving fresh from the Mills their ap-
proved ROSENDALE CEMENT, warranted pure and free
from quick lime, and which has given such general
satisfaction in the various government and other public
works in which it has been used. Purchasers and shippers
should be careful to get the genuine ROSENDALE
CEMENT, branded "NEWARK AND ROSENDALE," "H.
WILDE." This Cement does not swell and burst the hoops
when stored in warm climates. It is packed in tight kiln
dried barrels, and is specially adapted for safe shipping
on long voyages. Terms reasonable, which may be known by
addressing.

JOHN H. STEPHENS, President, Newark, N. J., or
HENRY WILDE, Secretary, 90 Wall st., N. Y.

DELAFIELD & BAXTER'S, Late OGDEN & DELAFIELD, ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying
our CEMENT for public works, or other purposes. We
warrant it equal in quality to any manufactured
in this country. It attains a great degree of hardness, sets
immediately under water, and is a superior article for ma-
sonry coming in contact with water, or requiring great strength.
For sale in tight barrels, well papered, on application at their
office, by **DELAFIELD & BAXTER, 104 Wall st.**
The above CEMENT is used in most of the fortifications
building by government.

RADLEY & HUNTER'S IMPROVED SPARK ARRESTER.

RADLEY & HUNTER'S CELEBRATED
NEW INVENTION is now offered to the
public as a **Perfect Spark Arrester**,
which possesses the advantage over ALL
OTHERS of being of the most simple
construction, and much more dis-
cussible than any ever used. The man-
ufacturer invites an examination of this
Arrester by the Railroad public, confident
that it will meet with universal ap-
probation.



The undersigned hereby gives public no-
tice that he is the sole manufacturer
of the above article under the Radley &
Hunter Patent, of whom alone they can be
purchased in the United States.

EDWIN R. BENNET,

Office 82 Duane St., New York.

Central Park Improvement Fund Stock.

PROPOSALS for \$300,000 CENTRAL PARK IMPROVE-
MENT FUND STOCK—Sealed proposals will be re-
ceived at the Comptroller's office until THURSDAY, June 16,
1859, at 2 o'clock, P. M., when the same will be publicly
opened, for the whole or any part of the amount of THREE
HUNDRED THOUSAND DOLLARS OF THE CENTRAL
PARK IMPROVEMENT FUND STOCK OF THE CITY
OF NEW YORK, authorized by an Act of the State Legisla-
ture entitled "An act for the Regulation and Government of the
Central Park in the City of New York," passed April 17,
1857, amended April 13, 1859, and by an ordinance of the
Common Council, approved by the Mayor, May 13, 1859.

The said Stock will consist of Three Thousand Shares, of
One Hundred Dollars each share, bearing interest at the rate of
six per cent per annum, payable quarterly, and the
principal sum redeemable on the last day of August, 1887.
The proposals will state the number of shares desired, and
the price per share; and the person whose proposals are ac-
cepted will be required to deposit with the Chamberlain of the
city, within three days after the opening of the bids, the
whole sum awarded and covered by their bids respectively,
including the premium, if any; thereon, and on presenting the
receipt of the Chamberlain to the Comptroller, will be out-
letted to receive a certificate for the par value of the number of
shares, bearing interest from the date of such deposit.

Each proposition should be sealed up and indorsed "Pro-
posals for Central Park Improvement Fund Stock," and the
proposals, thus sealed and endorsed, put in a second envelope
sealed and addressed to "Robert T. Haws, Comptroller, N. Y.
City." The right is reserved on the part of the Comptroller
to reject any or all of the bids, if considered necessary to pro-
tect or promote the interests of the Corporation.

Department of Finance, Comptroller's Office, New York,
May 17, 1859. **ROBERT T. HAWS, Comptroller.**

Notice to Contractors.

OFFICE OF THE DUBUQUE AND PACIFIC R. R. CO.,
Dubuque, Iowa, May 7th, 1859.
PROPOSALS WILL BE RECEIVED AT THE OFFICE
of the Dubuque & Pacific Railroad in Dubuque, Iowa,
for the construction of said road from its western terminus to
Sioux City.
The following are approximate estimates of the amount of
embankment and excavation

	Embank- ment. Yards.	Excavation in earth. Yards.	Excavation in rock. Yards.
From end of present track, 2 miles beyond Nottingham to Winthrop, 20 miles.	125,000	56,500	700
Next 20 miles, west of Winthrop.	140,000	92,000	
From there to Cedar Falls, 20 miles.	165,000	105,000	
From Cedar Falls to Fort Dodge 92½ miles.	1,116,000	150,000	6,590
From Ft. Dodge to Sioux City, 130 miles.	1,300,000	300,000	

The original estimates were for different gradients from
those we now propose to adopt. The above estimates of work
to be done are merely approximate, but are believed to be
substantially correct. A large portion of the grading between
the end of the present track and Cedar Falls, is already done;
many of the culverts are put in; and the cross-ties for about
forty miles are delivered. Timber will be substituted for ma-
sonry. Proposals will be received for road bed and super-
structure, without fencing and without buildings, except water
tanks; and the company will furnish rolling stock for con-
struction.

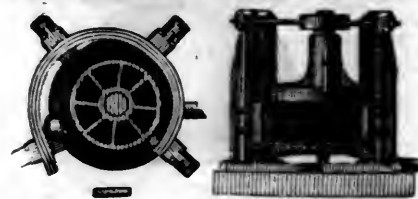
The amount of grading, as will be seen by the above esti-
mate, is exceedingly small; the material as a general thing,
is black loam soil. Timber is convenient of access in the vi-
cinity of all the principal streams as far west as Fort Dodge;
from there to Sioux City it is quite scarce; there is considera-
ble, however, in the little Sioux and occasional groves and
patches scattered over the intermediate country. The Big
Sioux and other streams in the vicinity of Sioux City, furnish
an abundance of good timber. Bituminous coal of fair quality
exists in abundance on the Iowa, Boone, Des Moines and Big
Sioux rivers. The Missouri river is navigable for steamboats
from Sioux City to Fort Benton, 1,900 miles, as ascertained
by actual measurement by several United States officers. The
United States appropriated one hundred thousand dollars to
open a military road from Fort Benton to Fort Walla Walla,
the head of navigation of the Columbia river; and Lieut.
Mullan, U. S. A., is now at work with a strong force opening
that road. When that is done, and the Dubuque & Pacific
Railroad finished to Sioux City, this must become the main
route to Washington, Oregon, and the Northwestern British
Possessions. The region of country near the head waters of
the Columbia and Missouri rivers, is one of the most beautiful
and desirable in the world, according to the reports of the U.
S. officers who made the Pacific Railroad surveys. All who
visited that region for a great distance north and south, east
and west, again and again, express their delight and agreeable
surprise, in finding a country so contrary to all their precon-
ceived notions. It has a fine climate and fertile soil, and is in
every respect considered a country capable of sustaining a
dense population. Nineteen hundred miles of navigable water
through such a country, to say nothing of the great thrugh
route to the Pacific, must be a powerful feeder to our road.
In view of these facts, the company deem it advisable to com-
mence work at the west end as well as at the east. Payment
will be made in construction bonds, drawing seven per cent
interest, which are a lien on the road and on the lands granted
by Congress; in county bonds, and in such local means as can
be raised on the line of the road. The land grant is three thou-
sand eight hundred and forty acres per mile, the same as the
Illinois Central; the greater portion of the lands lie between
Fort Dodge and Sioux City; all are within fifteen miles of the
road. The construction bonds are receivable at par in pay-
ment for lands; when land is paid for with these bonds, the
mortgage by its own terms ceases to be a lien upon it. Two
hundred and thirty thousand four hundred acres of land be-
longing to the portion of road now completed, will be offered
for sale on the 6th of June next, for construction bonds at par,
at an average price of about four dollars an acre. The com-
pany intend to put the bonds and lands at rates which will in-
duce capitalists, in these times, to undertake the building of
the road. We are well aware that no one will undertake a
work of this magnitude without strong inducements.

At least forty miles of road must be completed by the first
of December next; this can easily be done, as the grading and
bridging is far advanced, and the cross-ties are delivered.
However, the forty miles to be completed by that time may
be in two pieces of twenty miles each, one at each end of the
road. Proposals will be received for the building of the
road. As whole line, or for portions of twenty, forty or sixty miles. As
each twenty miles of road are completed, the company are
entitled to sell an additional seventy-six thousand eight hundred
acres of the land grant. The building of the west end of
this road, offers a favorable opportunity for founding a half
dozen or more colonies on a large scale.

The company own, with but few exceptions, each alternate
section (mile square) of land for fifteen miles on each side of
the road. Twelve to fifteen sections may be located on the
lands of the company; and the lands at the station, except
depot grounds and right of way, will be secured to the con-
tractors. The vicinity of Sioux City is a favorite spot for
German emigrants. It is believed that most of the work can
be paid for in lands and goods. Considerable work was done
at the east end of the road last year, for goods at lower
prices than the same work could formerly be done for money.
Maps and profiles may be seen, and further information had
at the office of the company, in Dubuque, Iowa.

Adopted by order of the Board,
F. S. WINSLOW,
PLATT SMITH,
J. M. REDMOND, } Corresponding Com.

HENRY BURDEN'S PATENT REVOLVING SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this
Machine for the United States, now offers to make transfers
of the Right to run said Machine, or sell to those who may be
desirous to purchase the Right for one or more of the States.

This Machine is now in successful operation in ten or twelve
Iron Works in and about the vicinity of Pittsburgh, also at
Ploverville, and Reading, Pa., Covington Iron Works, Md.,
Troy Rolling Mills, and Troy Iron and Nail Factory, Troy,
N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are nu-
merous:

Considerable saving in first cost; saving in power; the entire
saving in shingler's, or hammerman's wages, as no attendance
whatever is necessary.

It being entirely self-acting; saving in time from the quan-
tity of work done, as one machine is capable of working the
iron from sixty puddling furnaces; saving of waste, as nothing
but the scoria is thrown off, and that most effectually; saving
of staffs, as none are used or required.

The time required to furnish a bloom being only about six
seconds, the scoria has no time to set, consequently is not rid-
dled of much easier than when allowed to congeal, as under the
hammer.

The iron being discharged from the machine so hot, rolls
better and is much easier on the rollers and machinery.

The bars roll sounder, and are much better finished.

The subscriber feels confident that persons who will examine
for themselves the machinery in operation, will find it possesses
more advantages than have been enumerated.

For further particulars address the subscriber at Troy, N. Y.
P. A. BURDEN.

Railroad Spikes & Wrought Iron Fastenings.

THE TROY IRON AND NAIL FACTORY, EXCLUSIVE
OWNER of all Henry Burden's Patent
Machinery for making spikes, have facilities for manu-
facturing large quantities upon short notice, and of a quality
unsurpassed.

Wrought Iron Chairs, Clamps, Keys and Bolts for Railroad
Fastenings also made to order. A full assortment of Ship and
Boat Spikes always on hand.

All orders addressed to the Agent at the Factory will receive
immediate attention. **WM. F. BURDEN, Agent,**
Troy Iron and Nail Factory, Troy, N. Y.

Patent Machine-made Horse Shoes.

THE TROY IRON AND NAIL FACTORY have
always on hand a general assortment of Horse Shoes
made from Refined American Iron.

Four sizes being made, it will be well for those or-
dering to remember that the size of the shoe in-
creases as the number—No. 1 being the smallest.

WM. F. BURDEN, Agent,
Troy Iron and Nail Factory, Troy, N. Y.

FIRST INTRODUCED JULY, 1849



A. L. ARCHAMBAULT,
MANUFACTURER OF
**PORTABLE STEAM HOISTING
AND PUMPING ENGINES,**
From 3 to 30 horse-power, and
STATIONARY ENGINES, from 3 to 100 horse-power
S. E. cor. Fifteenth and Hamilton Sts.,
PHILADELPHIA.

FREIGHT CARS FOR SALE.

27 CARS—Have been run about two years, viz:—
5 long 8-wheel Box Cars, 2 with apartment for conductor
3 " " Cattle Cars
19 " " Platform Cars.

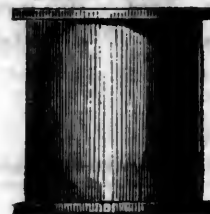
These Cars are made in the best manner, with large axles,
safety beams, brakes, lighter boxes, and have been newly
painted and will be sold low for cash.

WILLIAMS & PAGE,
2m17 41 Water st., Boston.

IMPROVED BEARING SPRING



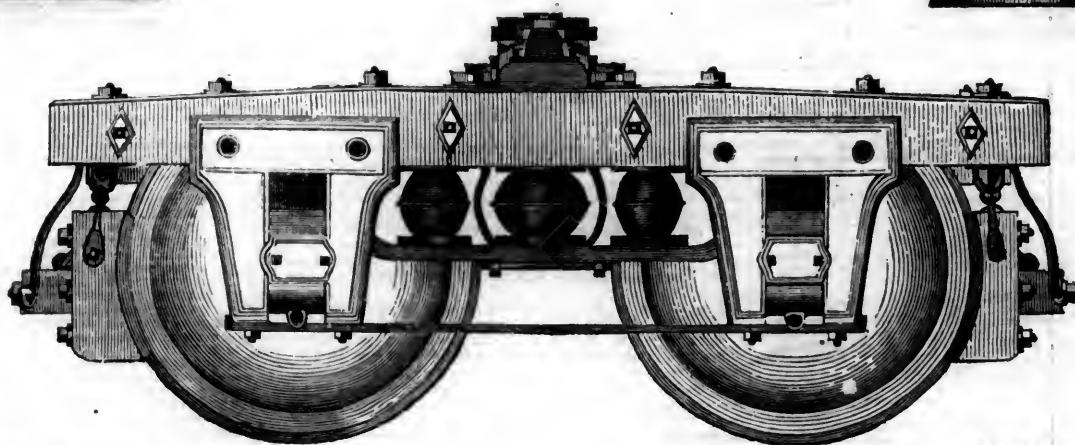
BEARING SPRING



New England Car Spring Co.

SOLE MANUFACTURERS

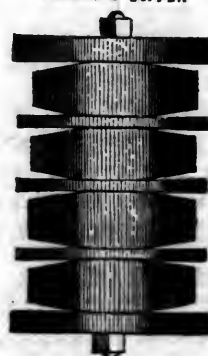
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Dubuque & Pacific Railroad Company.

THERE will be an election of seven directors of said Company on Monday the 6th of June, 1859, at the office of the Company in Dubuque.

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6119

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Notice to Bridge Builders.

ENGINEER'S OFFICE, C. & S. R. R. }
Charleston, May 23, 1859.

SEALED PROPOSALS WILL BE RECEIVED AT THIS Office until 12 M., on Saturday, 18th June next, for the construction of a single-track railroad Bridge across the Savannah River, about thirteen miles above the City of Savannah.

The said Bridge will have (6) six spans of (144) one hundred and forty-four feet each; and a swing bridge (190) one hundred and ninety feet long, (giving two openings of 80 ft. each.) The entire length of the Bridge will be about (1070) one thousand and seventy feet.

The superstructure of the Bridge to be of the most substantial character, and on the plan of Howe's Patent Truss. The piers and abutments to be composed of cast-iron cylinders, (6) six feet in diameter; sunk by Pott's pneumatic process, through an average depth of (20) twenty feet of mud, sand, and gravel, and securely based upon the impenetrable substratum which underlies the bed of the river.

Proposals will be received at the same time for constructing the said Bridge on piers and abutments of brick, resting on piled foundations.

The plans and specifications, bills of timber and iron, may be seen, and all other information obtained, at this office, on and after Monday, 6th June.

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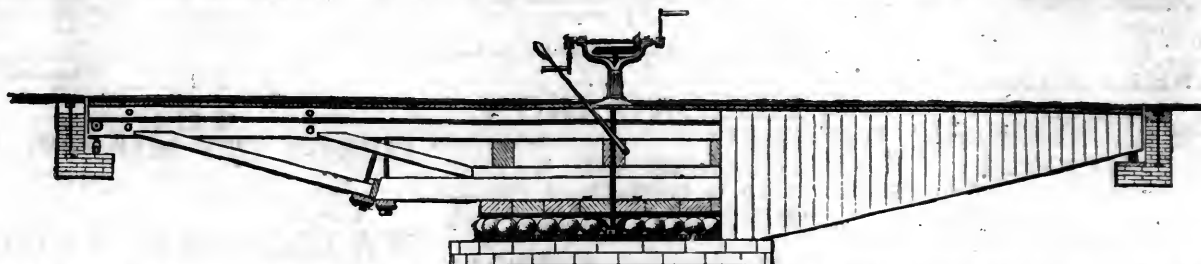
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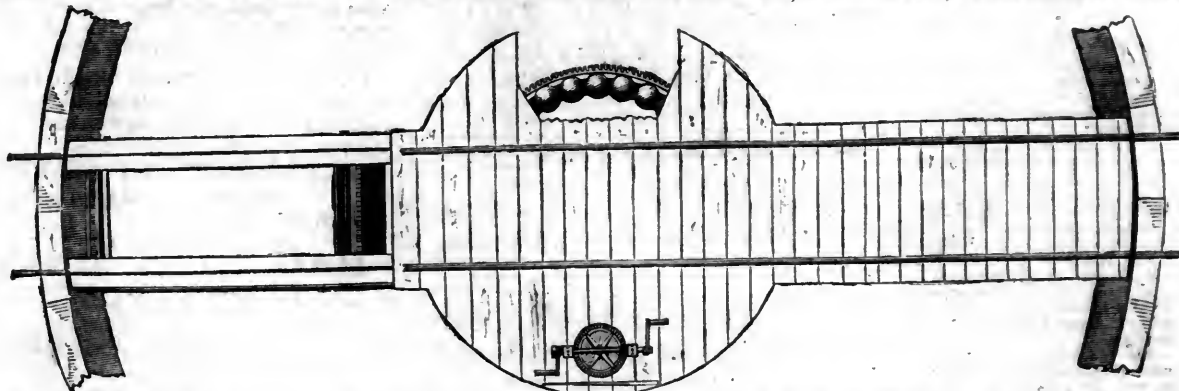
T. D. STETSON, Agent for procuring patents, No. 5 Tryon Row, (near City Hall). A circular with full information sent free by mail.

American correspondent *Prac. Mechanics' Jour* from 1854.

WARD'S PATENT SELF-CENTERING TURN-TABLE.



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These TABLES are already introduced, and give general satisfaction.—They are manufactured in TOLEDO, Ohio, by R. F. RUSSELL, of the "Toledo Novelty Works," and in ALEXANDRIA, Virginia, by THOMAS S. JAMELSON, to either of whom orders may be sent, or to the undersigned, patentee, at AUBURN, Cayuga County, New York.
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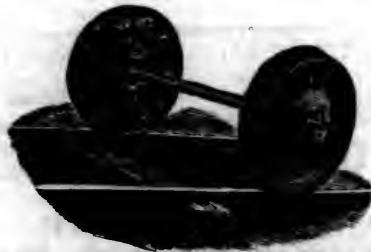
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STEAM NAVIGATION, COMMERCE, FINANCE,
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HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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SATURDAY, JUNE 11, 1859.

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MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, June 11, 1859.

Railroad Management.

To the Editor of the AM. RAILROAD JOURNAL.

I address this note to you for the purpose of eliciting your views upon a subject which I think of vast moment to the railroad interests of the country; and of the greater moment, because I believe that, from the aspect in which the matter seems to be viewed by many railroad directors, a most serious injury has grown up, and is exerting a deleterious influence upon this species of property. The question which I desire to have answered is this:—What are the absolute and relative powers, duties and obligations of the president of a railroad company and of the board of directors, to one another, in respect to the control, management and general administration of the affairs of a railroad corporation.

Upon a first view it would probably be answered that these are conferred, limited and depend solely upon the charters of these corporations. This doubtless would be the case where the charters are full and explicit upon this subject. But this, unfortunately, is the case with but few of them; and, consequently, these problems are left

to be solved by the circumstances attendant upon each individual case, to the prejudice of the true interest of the stockholders, and, frequently, to the loss of their property. Observation, and some experience, has brought me to the conclusion that the concentration of administrative responsibility upon the president of a railroad, and the usurpation of powers, which ought properly to belong to him, by the board of directors, is largely affecting this great interest. Most charters design that these things shall be provided for by by-laws, but in few instances is the making of by-laws attended to by stockholders, and the result is that these questions are left open as bones of contention between the executive of the road, and the directors. It will be a lucky day for railroad shareholders when the time arrives that something of military discipline shall be applied to the administration of roads. The interests of shareholders and the public at large are too great, nay vital, to place the administrative conduct of a railroad in the hands of a president, to be enervated by the indirect and *grave* responsibility of a board of directors. The true function of a board, as I conceive, is as an *advisory* council, to recommend by their counsels and reflect upon him, by their discussions, the general policy to be pursued in administering the affairs of the corporation they have in charge. To the president belongs the responsibility, and to him should be left the duty and honor of directing and giving energy to the execution of a wide discretion.

Excuse this cursory glance at the subject upon which I desire and request your views. I am a constant reader of your valuable paper, and for the reason that I set some store by your opinions and judgments upon all questions pertaining to railroad economy I now ask them.

Very respectfully,

A SUBSCRIBER.

New York, June 1, 1859.

If "A Subscriber" would allow us to supply the material and organize a board of directors, there would be an easy answer to his question. No road is well managed that is not guided by the intelligence, and directed by the will of *one* person. He should be allowed a wide range, though subject to

some rule of conduct, or some standard of responsibility laid down for his control. Our best managed roads are undoubtedly those the least interfered with by boards of directors. As a general rule, such a body are not near enough to the subject upon which they presume to decide, or have not given it sufficient attention to act with intelligence and safety. But however wise, no board of directors can impart intelligence and energy to the president, no more than can the convictions of one individual become the rule of conduct for another. No body of men, be they ever so competent in their own affairs, can manage a railroad so well as *one* of their number; nor was a railroad ever successful, either in construction or operation, that did not owe this success to the genius or capacity of *one* person.

How is such a person to be found and placed at the head of our companies? Before he can safely be entrusted with power, his capacity for its proper exercise must be shown. But not one in ten of the presidents of our roads are expected to have, in the outset at least, any experience in the duties which are to devolve upon them. Their financial influence gives them their positions. In other respects they may be politicians, adventurers, merchants, speculators, etc., etc. They do not propose, nor are they expected to qualify themselves for the task of managing a road. They may not be competent to superintend the construction of the simplest work on its line. They may not know one part of a locomotive from another. They may not be able to tell whether they are well or badly served by a single person under them. From this ignorance, their subordinates, no matter what may be their qualifications or degree of faithfulness, enjoy entire immunity in their positions—just as the managers of roads enjoy entire immunity in theirs; from a corresponding ignorance on the part of the stock and bondholders, of the responsibilities that should be exacted from them.

Under such circumstances, when matters go wrong, as they always will, it is natural that the directors should try their hand at the business: that each one should propose some nostrum, or panacea of his own—the sovereign remedy for the existing ills. They feel themselves authorized

to protrude their opinions from a consciousness that they are as wise as their chief. He defers to them for the same reason. The consequence is, that little is done, and that little is so diluted in its purpose and efficiency, that it might about as well be left undone. The road drags along, pays nothing to its stockholders, nor perhaps to its bondholders, and ends by becoming bankrupt—the reason of all of which the public are never able to comprehend.

The fallacy of "A Subscriber" consists in assuming presidents of railroads to be in all respects competent for their places, which is begging the whole question—admit it, and there is no room for argument.

Can such men be obtained? Not without an entire change in our present system, or want of system. This offers no rewards for good conduct, or to employees to qualify themselves for responsible positions, that bring both honor and emolument. A great many of our roads, and very important ones too, are constantly changing their officers. Those temporarily in power, with a conceit of knowledge very much in ratio to their ignorance, make a sweep of all below them and bring in a set as ignorant and conceited as themselves. The great body of superintendents are *peripatetics*, wandering round from one road to another, without being allowed to remain in one place a sufficient time to get fairly warm in it, or to establish anything like a permanent system or policy, or to display the qualities they may really possess. Should one not prove acceptable to the president or directors who may be entirely unfit to form any opinion of his qualifications, he must go. This is one of the worst features about our roads. No sufficient encouragement is offered to young men to enter the service of companies, in the expectation that qualifications will regularly lead to preferment—thus offering the highest positions as the rewards of merit. As it is, merit and position have no necessary connection. They are much oftener disjoined than united. The result is that the success of a railroad is all a matter of *chance*. It creates no surprise to find one which was supposed to be *all right to-day, all wrong to-morrow*. The public chronicle the result with a sort of stoical indifference. But where the fault lies defies all inquiry or analysis.

The primary fault is undoubtedly to be looked for in the ignorance that prevails in the public mind upon the subject of railroad management. This ignorance is in part due to the silence that railroad managers usually maintain as to the manner in which they or their subordinates have discharged their duties. We have not to go far in proof of this remark. We should like to find the man who can tell us how the Hudson River, the New York and New Haven, the Erie, the Camden and Amboy, or even the New York Central is managed? Certainly no idea is to be got from anything the managers of these roads have ever told us. Their policy is to say just as little as the law will allow them to. The only standard the public have whereby to form an opinion is the apparent degree of success obtained. But this even may not be one-half what it should be.

The great thing wanted is, that every person who occupies an important position on a road should be compelled to make a public exhibition

of himself once or twice a year at least. An appropriate place for this exhibition is in the stated reports of the companies. We think as a general rule, that our roads are well managed just in proportion to the thoroughness with which this exhibition is made. We will cite the Baltimore and Ohio and Pennsylvania railroads in proof. In these, the parties holding important subordinate positions, are made to tell their own story. They naturally desire to make a creditable display of themselves, and to enable themselves to do so, for a series of years, their conduct must approach the standard of excellence they wish to assume. A desire for a good name becomes necessarily a matter of habit which ends in deserving one. An army would not be worth a straw, when nothing was ever heard of any one but the commander in chief. In most of our railroad companies, no figure is seen but that of the chief executive. All below him are an undistinguished mass, without anything like individual life, and without the motive to any. Where no adequate motive exists, no great excellence will ever be found.

We have already made a long story, but we will say a word or two more. Behind the indifference in the part of the managers is, as already stated, that of the owners of our roads. Among these there is very little interest felt as to the manner in which they are conducted. It is natural that it should be so. Almost every person in the United States is deeply immersed in his own business or calling, the duties of which tax all his capacities. We all know that nothing is so annoying and wearisome to a person so engrossed as to have his attention called to matters entirely foreign to his ordinary pursuits. It is like entering upon a business with which one has not the slightest experience, or the organizing a new department in his mental operations, already too much taxed—or assuming labors and duties for which he never had the least aptitude. Now a sense of duty or interest may, in the outset, lead a person, who has invested largely in a railroad, to pay some attention to the manner in which it is managed. But habit and inclination are stronger than the momentary impulse which a new investment communicates. If the road, luckily, be well managed, he gladly throws off all care or thought about it. If badly, the keen sense of loss gradually becomes weakened by lapse of time, and by his having made it up in his own regular business. He sees his folly in having ever departed from it, charges all his investment to *profit and loss*, preferring to sink the whole rather than to have his mind distracted by dwelling upon, or looking after his unlucky venture. Henceforth the managers of the road, having no check from its owners, go on their own way, without let or hindrance.

There is a remedy for all these evils, which is to make our roads, in effect, *private property*. The great curse of the United States is *joint stock corporations*. In these, it is the interest and aim with every person employed, to get the largest sum possible for the smallest amount of service rendered. This statement measures the relations of a corporation and the servants of it. In such as are successful, the pay is graduated upon the scale of exact equivalents—so much service, or labor, for so much pay—as in an iron mill or a cotton factory. Were these to hire their workmen as do railroads, they could not stand a year: To

make railroads successful we must introduce a similar principle—that of individual responsibility. Make compensation depend upon services rendered, and every person employed will do his best, as the means of increasing the amount of his compensation. If the running of our railroads, or if the different departments of service could be farmed out, it would not be long before they would be in the hands of those persons best competent to make the largest sum possible out of them. Such men directly appealed to, would not long be lacking in any branch of service. Every road, capable of being so, would be rendered productive. Success is the general rule of society. In every great interest there should be steady improvement. Railroads would fall under a similar law, in which intelligence and capacity would have full and free scope, and where every person employed, no matter how insignificant his position, would become a co-laborer to a common end.

The War and the North American Overland Route.

(From the *London Post*, May 17.)

Among the grave consequences that may result from the existing state of things on the Continent is one of especial interest to England, alike in a commercial and in a political point of view—the interruption, namely, of our overland communication with the East. Should it happen, by whatever deplorable complication, that we became belligerent, and that France and Russia were among our opponents, there can be no doubt that a chief object with these Powers, for various considerations, would be to close against us that road to India which we now travel with such comparative speed and facility through Egypt, and to preclude us from that other highway which Sir Macdonald Stephenson is so energetically essaying to open up to us through Turkey. Were these objects accomplished—and where the stake is so important it is better to contemplate, in order that we may provide against the worst—the effect of our exclusion from prompt inter-communication with the East through Egypt, or through Turkey, might be disastrous as well to our commercial as to our political interests, were no timely means taken to neutralize the evil, by securing a communication in another direction. It is very true that the bulkier classes of our merchandise might continue, as now, to be sent round the Cape, and that the employment of a line of steam transport ships on that route, as proposed by Messrs. Croskey, might materially facilitate the transit, as well of heavy merchandise as of troops, under ordinary circumstances; for, as it is, the forwarding of goods by the Egyptian overland route is only suited for comparatively light articles. The vital object, however, is to secure railway communication to the utmost possible extent between this country and our possessions, and our markets in the East, or, the route thither changed, the far West as it would become to us, and to have that railway communication wholly on our own ground, secure alike from the assaults of enemies, and from the gross extortions of such friends as the Pasha of Egypt, who mulcts the customers of the Peninsular and Oriental Steam Packet Company in the sum of £8 per ton for conveyance between Alexandria and Suez, thus bringing up the total expenses from England to Bombay, Madras, or Calcutta, to the high figure of £36 per ton of forty cubic feet, besides a per centage put on for value.

Under these circumstances it is especially gratifying to reflect that we have the means of completing a through transit from England to India and the East, so far as railways are concerned, *entirely within our own possessions*. The great question of the Inter-oceanic Railway that, despite all difficulties, is to connect the Atlantic with the Pacific, between Halifax and Vancouver's island, has more than once been emphatically urged upon public

attention in these columns. One great difficulty, by many persons deemed insuperable, seemed to present itself in the vast range known as the Rocky Mountains, whose frowning precipices were supposed by the large class who take things for granted to form an impassable barrier between the prairies of the Saskatchewan and the new colony of British Columbia, that new Liverpool, which we confidently expect to see rising up within a few years on Vancouver's Island. Happily, however, as the result of the scientific exploration of the route, which has been made by Captain Palliser and Dr. Heeler, *all question of obstruction in the passage of the Rocky Mountains is completely set at rest, and there is clearly shown to be no practical difficulty in the way of the speedy construction of a railway to the Pacific through British North America.* The highly influential gentlemen who form the direction of the North-west Transportation Company, and who as such, have undertaken to open up a route between, in the first instance, Lake Superior and the Red river settlement, seem to consider that some years must necessarily elapse before a direct railway communication can, under the most favorable circumstances, be established; but we trust that maturer observation of the subject will render them more confident as to the feasibility of effecting railway communication itself. The Americans are more go-ahead folks than we in their speculations, no doubt; but it has yet to be shown that we are not as energetic and effective as they when a practical object of clear utility is set before us. In no respect have the people of the United States manifested greater development than in the extension of railway inter-communication. Of this power, Mr. Oliphant, in his amusing work on "Minnesota and the Far West," gives an emphatic illustration in the case of the railway traffic of Chicago. In 1852, he tells us, there was only one railway, forty miles long, into that city; but when he re-visited the place in 1855, nearly twenty railroads radiated; either directly, or by connection, from Chicago, with an aggregate length of two thousand five hundred miles—"each from one to three hundred miles long, passing through and opening up new and fertile districts." Now, the distance between Fraser river, in British Columbia, and the western head of Lake Superior, is only fifteen hundred miles; and although there certainly do not exist on the route those already created towns which in the States served as feeders for the various railways, there do exist throughout the line the "new and fertile district" which, access to them, once furnished, will give birth to towns that will amply feed the railway of themselves, to say nothing of Canadian nutriment; while there exist, moreover, on this side, the greatest powers of supply of all manufactured goods known in the world, and, on the other side, six hundred millions of people ready, now or proximately, to be customers for those goods. *Along this line the commodities of the East and those of the West will be interchanged with a rapidity now impracticable, for the distance between, say Canton and London, will be lessened by not fewer than five thousand three hundred and fifty miles, of which, moreover, a considerable proportion will be represented by railway transit.* The object is one of such importance in every point of view that we trust the government at home will lend their hearty and liberal support to its promotion, in whatever way may be found most expedient, and this support should find zealous co-operation on the part of the provisional governments. There seems some difficulty impeding the development of the line between Halifax and Quebec, which would have formed the first portion of the great Inter-oceanic Railway. Wherever this difficulty lies, it is earnestly to be desired that no effort be omitted to remove it, and at once.

We are glad to see the attention of Englishmen turned toward their possessions in this country. Whatever may be said of the practicability of carrying on a large commerce, by railway, across this continent, the discussion of such a scheme will tend to draw attention to, and develop the re-

sources of the interior of British America, about which little is now known, although in a few years it is destined to attract great interest, not only in Europe but in the United States. The construction of a line of railroad from St. Paul to the navigable waters of the Red River of the North would open several hundred thousands of square miles of country, possessing an excellent soil, a good climate, and extraordinary commercial facilities. The colonies that England has planted upon unoccupied soils have proved much more profitable to her commerce, and have given much less trouble in their political relations than the subjugated races which are held by no tie but that of force. The best customer of Great Britain is the United States—the next best, her North American Colonies. The most important of these, the Canadas, occupy an area insignificant in extent and value, compared with that lying upon the Saskatchewan and the Red River of the North. Only let this new territory be opened, and the wonderful progress of the United States and Canada will be repeated in a new field.

In reference to this country, Englishmen make a common and almost necessary mistake, considering their exclusive and unaffiliating character. They turn their attention hitherto for fear that they may be compelled to share their present route with Russians or French. On this continent they show a similar repugnance to coming into contact with the United States. We must have, say they, a route across the continent entirely within our own territory. This, for commercial purposes, is simply a matter of impossibility. No continuous route for a railroad from ocean to ocean can be found in British territory. A railroad cannot be constructed at any reasonable cost around the north shore of Lake Superior. Were it possible, nothing would pass over it from its inaccessibility and immense cost. Commerce knows no political line. A merchant who had anything to send across the continent, would not stop to ask about the political institutions of the region traversed, but about the cheapest, safest and most expeditious route. A war between the two countries would put an end to not only all commerce, but to the running of the road through the British Possessions. In peace, the cheapest carrier would take the business. The St. Lawrence is closed for six months in the year; Lake Superior for a still longer time. Through these waters must a railway through British territory be reached. A great commerce can never be subjected to such interference as this, when shorter and better routes exist, approachable every day in the year.

Notwithstanding the present feeling in England, we are glad to see that events taking place elsewhere are turning attention this way. Prejudice will soon give place to more correct views, and to a more enlightened policy. We do not despair, even, of seeing Englishmen assisting in the construction of a great work in the United States, which is to open to them their own territory—we mean the Minnesota and Pacific Railroad. The completion of this work would throw open the whole interior of the continent to the very base of the Rocky Mountains, and to the Pacific coast. Should these mountains prove to be easily penetrable, as is confidently affirmed, the first step to this end will not be taken till the construction of the work named.

Rock Island Bridge.

We gave not long since a copy of instructions issued by the Secretary of War to a commission of officers of the United States Topographical Corps, directing them to inquire in the obstructions to navigation, alleged to be caused by the bridge over the Mississippi at Rock Island. This committee have made an examination of the bridge, and have submitted a report, of which the following is an abstract:

1. The Board is of opinion that the railroad bridge, which crosses the Mississippi river between Rock Island and Davenport, is *not* constructed according to correct principles, reference being had to the interests of navigation.

2. The piers of said bridge are *not* of the best form, and there was no practical difficulty in constructing them of the proper form. With the exception of the turn-table pier, the Board is of opinion that the defective form is a matter of no national importance. The turn-table pier will be more particularly referred to in answer to the next question.

3. The only pier larger than is necessary is the turn-table pier. This pier, in the opinion of the Board, should have been constructed no longer or broader than was absolutely necessary to sustain the trap when the draw is open, and protect it from injury by passing boats. It might have been constructed with a length of 295 feet, affording ample support and protection, it being actually 355 feet in length, the difference, 60 feet, is unnecessary, and, in the judgment of the Board, pernicious. The effect of making it larger than was absolutely necessary, is to contract the water way, increase the velocity, narrow the draw passage and present more surface for boats to strike against; thus increasing the difficulty of their passage through the draw. In a pier of this size the form of the starling is of importance, and the upper faces of the pier should have been curved surfaces.

4. The piers are not placed parallel with the current, but at angles varying from 26 to 14½ degrees. The effect of this obliquity is to treble the obstruction to the flow of the water, and consequently to affect the increase of velocity in the same ratio. Another consequence is that the passage of steamboats and rafts through the draw and between the piers is rendered much more difficult and hazardous. Furthermore, the draw on the Iowa side is rendered useless by the formation therein of an eddy.

5. The velocities in the different parts of the river in the vicinity of the bridge have already been stated, and will be found tabulated in appendix.

6. The eddy on the Iowa side of the turn-table, as nearly as could be estimated, is about 100 feet wide at the top of the pier, and the turbulence and boiling of the water extends about 500 feet below. This eddy, however, is constantly varying its position and dimensions. Its effect on the passage of boats ascending and descending, is undoubtedly to render them more difficult on account of the care required to avoid getting one part of the boat into it, while another part is in the current of the draw. It has been previously stated that the effect of this eddy in the Iowa draw is to render it useless.

7. The surface of the water at the up-stream end of the turn-table pier, is sixteen and a-half inches above the surface of the water at the down stream end. The extent of the back water, or *remous*, as nearly as could be estimated, is about one hundred and fifty feet.

8. The bridge is badly located, and, in consequence of this bad location, is a greater obstruction to the passage of steamboats than would have been necessary had the location been good. Any site in the vicinity of Rock Island, out of the rapid current, would have been better.

The Board considers it proper to recapitulate some of the well known principles of bridge building, to show how far they have been conformed to or departed from with the Rock Island Bridge.

These principles are:

1. That at a given place, in locating a bridge over any stream, the site where the velocity of the current is minimum, should be selected.

2. That in designing a bridge, the piers should have the minimum cross section consistent with the support of the superstructure, thus offering the least obstruction to the flow of the water, and increasing the velocity of the current as little as possible.

3. The piers should always be placed parallel with the thread of the stream for the same reasons as those stated in the second principle, and because they thus render the passage of boats and rafts less difficult.

4. In designing a bridge over a river having a large commerce in boats and rafts, the draws and piers should be of the greatest practicable width.

In applying these principles to the Rock Island Bridge the Board is constrained with extreme regret to report that *all have been violated*, thus rendering the bridge not only an obstruction to the navigation of the river, but one materially greater than there was any occasion for.

The result of this report will be, we suppose, that the present bridge will have to come down. We presume there would be no objections to the construction of a new one, avoiding those which attach to the present one. The destruction of it would involve a heavy loss to the Rock Island Railroad which has a large interest in it.

LaGrange and Columbus Railroad.

The people of Eastern Georgia are agitating the construction of a railroad from LaGrange, on the line of the Atlanta and LaGrange Railroad to Columbus. In reference to this project, the *Atlanta Republic* says:

Already \$175,000 has been subscribed between LaGrange and Hamilton, and the amount in prospect, which will be subscribed, will put the subscriptions up to \$300,000—thereby making the road certain of success so far as the upper end is concerned. If the people of the southern part of Harris, and the northern part of Muscogee, will come up to the rescue, the success of the enterprise will be placed beyond a doubt; and we have every reason to believe that they will.

Mr. Edward Broughton, a gentleman of long experience in building railroads—and withal a man with the means, energy, and ability, to carry out any contract he undertakes—proposes, that if \$300,000 will be raised, he will commence the road and build it to Hamilton at fair prices; and what is lacking to remunerate him for such service he will take in stock.

If the road is built to Hamilton, the people below, and at Columbus, will never allow it to stop at that point. Self-protection would force them to carry it on to Columbus. Therefore, we may conclude that the road *will be built*.

TREATISE

OR THE

PRINCIPLES OF CIVIL ENGINEERING

AS APPLIED TO THE

CONSTRUCTION OF WOODEN BRIDGES.

By S. S. POST, Civil Engineer,

And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 355.)

EXAMPLE F.

Suppose a truss is required to be 20 feet high in the middle, about 160 feet clear span, and to have the outline of the greater portion of a semi-ellipse.

Any length of ellipse may be assumed which, on trial, will give a suitable length of ordinate for the end height of the truss.

For simplicity in calculation the length of the ellipse in this case is taken at 200 feet.

Fig. 70.

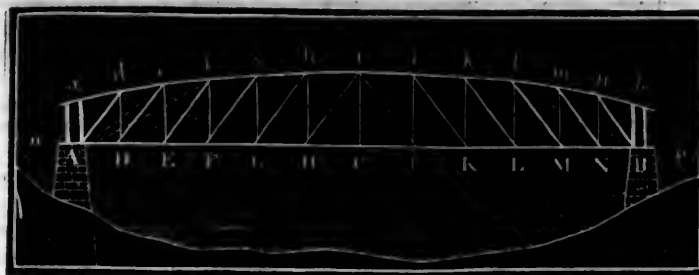


Fig. 70 represents a truss with a top conforming to the curvature of an ellipse, the longest diameter of which, is 200 feet, and the shortest diameter 40 feet.

Then the middle height (Cc) of the truss is 20 feet, and half the transverse axis (Co) of the ellipse is 100 feet.

Making the width of the first panel from the middle $CI=CH=15$ feet, the ratio of the height to the width will be—

$$20 : 15; \text{ or } 1 : .75; \text{ or } \frac{15}{20} = 0.75.$$

Putting $y=Hh$, x will be equal 15, and the equation $y^2=b^2-\frac{b^2x^2}{a^2}$ becomes $(Hh)^2=$

$$20^2 - \frac{20^2 \times 15^2}{100^2} = 400 - \frac{400 \times 225}{10,000} = 391 = (19.77)^2.$$

The height of the ordinate Hh is thus found to be 19.77 feet. Multiplying this height by the ratio 0.75 gives the width of the second panel (GH) $19.77 \times 0.75 = 14.83$, to which add the width of the first panel for a second value of $x=14.83+15=29.83$. Then—

$$y^2=(Gg)^2=400 - \frac{400 \times 29.83 \times 29.83}{10,000} = 364.41 = (19.09)^2,$$

$$FG=19.09 \times 0.75=14.32, \text{ and } 14.32+29.83=44.15 = FC=x,$$

$$y^2=(Ff)^2=400 - \frac{400 \times 44.15 \times 44.15}{10,000} = 322.03 = (17.95)^2,$$

$$EF=17.95 \times 0.75=13.46, \text{ and } 13.46+44.15=57.61 = EC=x,$$

$$y^2=(Ee)^2=400 - \frac{400 \times 57.61 \times 57.61}{10,000} = 267.24 = (16.35)^2,$$

$$DE=16.35 \times 0.75=12.26, \text{ and } 12.26+57.61=69.87 = DC=x,$$

$$y^2=(Dd)^2=400 - \frac{400 \times 69.87 \times 69.87}{10,000} = 204.73 = (14.31)^2,$$

$$AD=14.31 \times 0.75=10.73, \text{ and } 10.73+69.87=80.60 = AC=x,$$

$$y^2=(Aa)^2=400 - \frac{400 \times 80.60 \times 80.60}{10,000} = 140.15 = (11.84)^2.$$

The widths of the panels of each half span are 15, 14, 83, 14.82, 13.46, 12.26 and 10.73=80.6 feet. The whole span exceeds that proposed by 1.2 feet. This may be corrected by a proportionate reduction of the ratio of the height and width of the first panel, and repeating the operation.

Should it be desirable, the span may be extended in a similar manner by adding two, four, or more panels.

Taking the clear span at 161.2 feet and assuming that every foot of the truss is loaded with 1,500 lbs.; the total weight between the bearing points on the abutments (A and B) will be 241,800

lbs., or upon a half span 120,900 lbs. Of this weight the vertical ties will each sustain, directly, so much as belongs to the contiguous half panels.

The weight due to the panel CH will be supported one-half by the tie Cc and the other half by the tie Hh . The tie Hh will also support one-half of the weight due to the panel GH , while the other half will be supported by the tie Gg , etc., etc.

The weight upon each tie, of one-half the span, will be—

$$\text{On } Cc \quad \frac{15}{2} \times 1,500 = 11,250 \text{ lbs.}$$

$$\text{" } Hh \left(\frac{15}{2} + \frac{14.83}{2} \right) \times 1,500 = 22,373 \text{ "}$$

$$\text{" } Gg \left(\frac{14.83}{2} + \frac{14.32}{2} \right) \times 1,500 = 21,862 \text{ "}$$

$$\text{" } Ff \left(\frac{14.32}{2} + \frac{13.46}{2} \right) \times 1,500 = 20,835 \text{ "}$$

$$\text{" } Ee \left(\frac{13.46}{2} + \frac{12.26}{2} \right) \times 1,500 = 19,290 \text{ "}$$

$$\text{" } Dd \left(\frac{12.26}{2} + \frac{10.73}{2} \right) \times 1,500 = 17,242 \text{ "}$$

$$\text{" Abutment A } \frac{10.73}{2} \times 1,500 = 8,048 \text{ "}$$

$$\text{Total half span } \dots = 120,900 \text{ lbs.}$$

The vertical pressures upon the braces will be—

$$\text{On } cH \dots \dots \dots 11,250 \text{ lbs.}$$

$$\text{" } hG \ 11,250 + 22,373 = 33,623 \text{ "}$$

$$\text{" } gF \ 33,623 + 21,862 = 55,485 \text{ "}$$

$$\text{" } fE \ 55,485 + 20,835 = 76,320 \text{ "}$$

$$\text{" } eD \ 76,320 + 19,290 = 95,610 \text{ "}$$

$$\text{" } dA \ 95,610 + 17,242 = 112,852 \text{ "}$$

$$\text{On abutmt A } 112,852 + 8,048 = 120,900 \text{ "}$$

The ratio of the heights to the widths of the panels being as 1 to $\frac{3}{4}$, the horizontal thrusts of the braces will be three-fourths of the vertical forces.

Then the horizontal thrusts of the braces, and the consequent tension upon the bottom chord, will be

$$\text{Of brace } cH \ 8,437 \frac{1}{2} \text{ lbs. tension on } CH,$$

$$\text{" } hG \ 25,217 \frac{1}{2} \text{ " " " } CG,$$

$$\text{" } gF \ 41,613 \frac{1}{2} \text{ " " " } CF,$$

$$\text{" } fE \ 57,240 \text{ " " " } CE,$$

$$\text{" } eD \ 71,707 \frac{1}{2} \text{ " " " } CD,$$

$$\text{" } dA \ 84,639 \text{ " " " } CA.$$

$$\text{Total } \dots 288,855 \text{ lbs. at middle of chord.}$$

The ratio of height to width being the same for all the panels, the ratio of the height to the diagonals, in the direction of the braces, will also be uniform for all the panels.

The length of the brace Hc is 25 feet—for $\sqrt{(20^2+15^2)}=25$ —and the ratio of the vertical to the oblique is as 20 : 25, or as 1 : $\frac{5}{4}$; or, $\frac{25}{20} = 1.25$.

Consequently, the oblique strain, or thrust of each brace, is one-fourth greater than the vertical force applied to that brace.

The oblique strains of the braces are—

On brace cH	14,062½ lbs.
" " hG	42,028½ "
" " gF	69,356½ "
" " fE	95,400 "
" " eD	119,512½ "
" " dA	141,065 "

Of the 1,500 lbs. per lineal foot, 600 lbs. may be taken as weight of structure, and 900 lbs. weight of passing load. The vertical pressures upon the counter-braces will be to the vertical pressures on the direct braces, as 900 to 1,500, or as 3 to 5. If the braces and the counter-braces of each panel were of the same length, their oblique thrusts would be in the same ratio. In this case however the strain upon the counter-brace will somewhat exceed three-fifths of the strains upon the braces in the same panel.

The approximate strains, to which the various timbers, bolts, etc., will be subject, having been calculated, their dimensions may be determined as in the previous examples, good judgment and mechanical knowledge being requisite in fixing upon the most suitable loading proportions of sections of the chords, braces, beams, etc.

Having disposed of this truss as an independent open beam, it may be well to inquire farther into the effect of combining with the beam, the principle of the confined arch, composed of a system of arch-braces and straining beam, as illustrated in Fig. 59 to 67 inclusive, and by means of which a latent strength is kept in store to provide against the contingency of a broken chord.

In the McCallum arrangement, as illustrated in Fig. 59, the end heights of the truss are sufficient to allow the smoke stack of a locomotive engine to pass under top lateral bracings, and the arch braces take such angles that the resultant of their oblique forces is inclined about 45 degrees or one to one. In this case the vertical and horizontal pressures are equal to each other.

Suppose arch-braces to be used in the present example, and inserted as from A to f and A to e, Fig. 70, bearing firmly upon the angle of the abutment, or pier A, so that they support the weight of one-half the truss and its load. Let the depth of the chord be 15 inches, the corbel or bolster 10 inches, and the wall plate 5 inches, in all 30 inches, or 2.5 feet, from the top of the chord to the angle formed by the face and the top surface of the abutment.

The arch-brace Af will then have an inclination of 20.45 vertical to 36.45 horizontal and its length will be $\sqrt{(20.45)^2 + (36.45)^2} = 41.8$ feet.

The arch-brace Ae will have an inclination of 18.85 vertical and 22.99 horizontal, and its length will be $\sqrt{(18.85)^2 + (22.99)^2} = 29.73$ feet.

The weight of the half truss and its load being 120,900 lbs., the vertical pressure on each arch-brace, if alike, will be 60,450 lbs.

The oblique thrust of the longer brace will be 20.45 : 41.8 :: 60,450 : 123,555 lbs.

The oblique thrust of the shorter brace will be 18.85 : 29.73 :: 60,450 : 95,341 lbs.

If these braces are supported laterally by the posts Dd and Ee, as in Fig. 59, their length will be divided into segments, the longest of which will be about 14 feet, and if their thickness be taken at 12 inches, they will resist the same tendency to compression, per square inch of section, as a pillar 14 diameters in length, or say 800 lbs.

The depth of the longer brace will be nearly 13

inches; for $13 \times 12 \times 800 = 124,800$ lbs.; and the depth of the shorter brace will be nearly 10 inches; for $10 \times 12 \times 800 = 96,000$ lbs.

The horizontal thrusts of these braces will be—
20.45 : 36.45 :: 60,450 : 107,745 lbs.
and 18.85 : 22.99 :: 60,450 : 73,726 "

Total horizontal thrust... 181,471 lbs.
Deduct half weight of truss... 120,900 "

Excess of horizontal force... 60,571 lbs.

The resultant of oblique forces in this case has an inclination of 2 vertical to 3 horizontal very nearly.

The horizontal strain at the middle of the chord was found to be 288,855 lbs.
The horizontal thrust of arch-braces... 181,471 "

Difference in favor of arch (36 per ct.) 107,384 "

Fig. 71.



§ 100. The centre of gravity (G) of the pier (Fig. 71) is in the line CH and the weight of the mass acts vertically upon the point II at the middle of the base (BF).

Any horizontal force, applied at A, will have a tendency to overturn the pier, about the angle F and to raise the point H. Then CHF may be considered as a bent lever with its fulcrum at F; the weight to be moved at H and the power applied at C.

Again, if a weight be applied at A it will act vertically upon the point D, and the two arms of the lever will be AD and DF.

A pier of solid granite 5 feet wide and 25 feet long on the top, 50 feet deep with a *batir*, of 0.1, will contain 15,416½ cubic ft., weighing, at 170 lbs. per cubic foot, 2,620,833 lbs., and without any superincumbent weight, will require a horizontal force of 393,120 lbs. to overturn it. If one-half the weight of the bridge (241,800 lbs.) rest upon the angle A of the pier (Fig. 71) it will require an additional horizontal force of 48,360 lbs. to overturn it, or a total horizontal force of 441,480 lbs.

The horizontal thrust of the arch-braces, of the two opposite trusses of a single track bridge, is $181,471 \times 2 = 362,942$ lbs.

The horizontal thrust is, therefore, 76,540 lbs., or 20 per cent. less than the pier has the ability to resist.

The horizontal strain upon the chords of the two trusses, is $288,855 \times 2 = 577,710$ lbs., which strain, in case both chords were to be severed, would thrust horizontally at the tops of the piers, and this thrust would be 136,230 lbs. or 31 per cent. more than the pier can sustain.

In case the pier should happen to be founded upon the level surface of a solid rock, the base closely fitted and cemented with mortar having a tenacity of only 12 lbs. per square inch, it will resist a further horizontal force of 136,080 lbs. For, the base has an area of $35 \times 15 = 525$ square feet; and the total tenacity of the mortar at the base will be $525 \times 144 \times 12 = 907,200$ lbs.

This will resist a horizontal pressure, at C, of $907,200 \times \frac{1}{60} = 136,080$ lbs.

The sum of the horizontal forces which the pier can now resist will be on account of its own weight 393,120 lbs.
On acc't of weight of superstructure 48,360 "
On acc't of tenacity of mortar at base, 136,080 "

Total resistance of pier.... 577,560 "

Stability of pier less than tension on chord, 150 lbs.

Stability of pier greater than thrust of arch, 214,768 lbs.

(To be continued.)

Journal of Railroad Law.

TRANSPORTATION CONTRACTS—MEANING OF THE WORD "TOLL."

Some time since an agreement was entered into between the Delaware and Hudson Canal Company and the Pennsylvania Coal Company, providing for the transportation of the coal mined by the Pennsylvania Coal Company, over the Delaware and Hudson Canal. The agreement provided that the Coal Company should have the right to transport coal over the canal with the same facilities as were enjoyed by the Canal Company themselves, or by any other persons. It further provided specially for a rate of tolls to be established on the first of May in each year. These tolls were to be fixed by ascertaining the quantity of lump coal belonging to the company, which, at that period, they should have contracted to sell and to deliver at Rondout, (the easterly terminus of the canal,) by transportation on the canal, during the year. The average price per ton of these sales were to be ascertained. From this average price, \$2.50 per ton was to be deducted, and one-half the remainder was to be the toll per ton to be charged to the Pennsylvania Coal Company for the transportation of their coal during the year.

The agreement further provided (and it was upon the effect of this provision that the question presented in the lawsuit of which we are about to speak, chiefly arose) that if the quantity of lump coal which, on the first of May, should have been sold, should be less than half the estimated sales for the year, then the toll during that year should be calculated on the average price per ton at which the sales should actually have been made.

Under this agreement the question soon arose—
at what time were the tolls payable, in case the sales prior to May 1st fell below one-half the estimated sales for the year?

The Pennsylvania Coal Company contended that in such a case the tolls could not be fixed under the contract until the *end of the year*; and that they therefore were not bound to pay any toll until the end of the year arrived. The Delaware and Hudson Canal Company on the other hand maintained they had a right to insist on an *immediate* payment on account, of a sum to be fixed by a proximate estimate of the tolls; though they did not deny that the amount of the tolls could only be accurately ascertained at the end of the year.

A suit was brought by the Coal Company against the Canal Company to test this question, and the decision was that the construction contended for by the Coal Company was correct. The following extract from the opinion of the court shows the reasons assigned:

CLERKE, J., after stating the facts. As a general rule, no one is obliged to perform a contract until its nature, limit and conditions are ascertained and prescribed. No debt can be legally demanded until its amount is capable of being estimated. If A engages B to go to Rome, and promises to pay all the expenses which he incurs on the route, B cannot compel payment of any portion of his expenses until he completes the journey, unless he has taken the precaution to have it expressly understood that A shall pay him the several portions of the outlay as they are incurred.

I can discover no essential difference on the point involved between such a case and that now before us, except that the latter relates to tolls, which it is said necessarily imply immediate payment. Is there, indeed, any peculiar virtue in the word "toll" which gives it so potent an effect as to lift any contract in which it is employed above the ordinary rules of construction? And after sifting this case thoroughly, and disengaging it from all irrelevant topics, we shall find that this is the only question that remains for consideration.

Does the word "toll," which is employed throughout this agreement import, *et vi termini*, an instant collection, as soon as the weight of the cargo is ascertained at the usual price?

"Toll" is a Saxon word, originally signifying a payment in towns, markets and fairs, for goods and cattle bought and sold there. It is defined in the institutes to be a reasonable sum of money due to the owner of the fair or market, upon sale of things tollable, within the same. It is now, also, popularly applied to the charges which canal and railroad companies require for the transportation of goods payable, no doubt, at once, in all cases, where there is no right or arrangement importing the contrary—precisely as goods sold are presumed to be sold for cash, unless by express terms, or from the circumstances of the case, the transaction shows a credit. The word means nothing more than a compensation for the privilege of service granted or rendered; and the period of payment depends entirely as in every other case, upon the express or implied understanding of the parties. The right of the Canal Company in this respect is not at all enlarged by the charters which it has received from the States of Pennsylvania and New York. It is, indeed, permitted by these charters to exact certain tolls and rates, not exceeding three cents per mile for every ton of ascertained burden in every vessel. But even in such cases where the rate is fixed, the toll cannot be exacted until the burden is ascertained, so that the amount payable must be certain before it can be demanded. Nothing appears in these charters impressing on the word "toll" a signification which, *et vi termini*, imports an immediate right of collection where the terms of a contract are inconsistent with it. They do not, in other words, contain any immunities to the company, shielding them from the effect of the ordinary meaning of language, as the ordinary consequences of the want of circumspection and care in the preparation of their contracts. The employment of the word "toll," therefore, does not, *et vi termini*, give the Canal Company any right to the collection of

it before its amount is ascertained. And as I have already intimated, the contract itself contains nothing from which it can be satisfactorily and legally inferred, that the parties intended, in the contingency contemplated in this clause of the agreement, that the tolls should be payable before the expiration of the year. To be sure, immediate payment is provided for in the first clause; but this is no reason why we should legally infer that this was intended on the happening of the contingency mentioned in the provision under consideration. Indeed, the presumption is at least as much in favor of the opposite supposition. In the one, immediate payment was expressly provided for, because the amount could be ascertained with certainty; in the other, it may be fairly assumed that immediate payment was dispensed with, and payment postponed until the expiration of the year, because the amount could not be ascertained with certainty until that time. And may it not be plausibly maintained, if the parties designed payment on account, by some proximate calculation, that they would have declared it? Their attention was, most manifestly, directed to the subject of payment, by contemplating the contingency; and, if they deemed it practicable and convenient, common prudence, of which we are not to presume any one destitute in matters in which important interests are concerned, would have required a suitable provision for this purpose, expressly set forth in the contract. For, assuredly, neither party would be willing to leave it to the interested conjectures of the other to make what is called a proximate estimate, without at least specifying some principles on which the computation should be made.

It would, indeed, have been more convenient for the Canal Company to receive the tolls, and it may be a very serious detriment not to have received them, as the weight of each cargo was successfully ascertained at the weigh-lock at Eddyville; on the other hand, it would be equally convenient for the Coal Company not to pay them until their amount should be definitely ascertained. So far as it may be presumed such considerations operated in the minds of the parties in making this contract, they may be deemed counterpoised, and a cautious reserve and silence might have been regarded by each as the best policy. Or, which is more likely, each might have been willing to trust to the liberality of the other, and not to rely, as to this point, on a strictly legal right. They are both respectable, wealthy, and powerful companies—not petty traders. We are not to suppose that the apprehended hazard by the retention of the dues by the other until the end of the year, or that both were not inclined to yield material favors and forbearance, respecting an arrangement likely to endure for many years, of great magnitude, and of great advantage to both. If, under the first clause, immediate payment was yielded by the one, under the contingency contemplated in the latter, a postponed payment may, with a very good grace, be yielded by the other. Generally, the Canal Company would receive immediate payment, as the method prescribed by the first clause would in the great majority of years obtain; the method prescribed in the other would be contingent and exceptional. Thus, occasionally, without any serious sacrifice of interest, it would be nothing unprecedented or extraordinary that they should wait for a few months for payment from their very safe and very profitable customer.

But, without indulging in any speculation on the possible intentions of the parties, it is enough for us to say, that the language of the provision referred to necessitates no such construction as the Canal Company demand. There is no latent virtue in the word "toll," to exempt a contract in which it is employed from the ordinary rules of construction; and a toll, like any other debt, cannot be demanded until its amount is ascertained. Nothing more clearly demonstrates the wisdom of adhering to this rule than the consequences which a departure from it would exhibit in this case. If the Canal Company are allowed to collect the tolls before their rate can be established, what amount shall be exacted and who shall determine the

amount? By a proximate estimate? By whom? Shall it be left to the arbitrary, perhaps biased, estimate of the interested party? The law abhors arbitrary power in the private as much as in the public relations. It allows no man to be a judge in his own cause—he must await the arbitrament of disinterested authority. The Canal Company demanded, as a proximate estimate, 55 cents per ton, on their own mere conjectural computation; they afterward reduced it to 50. They might as well have demanded 60 or 70. They had no more authority to demand 50, than the Coal Company had to insist on the payment of 40. Neither, in short, could coerce the other, until the amount actually payable should be ascertained in the manner prescribed in their contract.

Louisville and Nashville Railroad.

This great work, in which we are all so much interested, is rapidly hastening to completion. From one end of the line to the other the greatest activity pervades all departments. In Louisville the Company have a most beautiful depot nearly finished, a large engine house, suitable for several engines, and a machine shop, that cannot be excelled for size and completeness. The portion of the road finished from Louisville to Green river, 94 miles, is yielding a handsome profit on running expenses, besides developing the county heretofore almost out of reach. At Green river the bridge is about one-third completed. When finished, this will be the finest piece of work on the road, and, it is thought, in the West. It is built of iron, resting on stone piers, at an elevation at the centre span of over one hundred feet. The entire length of the bridge is one thousand feet.

Between Bowling Green and Green river the graduation is pushing ahead, and will be finished by the time the bridge is done.

From Bowling Green south, track-laying has been going on several months, as we have noticed in our columns. At this time it has reached Franklin, Ky. The grading is done thence to the State line, from which point to the tunnel, a short time only will be required to prepare the work for the track.

At the tunnel a large force is employed. The contractors hope to finish early in the fall.

From Gallatin, the track is progressing slowly, as but a short distance is laid down at a time, and then ballasted in a fine substantial manner. We had the pleasure of a ride over the new track a few days since, finding this piece of road equal to any we ever passed over.

It is not necessary for us to say anything about the road from Gallatin to Nashville, for all our readers are well posted on that point.

The Cumberland river bridge is now waiting for the river to fall; as soon as this takes place, the middle span will be put up.

In Nashville, depot grounds have been purchased, upon which the required buildings will be erected this summer. The work on this side is almost finished.—*Gallatin (Tenn.) Examiner.*

Chicago, St. Paul and Fond du Lac Railroad.

Under the new organization of the Chicago, St. Paul and Fond du Lac Railroad Company, work is to be commenced on the Rock river division, from Janesville to the LaCrosse junction, and the line completed and opened through from Chicago to Oshkosh during the coming season.

Chicago, Iowa and Nebraska Railroad.

The cars on the Chicago, Iowa and Nebraska Railroad were run to Bertram, seven miles west of Mount Vernon, and twelve miles east of Cedar Rapids, on the 30th day of May, and will be in Cedar Rapids by the middle of June.

Niagara and Detroit Rivers Railroad.

The Niagara and Detroit Rivers Railway Company, as organized under the recent act of the Canadian Parliament, have advertised for proposals for the construction of the entire line of the road. Tenders are to be received at the Company's office, in Hamilton, until the 18th of June. Engineers are also at work locating the line.

Cincinnati Stock Sales.

By KIRK & OHEEVER.

For the week ending June 6, 1859.

BONDS.		Per cent.	
Little Miami, 1st Mort.	6s	83	and int.
Covington and Lexington, 2d Mortgage	6s	80	
Do. do. Income	10s	12½	ft.
Chac. Ham. and Dayton, 2d Mortgage	7s	85	
Indianap. & Cincinnati, do. do.	7s	85	
STOCKS.			
Cincinnati, Hamilton & Dayton		62	
Columbus and Xenia		87	
Indianapolis & Cincinnati		51	
Little Miami		59	

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending May 21, were.....\$39,927 40
Week ending May 22, 1858.....44,228 96

Decrease.....\$4,301 56
Total traffic from July 1st.....\$2,036,500 07
Same period last year.....2,127,847 68

Decrease.....\$91,347 61

The earnings of the New York and New Haven Railroad for May, 1859, were:

From passengers, &c.....\$86,743 51
" freight.....15,250 00

Total.....\$101,993 51
Less due other roads.....24,546 88

Balance.....\$77,446 63
Receipts for May, 1858.....68,907 86

Increase.....\$3,538 77

The following are the receipts of the Pittsburg, Fort Wayne and Chicago Railroad, for the month of May, 1859, compared with the month of May, 1858:

For May, 1859.....\$119,909 11
Do. 1858.....115,404 79

Gain in 1859.....\$4,504 32

The receipts of the Long Island railroad for May, 1859, were:—

From passengers.....\$16,557 65
" freight.....11,297 38
" mail.....685 42

Total.....\$28,550 45
May, 1858.....25,525 56

Increase, 1859.....\$3,024 89

The traffic of the Great Western Railway of Canada for the week ending May 27th, 1859, was as follows:

Passengers.....\$21,971 63
Freight and live stock.....9,573 33
Mails and sundries.....1,439 14

Total.....\$32,984 10
Corresponding week of last year.....37,819 37

Decrease.....\$4,835 27

The earnings of the Cincinnati, Hamilton and Dayton railroad, for May, 1859, were.....\$42,086 23
May, 1858.....32,896 57

Increase in 1859.....\$9,189 66

The earnings of the Michigan Southern and Northern Indiana Railroad, for May, 1859 and 1858, were:

	1859.	1858.
Passengers	\$62,386 87	\$80,289 18
Freight	66,684 71	67,481 64
Mails	4,583 41	4,635 14
Express and miscellaneous	3,363 28	35,393 80

Totals.....\$137,518 27 \$187,799 76
Decrease in 1859.....\$50,281 49.

The business of the Illinois Central Railroad for May, 1859, was as follows:

Land Department.

Total sales during the month.....2,598.76 for \$43,996 82
To which add Town Lot sales.....1,015 45

Total of all.....\$45,012 27
Acres sold since Jan'y 1, 1859.....15,245.78 for \$223,608 65
Acres sold prev'ly, 1,229,835.33 " 15,637,148 95

Total.....1,245,081.11 for \$15,860,757 60

Construction Bonds canceled in May, 1859.....\$32,000 00
Construction Bonds canceled previously.....1,048,500 00
\$1,080,500 00

Free Land Bonds canceled in May, 1859.....\$6,000
Free Land Bonds canceled previously.....132,000
138,000 00

Total Bonds canceled up to May, 31, 1859.....\$1,218,500 00
Cash receipts in May, 1859.....\$51,580 28
Do. since Jan'y 1, 1859.....229,965 17

Total cash and bonds received to May 31, 1859.....\$2,904,762 70

Traffic Department.

Receipts from passengers.....\$50,410 21
Do. freight.....70,578 95
Do. mails.....6,368 22
Do. rent of road.....5,450 00
Do. other sources.....4,982 98

Total receipts in May, 1859.....\$139,771 47
Do. do. 1858.....161,090 34
Do. since Jan'y 1, 1859.....\$715,157 42
Do. do. 1858.....751,460 52

The annexed are the May earnings of the Chicago, Burlington and Quincy railroad:

Freight.....\$59,655 75
Passengers.....27,978 60
Mail and miscellaneous.....1,628 38

Total.....\$89,262 68
Operating expenses estimated.....50,000 00

Net earnings.....\$36,262 68
Gross earnings per mile.....557 89

Between Chicago and Burlington, 210 miles:

Freight.....\$67,298 82
Passengers.....33,303 91
Mail and miscellaneous.....1,996 83

Total.....\$102,599 56

Between Galesburg and Quincy, 100 miles:

Freight.....\$12,893 62
Passengers.....12,117 58
Mail and miscellaneous.....890 00

25,001 20

Total for 310 miles.....\$128,500 76
Earnings in May, 1858.....130,995 68

Decrease in 1859.....\$2,494 92

Earnings per mile.....\$114 18

The receipts of the Hudson River Railroad for May, 1859, were.....\$141,268 92
For May, 1858.....128,132 27

Increase.....\$13,136 65

The receipts of the Harlem Railroad Company for the month of May are as follows:

1859.....\$77,667 57
1858.....91,868 62

Net increase.....\$14,201 05

The above are the net receipts after deducting all charges.

The following are the earnings of the Milwaukee and Mississippi Railroad for May, as compared with the same month last year:

	1859.	1858.
Freight	\$40,005 31	\$55,110 23
Passengers	19,861 11	30,410 83
Mails	1,835 42	1,216 66

Total.....\$61,701 84 \$86,737 82

The earnings of the Galena and Chicago Union Railroad Company, for the month of May, were:

	1858.	1859.	Decrease.
Freight	\$109,985	\$81,821	\$28,163
Passengers	44,286	33,900	10,386
Mails, etc.	3,682	3,600	83

Total....\$157,953 \$119,321 \$38,632
Corrected earnings for the previous month, \$88,708

The Chicago and St. Louis Railroad.

A bill is on its way through the Legislature, on the petition of L. Candee, of New Haven, and others, incorporating a company to operate the above named road out in Illinois. There seems to be a little hesitation, but no real objection, to the incorporation of the company; nor should there be, when it is considered it is an attempt of Connecticut creditors to save a portion of the million and a quarter of dollars the road owes them.

It is said that the railroad in question cost eight millions. Its annual average earnings during the last four years have been over one million. The bonded indebtedness of the road, secured by three successive mortgages, was \$4,535,000. There is unpaid bank interest on these mortgages amounting to about \$1,325,000. Of the indebtedness there is owned in this State about \$1,250,000, and a large portion of the remainder is owned in Germany. The road became embarrassed in 1855, since which time no interest has been paid except about \$57,000.

The Hartford Press states the claims of the applicants for the charter as follows: The stockholders of the road were sold out under a power of sale contained in a fourth mortgage, in December, 1856. The equity of redemption—that is, the road—was bought, subject to the first, second, and third mortgage, by Joel A. Matteson and Elisha C. Litchfield, for the sum of \$5,000; since which time they have been in possession, and have received, down to October, 1858, when they stopped publishing the receipts of the road, the sum of \$2,024,407 30; and notwithstanding these large receipts, they have paid only \$57,000 towards the interest they have agreed to pay.

Proceedings for the foreclosure of the first mortgage were commenced in the courts of Illinois in October, 1856; the petition was answered by Matteson and others, and petitions, cross bills, and interpleaders, were filed by several other parties in interest. The bondholders have not been able to get a trial on the merits, and Matteson says he can postpone them, at least, two years longer, keeping possession of the road, and its income, all that time.

A suit for foreclosure on the second mortgage was commenced about the same time—October, 1856, and is in the same complicated state as the first. In October, 1858, a suit was commenced to foreclose the third mortgage, which has come to a dead lock, like its predecessors. No result is likely to be rendered within a reasonable time, except by the consent of parties. There is, also, a joint suit on behalf of all the mortgages pending in the U. S. Court for the District of Northern Illinois; this was commenced in the summer of 1858, and has not yet been reached in its order on the docket, on its merits.

With all these complications, and enormous expenses, already more than \$40,000 upon the bondholders, they have attempted and agreed upon a compromise by which they can have the road and all its income, as soon as they are prepared to take it, and to pay the bonus required by the terms of

the compromise. They cannot take it now for want of a proper organization.

The Legislature of Illinois does not meet until January, 1861. In the meantime, the road and its franchises is to be sold by order of Court under the third mortgage. The creditors deem it absolutely essential that they should be organized and prepared to operate the road as soon as they can get it, and prepared to buy it at the contemplated sale, so that other speculators, like Matteson, may not step in and plunder them further.

The creditors are among our most respectable and substantial citizens, embracing all classes, savings banks, trust funds, and benevolent societies, farmers, merchants, lawyers, maiden ladies, and widows.—*New Haven Herald.*

American Railroad Journal.

Saturday, June 11, 1859.

New York and Erie Railroad.

The competition between the "four great lines" is raging with greater violence than ever. On Tuesday of this week, the Pennsylvania Railroad reduced the rate of passenger fare from New York to the points named, as follows:

	Old.	New.
To Cleveland	\$13 00	\$8 00
" Chicago	23 00	12 00
" Columbus	17 00	10 00
" Crestline	15 25	9 00
" Cincinnati	20 00	13 25
" St. Louis	30 00	23 25

We take it that the New York Central will follow suit, and the Erie too. She is entered for the race, and must make time, or be distanced and disgraced.

Where is this wretched business to end? One result is clear. Unless soon put a stop to, it will prove the destruction of the Erie Railroad. This is certain. Let us see how it stands.

The comparative earnings of this road for the first seven months of the year were as follows:

	1859.	1858.
October	\$156,226	\$149,685
November	486,898	429,900
December	392,292	474,618
January	304,707	376,356
February	301,593	378,455
March	364,296	461,494
April	380,342	558,129
	\$2,636,354	\$3,181,679
		2,636,354

Loss in seven months..... \$195,323

The amount of falling off for the remaining five months will probably be still greater; so that the total gross earnings will be a million, at least, less than for 1858.

The total earnings for that year were, say \$5,100,000; current expenses, \$3,900,000, leaving as net earnings, \$1,200,000; or only about \$200,000 beyond what will probably be the current expenses for the present year; for the late report of the company gave no encouragement that they were to be materially reduced.

The action of the company still further illustrates its complete financial prostration. It is reported to have abandoned all idea of making, for the present, further payment of interest upon its funded debt. Whether this is true or not to the full extent, there is no doubt of its being true as to all classes of bonds, after the second mortgage. The company is completely broken. It has neither means for present necessities, nor, while the pre-

sent contest continues, any better prospect for the future.

What is to be done? The thing to be attempted is to compose the present disputes, and to restore, as far as possible, the traffic that the company once possessed. But how? And here we come to the very point at issue. Can this salvation come from Mr. Moran? We do not see how it is possible. Have we any reason to expect anything better for the future than the past. Under Mr. Moran's administration the road has steadily fallen off in its earnings, lost in public confidence, while its managers have been embroiled in disputes and quarrels, which have assumed such a degree of personal animosity, that we do not see how, the parties to them maintaining their present positions, they can ever be composed.

When a person takes the responsible position of the manager of a railroad, the duty he owes to the public is *success*. The degree of his success measures his qualification for the place he fills. Faithfulness to one's ideal is nothing, unless this leads to success—unless this lies at the goal, adherence to an ideal is unpardonable egotism.

Now it is clear that Mr. Moran's administration has not been a *success*. Far from it. It has been a dead failure. In every particular, we believe, except in the condition of the road, upon which a large portion of the earnings have been expended, does it stand in worse relations than when he took charge of it. We do not question the purity of his motives, nor that he has done many things well. While he made the most strenuous efforts to inaugurate, if we may use the term, an honest administration, we have no doubt that his, on the whole, has been much more expensive than there was any need of being, and as expensive, and probably more so, than any of his predecessors. One great reason for this has been, that he has not been properly supported. In the outset, he assumed the duties of President and Superintendent. Both are still vested in him. His influence has overshadowed every department of service. Now, while his influence was everywhere felt, he could not wisely direct all, nor exact from each department a proper degree of accountability. There is no doubt that the work and materials bestowed upon the track the past year cost the company a sum much larger than, under suitable superintendence, they would have cost. We give this as an illustration. How could it be otherwise? Mr. Moran is not such an expert as to know what is a proper compensation hardly for any kind of service rendered the company. He could not help being imposed upon.

It is easy to be wise after the event. We claim a little *foresight* in this matter. In the first number of the JOURNAL after Mr. Moran took his seat, nearly two years since, we commented upon his election in the following style:

"NEW YORK AND ERIE RAILROAD.

"Mr. CHARLES MORAN has been elected to, and accepted the Presidency of the New York and Erie Railroad.

"Mr. Moran possesses many excellent qualities for his new position. He has energy, is capable of great labor, and will, we have no doubt, serve the company with entire fidelity.

"The effect of this appointment upon the value of the securities of the company is yet to be seen. We have no doubt he will conduct their finances with ability. But this is by no means all that is to be done. To succeed in bringing relief by the

creation of *new* loans will, in the end, only add to the company's embarrassments, unless at the same time the operations of the road shall be so conducted as to secure the largest possible income.

"Mr. Moran's success, therefore, will depend upon the persons that he shall associate with him in the practical management of the road. His previous training has not fitted him for the discharge of such duties. His appointment is well so far as it goes. *But the changes and appointments are yet to be made, upon which final and complete success depends. He must associate with himself gentlemen of mature experience, and of the highest qualifications in railroad management, if he would have his administration reflect credit upon himself, and prove beneficent to the stock and bondholders.*"

So far from associating with himself gentlemen of "mature experience, and of the highest qualifications in railroad management," there has been a gradual weeding out of the best men found in the company when Mr. Moran took his seat as President. Not a single place, as far as we can learn, has been filled with first class men, possessed of experience, and fitted to command the confidence of the public. Had Mr. Moran selected competent assistants and advisers, his company would have been in a very different position from the present one. We have frequently commented, in a mild manner, upon a tendency which he undoubtedly has, of trusting entirely to his own convictions, and of turning a deaf ear to everybody else; but all to no purpose. We think now we are justified in using a little stronger tone. We spoke as plainly before his career commenced. The end has justified our apprehensions.

There is one matter connected with Mr. Moran's presidency to which we have never referred in a manner calculated to wound any one's feelings; but which, we are satisfied, has been one great cause of his want of success—we mean his salary of \$25,000. There were two relations that Mr. Moran could have occupied toward the company—that of a public spirited man, standing ready to lend a helping hand, and to make a personal sacrifice for a great public enterprise, especially one in which he has induced his friends to invest, and which was threatened with danger; or that of an *expert*, who brings great qualities and a valuable experience to its aid, for which he expects a corresponding compensation. But Mr. Moran has taken a compensation exceeding two and a half times that ever given to the most competent expert in the United States, while he brought to the road only the capacity of *becoming* one by the exercise of the duties that fell upon him after assuming his new position. If he came to the rescue of the road as a *friend*, then he should have been the first one to make a display of a great sacrifice of time, or money, or labor for its good, as an example for the emulation of others. But if he did not choose to make such sacrifice, but to receive a compensation equivalent to his qualifications and reputed experience, then he demanded and has received a sum altogether disproportionate to his merits. There is an entire want of fitness in the whole thing. It has done more to demoralize the company than all other causes together. Just see how it works—

A gentleman, a banker, without a day's experience on a railroad, is suddenly placed in the position of chief executive, receiving a compensation more than twice as great as ever before paid to the most experienced person in a similar position, and five times greater than even paid to a person

having no greater pretension. By necessary implication it was a direct disparagement, not to say insult, to every person who had for a considerable time been in the service of the company. Especially was it so felt, when a general reduction of compensation was soon after decreed. Take the case of a person who had been in the company's service, say for ten years, and had served it faithfully all that time, for a salary of a thousand dollars. Without increasing it a penny, and without any recognition of his qualities, a person without any experience is placed over him, with a pay, relatively ten times greater than he receives. He feels that injustice is done him. His self-respect is wounded. He ever after labors under the idea that he receives an insufficient equivalent for his services. Such a conviction will end in reducing their value, in his estimation to the compensation he receives. If he be wanting in principle, he will shirk his duties. If he has an opportunity, he will appropriate to himself the means of the company. Mr. Moran is loud in his complaints of being defrauded. If such be the fact, the parties to the frauds justify themselves with the idea that they are only raising their compensation to a level with his own. Such an extraordinary measure as a salary of \$25,000 for a *noviciate*, has its legitimate influence, which, in the present case, has been most disastrous, in the manner described. It has been most effectually used by the public, and by the enemies of the road to cover it with ridicule, and to bring it into contempt. Mr. Moran's uncompromising views have tended to stimulate this disposition. Ridicule is a most potent weapon, and may be used with as much effect against a railroad company as against an individual.

In conclusion, we see but one way in which the Erie railroad can be saved. It must go into new hands, who must bring to its management just those qualities that secure the highest degree of success in other undertakings. The policy we marked out last week, we are convinced, is the only one that will do any good. It is no use to go on any longer in the old way. No body of directors can lift the road out of the slough in which it lies. They cannot communicate the right kind of life to it. The road must, in effect, become equivalent to a *private* property. If anything is to be saved, the stock and bondholders must act, and promptly. If on the other hand, all hope of saving it is to be given up, it may as well be left where it is.

Galveston, Houston and Henderson Railroad.

A bridge is now being constructed from Galveston Island to the main land, a distance of about 9,000 feet, for the accommodation of the above road. The depth of water is from 6 to 7 feet. The bridge is to be completed the present year. The distance from Galveston to Houston is about 50 miles; of this distance about 5 miles of railroad on the Island has to be built; the other portion of the road being in operation.

Dayton and Michigan Railroad.

The opening of this road to a junction with the Pittsburg, Fort Wayne and Chicago Railroad, at Lima, was formally celebrated on the first instant. A new route is thus opened between Cincinnati and Chicago. The road will soon be extended to Toledo.

Chicago and Rock Island Railroad.

One of the most extraordinary reverses in the railroad enterprises of this country has been the Chicago and Rock Island road. In 1857, if the Reports of the Company are to be credited, the gross earnings amounted to \$1,886,196; these fell off in 1858 to \$1,407,845. The comparative earnings, copied from the *Chicago Press*, for the first half of the current fiscal year were as follows:

	1857.	1858.
July.....	\$149,911	\$82,374
August.....	153,849	83,384
September.....	197,011	94,965
October.....	168,540	92,719
November.....	128,341	73,883
December.....	90,309	60,218
	\$887,961	\$487,583
	487,583	

Falling off..... \$400,378
—or equal to 45 per cent.

The earnings for the last half of the fiscal years of 1857-8 were as follows:

January.....	\$72,041
February.....	67,307
March.....	92,063
April.....	92,120
May.....	80,594
June.....	90,043

Total..... \$494,172

A similar rate of decrease for the last, as for the first half of the year, would leave \$271,700 as the total earnings for six months, making the aggregate for the year \$759,455. The per centage of decrease has been less, and we estimate the gross earnings for the six months at \$344,000, making a total for the year of \$831,583; a sum less than the earnings of 1857 by \$1,054,613!

The cost of operating the road for 1858 was stated to be \$778,816; paid interest on bonds and on the Bureau Valley lease, \$224,715; making the total for these two items \$1,003,531, or \$171,948 more than the probable receipts for the current year. Add to this, the increase in the construction account for the past year \$147,854, the whole deficit will be \$319,802.

That the deficiency will equal this sum, we have little doubt. It is well known that the road was most wretchedly constructed, and requires constant and expensive renewals. It is hampered with the Rock Island Bridge, and has already guaranteed bonds to the amount, we presume, of \$200,000, bearing 10 per cent. interest, on account of it. How much more it may be called upon to pay, we have no means of knowing.

In view of this state of affairs, the lease of the Bureau Valley Railroad appears in its full enormity. This branch takes annually \$125,000 out of the net earnings of the main line. It stands directly between the stockholder and his dividend.

Such being the case, immediate steps should be taken to set it aside. It was a contract in which a portion of the directors of the Rock Island Company had a direct pecuniary interest hostile to that of their *wards*—the stock and bondholders of this road. We take it that no trustee can make a valid contract for his benefit, at the expense of the parties for whom he acts. This is a well settled principle of law, and we have no doubt it would, if properly invoked, set aside the obnoxious contract referred to.

To cover up as deep as possible the memory of this shameful transaction, the reports of the Rock

Island Company are always silent as to the cost, earnings, and cost of operating, the *Branch*. No one outside the company knows what these are, or have been. All that is known is, that the road was in an unfinished state, when the lease was taken, and that on this account it was stoutly opposed by some of the directors, who unfortunately were in a minority. Since that period all is *blank*. We have no means of knowing how much was expended on the Branch when the lease was taken. It is 47 miles long. The price at which it was taken was within a few dollars of \$1,800,000, the interest of which is \$125,000, or very nearly \$40,000 per mile, for what cost the contractors probably not \$15,000 per mile!

The reports of the company are equally silent about its relations to the Rock Island Bridge, although the company has a large pecuniary interest in it. The whole truth in this case, could it be told, would very likely reveal another Bureau Valley affair. No one, however, among the stock and bondholders seems to have interest or force enough, to make the directors open their mouths. The road was apparently made for these parties instead of its unlucky owners.

Artificial Illumination of Cars.

An important desideratum connected with the equipment of cars is the means of illumination at night. Oil is open to very serious objections for obvious reasons; volatile fluids are dangerous; candles are troublesome; all far more expensive than *gas*. The most modern system of gas-lighting in cars, that of taking in the gas at the ordinary street pressure, and expelling it by machinery rather than by its own force, seems likely to become the most popular. The smoking cars of the night express train between this city and Boston, via New Haven and Springfield, support two burners each on this system, and a passenger car on the Boston and Lowell road has just been provided with a similar apparatus, all of which are represented as working very efficiently and satisfactorily. The system of compressing gas by a pump into small cylinders as practiced on the Camden and Amboy and some other roads, is also working very finely, but the "low pressure" system requires none of the machinery therein necessary for charging. The Boston cars are charged in a few minutes, by connecting a common flexible hose to the street main, and allowing it to flow, while the "high pressure" system requires the working of force pumps by steam power for a long period to effect its compression. Whether the clock-work required by the low pressure system for expelling the gas is likely to become deranged is a question that can only be settled by long trial, but the system has been used two years on all the Jersey City ferry boats, and down to this date, we have heard of no difficulty in connection therewith.

The gas-holder for railroad cars is a sheet iron box, of large area but little depth, and containing some 50 or 60 cubic feet of gas. It is mounted beneath the floor of the car in the centre, and provided with suitable connections and valves. A hose, diaphragm of rubber, or similar material, extends horizontally across, and the gas, when admitted below from the mains, elevates it without difficulty, expelling all the air above through an open cock. This is the operation of charging: A clock spring connected with a common day meter

in the corner of the car above, is next wound up and connected to urge air with a gentle pressure into the space above the diaphragm, and so soon as the gas from below is allowed to escape to the burners, the clock-work supplies its place and maintains the pressure by working in common air, and depressing the diaphragm until all the gas is burned, and the rubber lies quietly on the bottom of the vessel.

Somerset and Kennebec Railroad.

The annual meeting of this Company was held on the fifth of April, at which an annual report was made, accompanied by a statement from a committee of investigation, covering the operations of the Company for three years past.

The total cost of the road has been as follows:

Received from stock subscriptions.....	\$169,200
" " " " 1st mortgage bond sold....	198,000
" " " " "pledged 102,000	
" " " " "sold....	238,000
" " " " "pledged 12,000	
Coupons overdue.....	66,000
Floating debt.....	51,926

Total.....\$837,127

The earnings for the year ending March 31, 1859, were—

From passengers.....	\$20,500
" freight.....	30,960
" mails.....	3,343
" express.....	600

\$55,403

The current expenditures for the same period have been \$26,989, leaving \$28,404 as net earnings. This sum has been appropriated toward completing the road, and the payment of debt due for iron.

The Report recently received is the first, we believe, issued by the Company. The road was commenced in 1853. It was opened to Kendall's Mills, 21 miles, in January, 1855; and to Showhegan, 16 miles further, in December, 1857. Since its opening it has been operated by the Kennebec and Portland Railroad. From February, 1855, to April, 1856, 13 months, the Kennebec and Portland Company run the road, receiving therefor \$1,000 per month. The earnings of the road for this period amounted to \$21,960. Paid Kennebec and Portland Railroad \$14,250. From April 11, 1856, to September 1, 1857, the amount paid for running the road was increased to \$1,750 per month. The earnings for this period were \$65,904. The amount paid the Kennebec and Portland Railroad \$29,756. Net receipts \$36,154. For the months of September and October, 1857, the road was run by the Company on its own account. The amount received for the two months was \$4,636. From May 1, 1857, to May 1, 1858, it was run by the Kennebec and Portland Company, the latter receiving therefor one-third the gross receipts which amounted to \$20,194. From May, 1858, to April, 1859, the road was run by the Kennebec and Portland Company, at the rate of 40 cents per mile. The receipts for this period were \$52,080. Expenses about \$25,328. The total amount of gross receipts of the road since it went into operation have been \$164,724. Paid to the Kennebec road for running the same, \$76,066. The balance has been expended in construction, payment of interest, etc., etc.

The following is a statement of the funded debt of the Company:

1st. Mortgage bonds, 6 per cents., \$300,000,

dated May 1, 1854, payable May 1, 1874. Coupons payable semi-annually on the first days of May and November.

2d. Mortgage bonds, 6 per cents., \$50,000, issued November 1, 1856, payable November 1, 1876. Coupons payable semi-annually on the first days of May and November.

Of the second issue, the Company have on hand about \$100,000. The interest on neither issue was paid for the past year, the earnings being applied in payment of the debts of the Company. The amount of unpaid coupons outstanding on the first of April was \$66,000.

Lewey's Island Railroad.

This is a short road recently constructed in the State of Maine. It was not fully completed till January 1, 1858. The earnings for the past year were—

For transportation of freight.....	\$10,850
" " " persons.....	2,100

Total.....\$12,950
Current expenses.....7,362

Net earnings.....\$5,588

The earnings for 1857 were \$5,135; expenses \$3,904; net earnings \$1,231.

The company has issued two classes of Bonds, viz:—1st Mortgage Bonds, for \$150,000, dated December 1, 1856, payable Dec. 1, 1876, with coupons payable semi-annually, at the Globe Bank, Boston.

2nd Mortgage Bonds, dated June 15, 1857, payable June 15th, 1869, with coupons payable semi-annually, at the office of the company in Calais.

The first bonds are held by the city of Calais as security for bonds of an equal amount, and of similar tenor issued to the railroad company by the city; the former agreeing to pay the interest on the same.

The total amount of stock issued by the company is \$171,310; the total cost of road, \$310,000. It has no floating debt.

Lacrosse and Milwaukee Railroad.

This road is no *Phœnix*, if it be without a parallel. Two companies have sprung from its ashes—one organized by the purchasers at the sale under the third mortgage, which presents the following organization:

Russell Sage, Troy, N. Y., President. Directors—L. A. Battershall, Troy, N. Y.; Wm. Gould, Albany, N. Y.; W. B. Gilbert, Syracuse, N. Y.; Hans Crocker, N. J. Emmons, J. W. Weeks, Milwaukee, Wis.; W. E. Smith, Fox Lake, Wis., and W. R. Sill, Lacrosse, Wis.

The "old 'un" still claims to live, incarnated as follows:

Directors.—Newcomb Cleveland, Henry C. Cabell, Cicero Comstock, John Lockwood, Orville Oddie, Geo. W. Pratte, A. B. Harris, and T. C. Dickinson.

President.—NEWCOMB CLEVELAND, of Waukegan, Ill.

Vice-President.—HENRY C. CABELL, of Richmond, Va.

Treasurer.—CICERO COMSTOCK, of Milwaukee.

Secretary.—S. R. KANE, of Milwaukee.

Which is the veritable *Jacob* remains to be seen. Organization number "two" presents one strong argument in its favor. If anything could have destroyed the old company, the rascalities committed by it would have killed it off long ago. We guess the last described organization to be the *Phœnix* of the concern—the veritable soul of the old com-

pany, only in a new body. Whether this body will have such fair proportions as the *old* one we very much doubt. We rather guess it will have to console itself with the *principles* it is advocating.

Productive Industry of Massachusetts and Ohio Compared.

Mr. E. D. Mansfield, Commissioner of Statistics of Ohio, in his report, estimates the total exports of that State, being the products of agriculture, at \$48,403,297, made up of the following articles:

Flour and wheat.....	\$11,111,518
Other grains.....	1,750,000
Beef and cattle.....	6,165,551
Pork, lard, lard oil and hogs.....	13,885,302
Butter, cheese and allow.....	1,734,382
Whiskey.....	5,109,913
Tobacco.....	2,197,125
Wool.....	2,649,466
Other articles.....	3,800,000

Total.....\$48,403,297

If we add to the above \$5,000,000 as the value of manufactured articles exported, the total aggregate of exports will be \$53,403,297.

In 1855, the total product of the industry of Massachusetts equalled \$295,820,681. Of this amount the products of agriculture, and of such manufacture as would be likely to be consumed chiefly at home, amounted to \$78,147,182, leaving for fabrics manufactured for general consumption throughout the country \$217,673,499. We give a few of the leading articles that go to make up this immense sum:

Names of Articles.	Value.
Manufactures of cotton goods.....	\$36,464,000
" " "woolen ".....	15,124,000
" " "iron.....	5,512,816
Machinery of various kinds.....	10,600,000
Candles and oil.....	6,813,291
Soap and tallow candles.....	7,720,533
Leather.....	11,000,000
Boots and shoes.....	57,489,000
Hats, bonnets, etc.....	4,905,000
Mackerel and cod fish.....	2,829,000
Alcohol and distilled liquors.....	3,183,282
Ready-made clothing.....	9,061,896

Total.....\$130,672,818

If we assume that Massachusetts produced in 1855 \$217,000,000 of fabrics of various kinds for general consumption, and if we estimate the share consumed at home to be in ratio to her population, then she would have exported more than \$200,000,000—her population being about one twenty-fourth of that of the whole country. But we will assume that she retained at home one-quarter of such fabrics, which is certainly a liberal estimate, the amount of her exports for 1855 were, consequently, \$162,716,000—or three times greater than the exports of Ohio, with a population exceeding twice that of Massachusetts!

These comparative statements are interesting, in showing how productive is industry when properly systematized and directed, and how little the wealth of a community depends upon the productiveness of its soil. There is no doubt that the actual values annually produced are greater in Massachusetts than in Ohio. A portion of this excess is owing, no doubt, to the greater amount of capital invested in the former State, but much more to the superior industry and training of its people.

Massachusetts exports to the other States manufactured articles exceeding in value one-half of the entire foreign importations for the whole country. Her imports are equal to her exports. This

fact illustrates the vast extent of our internal trade, which probably exceeds twenty times the amount of our foreign trade.

The tonnage caused by the railroads of Massachusetts, proves that we have not over-estimated the value of its products. These works in 1858, transported 3,369,270 tons of freight. If we reduce the above amount by one-half, for tonnage duplicated on other roads, we have 1,684,635, as the actual tonnage of the roads. The value of this tonnage will exceed \$250 per ton, or \$420,000,000 the value of the articles enumerated, will exceed \$500 per ton; leather is worth \$500; boots and shoes \$1,000 per ton; cotton and woolen goods, a still larger sum.

We doubt where there is an equal number of people in any country so well and profitably employed as those of Massachusetts. With the poorest soil of any, and in many respects, in an unfavorable geographical position, she has made herself by industry, the richest and most prosperous community in the world.

Houston and New Orleans Railroad.

The portion of this road lying within the State of Texas seems to be making rapid progress. We copy the following in reference to the same from the *Houston Telegraph*:

A force of 220 men are now at work, under the direction of Mr. Smith, of the firm of Wentz & Co., railroad builders, of great force, means and experience. Their operations commenced near the town of Beaumont, in the county of Jefferson, on the 10th of May, 1859. They are working on both sides of the Neches river, and on the 21st commenced laying the track on the west bank. The Engineer Corps are laying out the work to the Trinity river, so as to connect with the company's works from Houston east. One cargo of rails, chairs, spikes and other material, 350 tons, has been landed on the line of the road, having been sent from Cardiff, Wales, and received in Galveston by the brig Clyde. The company is daily in receipt of supplies of material from the North and Europe. The distance between Houston and the Trinity, at the town of Liberty, is thirty-six miles; from the Trinity to the Neches river, forty-four miles. It is designed the road shall strike the Sabine about three miles from the town of Madison.

The bridge across the Trinity will be about 400 feet in length, with a draw sufficient for the passage of vessels in that trade. The timber for bridge and trestle work is now in preparation at convenient points along the line. The length of the road to the Sabine, from Houston, is 96 miles. With the men, means, State aid and appliances, amounting to \$1,000,000, the work may be completed to the confines of Louisiana in two years. There is plenty of timber along the line for ties, bridges, and trestle work; there is very little deviation from a level from one point to the other. Comfortable quarters have been prepared for the workmen, and sanitary measures adopted for the preservation of their health; and the contractors, engineers, and whole force will be of the most effective kind, having a thorough organization and proper discipline, so essential to carry on the work with vigor.

The New Orleans *Bulletin* states that Mr. A. M. Gentry, President of the road, visited England last fall and succeeded in disposing of the bonds of the company sufficient to provide for the purchase of the iron for the whole length of the road. A portion of it has already arrived from Wales, and the remainder will come as fast as it may be wanted.

The entire distance to be built is 336 miles. Of this distance, 100 miles lie within the State of Texas, the Opelousas Railroad (in operation,) is to be used for 80, there remains to be provided for

in Louisiana 156 miles, the means for which must come chiefly from New Orleans. It is a work of very great importance, and we should suppose that an interest in behalf of it could be awakened in New Orleans that would end in supplying the necessary aid. The route is a very favorable one, and would bring to that city a vast accession of trade, and would greatly strengthen her commercial position. Texas, in area, is a half a dozen States. Houston is the focal point for her railroad system. A railroad which is to connect this with the great Southern Metropolis could not fail to have a lucrative business.

Illinois Central Railroad--Its Locomotive Department.

The following Statement will show the operations of the locomotive department of this road for the month of April:

Total miles run	156,300
Pounds of waste used	1,863
Gallons of oil	1,366
Cords of wood	2,870
Tons of coal	1,027
Wages of engineers and firemen	\$6,028
Repairs of engines	8,388
Value of waste and oil	1,279
" " wood and coal	14,097
Cleaning engines	1,085
Total expenses	30,880
Value of oil and waste used per mile	8.2
" " wood and coal	9.02
Wages of engin'rs and fire'n " "	3.80
Cost of repairs " "	5.36
" " cleaning engines " "	6.9
Total cost per mile run	19.75
Average number of miles to pint of oil	14.30
" " " " cord of wood	42
" " " " ton of coal	35

Henderson and Nashville Railroad.

The town of Hopkinsville has subscribed \$50,000 of stock in the Henderson and Nashville Railroad, payable when the grading of the road shall have been finished to Hopkinsville from the Tennessee line, on condition also that \$65,000 be raised by subscription, for the purpose of ironing the road in that county.

Pacific Railroad of Missouri.

This Company are prepared to pay the interest on all the bonds issued by it, and due July 1st. The work of construction is making vigorous progress, both on the main line and south-west branch.

Quincy and Palmyra Railroad.

The branch to connect Quincy with the Hannibal and St. Joseph Railroad, at Palmyra, is nearly completed. When opened, a direct line by railroad will be formally between the east and the Missouri river.

Fayette County Railroad.

We learn from the *Pittsburg Post* that the first division of the Fayette County Railroad has been opened, and that an excursion train run between Connellsville and the Union Iron Works. In a few months the road will be completed from Connellsville to Uniontown.

Cumberland Coal and Iron Company.

The annual meeting of this Company was held in this City on the 6th inst. The following gentlemen were elected Directors for the ensuing year, viz.:

President, CHARLES GOULD; Directors, Robert P. Getty, Allan Campbell, Samuel J. Tilden, Nathaniel Marsh, William F. Havemeyer, David Palmer, Edmund H. Miller, Columbus Seguire, Benjamin Nathan, J. Hall Pleasants, Baltimore; Charles M. Connolly, Frederick Kuhn.

Memphis and Little Rock Railroad.

The greater part of the line of the above road, from the Mississippi to the Arkansas river, is under contract.

To Railroad Contractors.

NIAGARA AND-DETROIT RIVERS RAILWAY COMPANY (OF CANADA).

IN pursuance of the statute in that case made and provided, notice is hereby given that tenders for the construction of this company's railway will be received until noon of Saturday, the 18th of June next.

Further information and the necessary printed form of tender may be obtained on application at the office of the company in Hamilton, Canada West.

The tenders to be endorsed "Tender for the construction of the Niagara and Detroit Rivers Railway," and to be sealed and addressed to the secretary, at Hamilton, Canada West.

The Directors, under the provisions of the said statute, will not bind themselves to accept the lowest or any tender. By order.

W. LYNN SMART, Secretary.
HAMILTON, Canada West, May 17, 1859.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, January 1, 1859.

LOCOMOTIVES.

2 LOCOMOTIVES, about 15 tons, (second hand,) 4 ft. 8½ in. gauge, in excellent order for sale at a bargain.

GEO. T. M. DAVIS,
New York, May 24, 1859. 2nd 47 Exchange Place.

WEISSENBORN'S PATENT Incrustation Preventer FOR STEAM BOILERS.

EFFECTUALLY obviates the Formation of Scale on the Plates by separating the incrusting matter from the water before it enters the boiler, at the same time condensing a large portion of the steam and supplying the purified water to the boiler at about boiling heat. The apparatus is compact, simple, and applicable to all kinds of Engines. Recent modifications render it still more efficient than heretofore. Testimony as to its successful operation in preventing scale, and also as a HEATER AND CONDENSER, can be furnished by the subscriber.

Probably no modern improvement connected with Steam Power combines so many advantages as this. The economy of Fuel alone from its use soon repays the cost of the apparatus. Prices reduced. Terms easy.

STEWART KERR, Engineer,
Agent, 15 Broadway, NEW YORK.

Notice to Bridge Builders.

ENGINEER'S OFFICE, C. & S. R. R. }

Charleston, May 23, 1859.

SEALED PROPOSALS WILL BE RECEIVED AT THIS Office until 12 M., on Saturday, 18th June next, for the construction of a single-track railroad Bridge across the Savannah River, about thirteen miles above the City of Savannah.

The said Bridge will have (6) six spans of (144) one hundred and forty-four feet each; and a swing bridge (180) one hundred and ninety feet long, (giving two openings of 80 ft. each.) The entire length of the Bridge will be about (1070) one thousand and seventy feet.

The superstructure of the Bridge to be of the most substantial character, and on the plan of Howe's Patent Truss.

The piers and abutments to be composed of cast-iron cylinders, (6) six feet in diameter; sunk by Potts' pneumatic process, through an average depth of (20) twenty feet of mud, sand, and gravel, and securely based upon the impenetrable substratum which underlies the bed of the river.

Proposals will be received at the same time for constructing the said Bridge on piers and abutments of brick, resting on piled foundations.

The plans and specifications, bills of timber and iron, may be seen, and all other information obtained, at this office, on and after Monday, 6th June.

EDWARD MANIGAULT,
Chief Engineer, C. & S. R. R.

FOR SALE.

2,250 TONS English Rails, (offset), 54 lbs. to the lineal yard, Erie pattern, Bars 24 feet long. Terms, CASH.
GEO. T. M. DAVIS,
New York, June 1, 1859. 4723 47 Exchange Place.

OFFICE OF THE ILLINOIS CENTRAL R. R. Co.,
New York, May 23, 1859.

THIS COMPANY is now prepared to receive payment in full upon its capital stock, as set forth in the circular addressed to the shareholders on the 6th of March last.

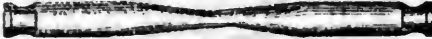
The Freedland Bonds and all other obligations of the Company, except the Construction Bonds, due in 1875, will be received at par, and accrue interest in payment of the balance of \$40 per share now unpaid.

Certificates of full-paid shares will be issued, upon which the Company will pay an interest dividend of TWO DOLLARS per share semi-annually, upon the conditions recited in the circular.

By order of the Board.
J. N. PERKINS, Treasurer.

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 Rolled or Hammered Car Axles, Bar Iron
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CAR AXLES,
 AND EVERY DESCRIPTION OF
LOCOMOTIVE FORGINGS.

ALSO,
 STEAMBOAT SHAFTS, CRANKS, TOBACCO SCREWS,
 HAMMERED BAR IRON,
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 FOR LOCOMOTIVE ENGINES,
 Brass Domes, Escape Pipes, Steam-Chest Covers,
 Cylinder Heads, Jackets, Raised Bands for Boilers, etc., etc.,
 Also, Smoke Stacks and Russia Iron Jackets.
 Also, COPPER FLUES OF SUPERIOR QUALITY, and
 All other Copper Work for Locomotive and Stationary Engines.
 Brass and German Silver Name and Number Signs
 FOR LOCOMOTIVE ENGINES,
 Furnished at unusual short notice.

FREIGHT CARS for SALE.

27 CARS—Have been run about two years,—viz:—
 5 long 8-wheel Box Cars, 2 with apartment for conductor
 13 " " Cattle Cars.
 19 " " Platform Cars.

These Cars are made in the best manner, with large axles,
 safety beams, brakes, lighter boxes, and have been newly
 painted and will be sold low for cash.

2m17

WILLIAMS & PAGE,
 41 Water st., Boston.

Central Park Improvement Fund Stock.

PROPOSALS for \$300,000 CENTRAL PARK IMPROVEMENT FUND STOCK.—Sealed proposals will be received at the Comptroller's office until THURSDAY, June 16, 1859, at 2 o'clock, P. M., when the same will be publicly opened, for the whole or any part of the amount of THREE HUNDRED THOUSAND DOLLARS OF THE CENTRAL PARK IMPROVEMENT FUND STOCK OF THE CITY OF NEW YORK, authorized by an Act of the State Legislature entitled "An act for the Regulation and Government of the Central Park in the City of New York," passed April 17, 1857, amended April 13, 1859, and by an ordinance of the Common Council, approved by the Mayor, May 13, 1859.

The said Stock will consist of Three Thousand Shares, of One Hundred Dollars each share, bearing interest at the rate of six per cent per annum, payable quarterly, and the principal sum redeemable on the 1st day of August, 1887.

The proposals will state the number of shares desired, and the price per share; and the person whose proposals are accepted will be required to deposit with the Chamberlain of the city, within three days after the opening of the bids, the whole sum awarded and covered by their bids respectively, including the premium, if any, thereon, and on presenting the receipt of the Chamberlain to the Comptroller, will be entitled to receive a certificate for the par value of the number of shares, bearing interest from the date of such deposit.

Each proposition should be sealed up and indorsed "Proposals for Central Park Improvement Fund Stock," and the proposals, thus sealed and endorsed, put in a second envelope sealed and addressed to "Robert T. Haws, Comptroller, New York." The right is reserved on the part of the Comptroller to reject any or all of the bids, if considered necessary to protect or promote the interests of the Corporation.

Department of Finance, Comptroller's Office, New-York, May 17, 1859. **ROBERT T. HAWS, Comptroller.**

JOURNAL

OF THE

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A. dress **HENRY RUTTAN,**
 Coburg, Canada.

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 Orders for the purchase and sale of Stocks and Bonds, at the
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AVAILABLE IN ALL THE PRINCIPAL CITIES OF THE WORLD.
ALSO, MERCANTILE CREDITS,
 For use in EUROPE, CHINA, etc.

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 STOCKS and BONDS Bought and Sold on Commission.
 MERCANTILE PAPER and LOANS Negotiated.
 INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH.
 New York, May 11, 1858.

CHAS. A. FISHER,

Late of the firm of FISHER, DENNY & CO.,
 No. 18 Exchange Place.

STOCKS and Bonds bought and sold on commission. Loans negotiated.

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 Advances made on all approved Securities.
 COLLECTIONS MADE throughout the United States and
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 Messrs. Sewell, Ferris & Co., " Hon. Franklin Steele, Minne-
 Geo. P. Rogers, Esq., " soia.
 A. Gridley, President McLean A. & W. A. Saunders, Bankers,
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KIRK & CHEEVER,
 Stock Brokers and Railroad Agents,
 NO. 83 WEST THIRD STREET,
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Railroad Stocks, Bonds, &c., bought and sold on commission.
 Regular sales at public auction at the Merchants' Exchange.

R. H. RICKARD,
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BUYS and sells MINING SHARES, MINES and
 MINERAL LANDS on commission, will examine
 Mines and Mineral Lands in any part of the United States, and
 report on their value, etc., etc.

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 Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A.
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 & Forrest, Conn. Mer's N.Y., John F. Butterworth, Esq., N.Y.,
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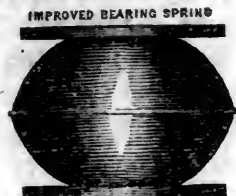
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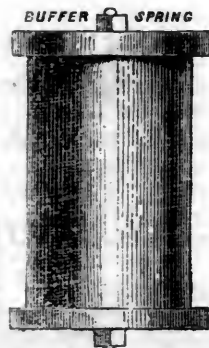
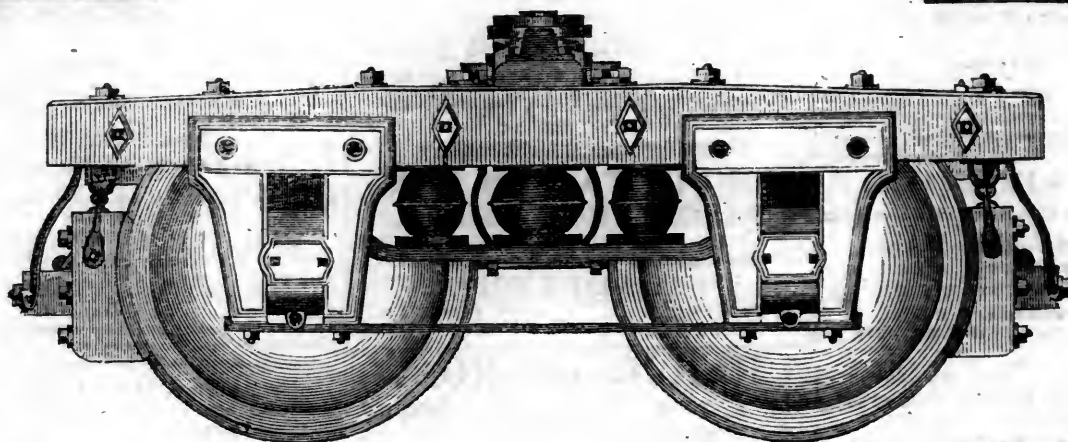
REFERENCES.—Messrs. Wm. and Jno. O'Brien, Thos. Denny
 & Co., Horace Greeley & Co., Oregon & Co., Todd & Co.,
 J. & C. Berrian, Geo. F. Nesbitt & Co., Eugene Plunkett,
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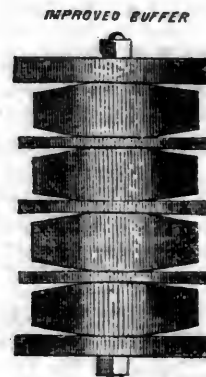
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The cost of the fuel delivered to the furnaces is but two and a-half cents per bushel.

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500 tons T rails on hand 54 to 57 lbs. per linear yard.

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Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by STEPHENS & JACKSON, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:—

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater,
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Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

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These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per linear yard, viz:—25, 30, 38, 40, 45, 50, 60, 62, and 75 lbs.

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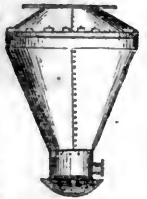
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1st. Its first cost is much less than that of any Oil in use, of known merit or acknowledged worth.

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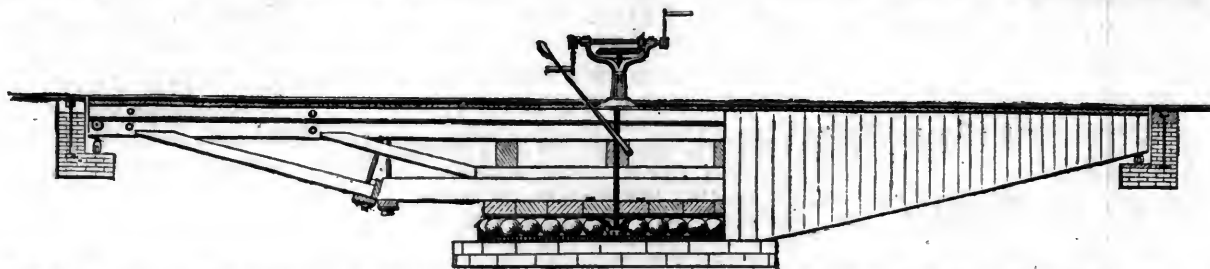
FOR Mott's Iron Turn Tables, Dime's Patent Blower,
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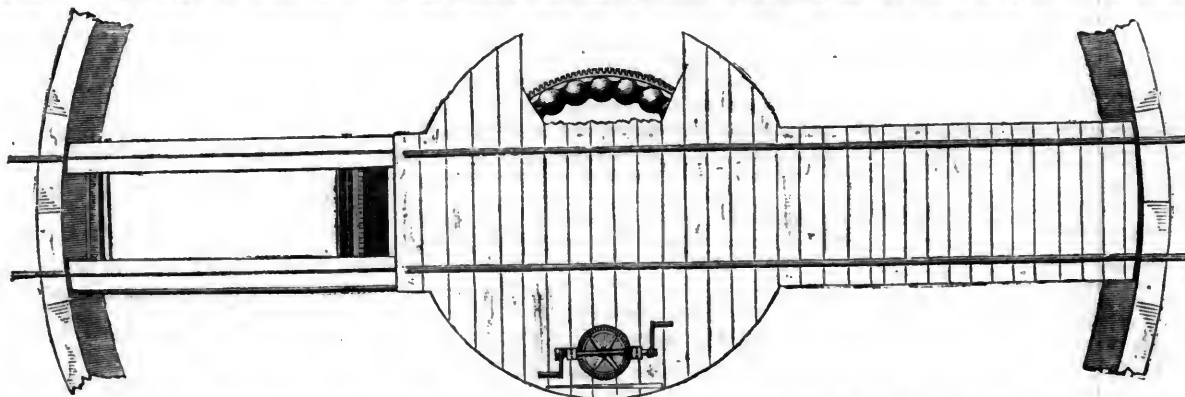
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NEGOTIATORS OF SECURITIES.

WARD'S PATENT SELF-CENTERING TURN-TABLE.



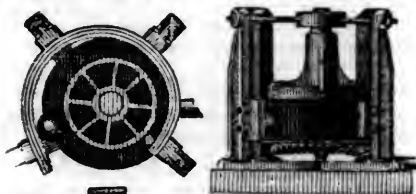
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W. H. WARD.

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This Machine is now in successful operation in ten or twelve Iron Works in and about the vicinity of Pittsburg, also at Phoenixville, and Reading, Pa., Covington Iron Works, Md., Troy Rolling Mills, and Troy Iron and Nail Factory, Troy, N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are numerous:

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The time required to furnish a bloom being only about six seconds, the scoria has no time to set, consequently is got rid of much easier than when allowed to congeal, as under the hammer.

The iron being discharged from the machine so hot, rolls better and is much easier on the rollers and machinery.

The bars roll sounder, and are much better finished.

The subscriber feels confident that persons who will examine for themselves the machinery in operation, will find it possesses more advantages than have been enumerated.

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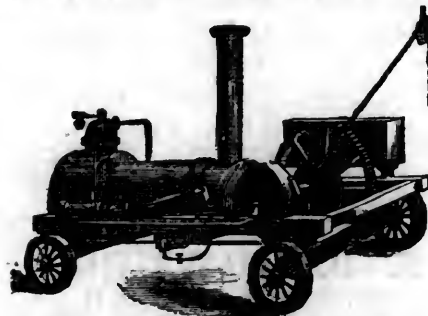


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FIRST INTRODUCED JULY, 1849



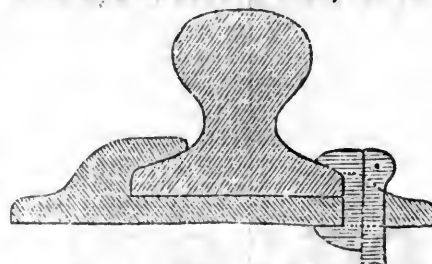
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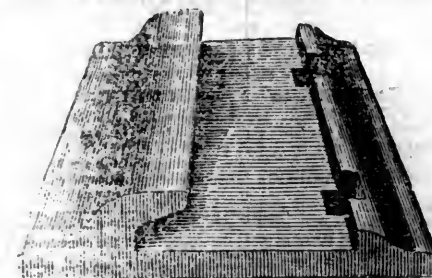
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, June 18, 1859.

Cairo and Fulton Railroad.

At a recent meeting of the stockholders of the Arkansas Division, the following Directors were elected: Edward Cross, James L. Witherspoon, M. Brayman, H. M. Fairchild, I. M. Moore, E. R. McGuire, A. King. The Board was subsequently organized by the election of the following officers: M. Brayman, President; Daniel Ringo, Vice President; Frederick A. Staring, Secretary; Geo. B. Wait, Treasurer. This road extends entirely across the State of Arkansas. Mr. Brayman has been President of the Missouri Division for some time past, and as he is now absent at the East, it is not known whether he will accept the office now tendered him.

The construction of the above road is of vital importance to the people of Arkansas. It would increase by more than \$50,000,000 the value of land in the State the moment it was opened. In the way of the construction of this road, is the default that exists on the part of the State in the payment of the entire debt. The dishonor of a State is, to a considerable degree, the dishonor of all its people. In the present case, the payment of the State debt would have a double advantage

It would be an act of justice to creditors, who have been for years without a penny, either of interest or principal of their unlucky investment, and would, at the same time, be the means of constructing her proposed works which can make no substantial progress, so long as the State is in default upon debts already contracted.

New Jersey Railroad.

This company held their annual meeting at Jersey City on the 4th instant, at which the usual reports of the directors were submitted.

The capital account was stated to be as follows:

DR.—To Capital stock.....	\$3,749,000
Bonds issued	711,420
Surplus profits	342,297
	<u>\$4,802,717</u>
CR.—By Cost of road	\$3,225,532
Equipment	313,295
Property, chiefly the ferry and appurtenances	1,248,322
Cash in hand	15,568
	<u>4,802,717</u>

The revenue and expenditures for the year were as follows:

RECEIPTS.	
From passengers	\$645,403 20
" freight	78,066 01
" U. S. mail rents, express, freight and other sources.....	179,989 24
	<u>\$908,458 45</u>

EXPENSES.	
Maintaining railroads, bridges and buildings	\$69,500 27
Repairs of locomotives, cars and machinery	34,677 52
Fuel, cost and labor in preparing.....	51,510 17
Operating the road and transporting passengers and freight.....	183,569 68
Office expenses, salaries and contingencies.....	113,983 22
	<u>349,370 73</u>

Interest on bonds	\$44,496 49
Transit duty on passengers and freight.....	15,035 51
Tax on capital stock	18,122 50
Dividends in cash, August and February	262,450 00
Profit and loss to surplus earnings	113,983 22
	<u>\$554,087 72</u>

The comparative statement of the last four years exhibits the uniform and gradual improvement of the receipts and expenses and illustrate the economical working of the road.

	1855.	1856.
Gross receipts.....	\$861,514 36	\$916,637 61
Expenses	360,766 77	400,715 89

Net earnings	\$500,747 59	\$515,921 72
Ratio of expenses to earnings.....	41½ per cent.	44 per cent.
Dividends.....	\$348,235 00	\$348,470 00
Surplus.....	78,480 90	85,257 84
Number of passengers.....	2,164,471	2,278,913½
Tons of freight	64,049	68,688
Miles run	382,568	407,682
Ratio of running expenses per mile.....	0.94	0.98½

	1857.	1858.
Gross receipts	\$911,617 25	\$903,458 45
Expenses	376,866 03	347,370 73

Net earnings	\$534,751 22	\$556,087 72
Ratio of expenses to earnings.....	41½ per ct.	38½ per ct.
Dividends.....	\$348,490 00	\$362,450 00
Surplus.....	107,171 18	113,998 22
Number of passengers.....	2,238,130	2,100,993
Tons of freight	80,872½	85,460½
Miles run	396,032	398,784
Ratio of running exp's per mile	0.92 6-10	87½ per ct.

The ratio of expenses to the earnings of the last year (1858) is 38½ per cent.; for 1857, 41½; for 1856 44 per cent. The whole surplus fund, after deducting \$39,204 67 for relaying the road with new rails and additional arches, and improvements to the Raritan viaduct during the past year, now amounts to \$342,297 90.

The apparent diminution of passengers in 1858 as compared with 1857, is owing to the large increase of commutation tickets; 1,859 of which annual, semi-annual and quarterly, were issued in 1858, and not included in the above enumeration. They are estimated to be equal to 1,040 annual commuters, and are computed to have made 500,000 passages over the road during the year; which is one trip each way for 240 of the 365 days; thus assuming that they ride about two-thirds of the year.

The tax on capital stock paid the State amounts to \$18,122 50. The year previous it was \$17,425. The transit duties for 1858 were \$15,035 51, and the dividends at the rate of 10 per cent. per annum, being \$1,745, were as usual paid in 1858 to the School Fund, on the stock of this company given in payment of the State's Newark Turnpike stock.

An analysis of the pay rolls, and salaries of agents and officers shows that nearly \$100,000 is annually paid for personal services, of which more than one-fifth, or \$21,475 41, is paid to flag and gatemen; watchmen, switchmen and bridge tenders, several thousand more than to the conductors, ticket agents and clerks. In 1858, the flagmen and gatemen received \$5,542, and conductors \$5,707, and the former are constantly increasing, from the desire to afford every reasonable protection, and in compliance with city ordinances.

The following table of receipts from commutations from 1840 to 1858 exhibits the rapid increase of commuters, only three of whom commenced in 1840, when the charge was \$120 a year between Newark and New York for the railroad alone, and \$15 were paid in addition to the ferry, which was then not under the control of our company. The regular railroad fare between Newark and New York was then 37½ cents, with 6 more for the ferry. The annual commutation is now, and has been for many years, reduced to \$50 from Newark to New York, or 8 cents a trip; from Elizabeth, \$55, or 9 cents a trip; from Rahway \$60, or 10 cents a trip; from New Brunswick, \$65, or 11 cents a trip.

TABLE OF RECEIPTS FOR COMMUTATIONS.

1840. \$3,600.00	1846. \$10,381.50	1853. \$30,165.56
1841. 2,382.00	1847. 12,660.00	1854. 32,404.55
1842. 3,140.86	1848. 12,753.83	1855. 40,176.22
1843. 6,485.00	1849. 14,242.60	1856. 46,356.29
1844. 8,120.32	1850. 17,907.15	1857. 50,347.77
1845. 9,099.25	1851. 21,377.03	1858. 55,465.77
	1852. 24,126.85	

The decided increase of commutations thus far for the present year renders certain that the whole amount for 1859 will exceed \$60,000.

After defending the commutation system, the report speaks of the system of excursion tickets adopted on the New Jersey road. It says:

The daily excursion tickets, which have proved so great a convenience, as to have been followed by the Hudson River, and some of the New England roads, have sometimes been so severely assailed as to lead to doubts of the propriety of their continuance. Loose items, too, have been published, that a restriction on the use of a ticket on the day sold is not lawful; just as if Railroad Companies are precluded from the rights and privileges incident to individuals and other corporations from making a contract. The decisions of our courts and the higher tribunals of other States have conclusively settled these points. Otherwise the difficulties which are sometimes made would induce the abandonment of the excursion tickets, and the exclusive use of regular tickets. The discrimination of price in favor of daily excursion tickets is deemed just and proper, in view of the facts that the persons using them are most generally frequent customers, residents on the line of the road, and usually go to and from without baggage; thus being more desirous patrons, and requiring less service of the company. The extension of excursion tickets to several days, or indefinitely, would defeat their design and operate in effect to convert them into regular tickets, and hence the variation in price—which is deemed to be fully justifiable both for commutation and excursion tickets, in view of their greater advantage to the company, and the entitling the party for whom they are intended to more favorable terms—would cease and the advanced rate be uniformly charged. A full comprehension of all the facts and reasons bearing on this subject will produce general satisfaction with the propriety and justice of discriminating rates between regular passengers and commuters and excursionists.

The following results, which exhibit the advantages of coal over wood as a fuel, are of interest:

The coal burners, "Zabriskie" and "Phoenix," have run during the past year, as satisfactory as before; the "Zabriskie" drawing the heavier, and the "Phoenix" the lighter trains, the former at 9 8-10ths cents per mile, the latter at 7 5-10ths cents

per mile. A new engine, to bear the name of "J. J. Cheetwood," the only director who has not yet been thus distinguished, has been ordered. This engine is to be of the first class, and is guaranteed by the builders, Messrs. Rogers, of Paterson, to be superior in construction and its economical working to any on the road. In view of the marked excellence of many of our machines, we are warranted in expecting an engine of extraordinary capacity, and economical performance. We have also adapted one of our first class wood burners, the engine "Gov. Dickerson," to the consumption of coal, by the application of one of Gregg's Patent Improvement, which consists chiefly in constructing a brick arch in the fire-box. The alteration costs \$150, and with the experience now acquired can be made for \$100. Some slight modifications of Gregg's Improvement have been made, and the engine now generates an ample supply of steam, and runs with entire acceptance, performing, in the opinion of our drivers and firemen, with a success fully equal to our other coal burners, drawing the heaviest trains from the first at 10 5-10ths cents per mile, and since the alterations in the smoke stack and fire-box, an economy has been attained quite equal to any of our coal engines. The cost per mile for running a coal engine at present is about 9 8-10ths cents per mile, while the average rate for the whole time we have used coal is 10 5-10ths cents per mile. There is also a reduction now attained in the consumption of wood, from improvements in wood burning engines, which render more economical the use of that fuel, from a diminution in its cost. For the year past, 1858, the cost of wood is found to be 17 5-10ths cents per mile, while for 1857 it was 20 1-10ths cents per mile. The substitution of oak and hickory (on the Millstone road) for pine, has also aided materially in the saving of fuel during the past year, so that the difference in the amount paid for wood in favor of 1858 over 1857 is \$12,746.99. The results of last year, however, show a decided preference of coal over wood—being nearly 47 per cent. in favor of the substitution of the former for the latter, which, had it been entire, would have effected for the year a saving of \$26,864.07; all of which justifies the gradual change from wood to coal burners.

The Company have determined to introduce such improvements in the construction of cars as shall promote the comfort of travelers. Six superior passenger cars are to be constructed in the most complete and finished manner, by Mr. Cummings of Jersey City, and placed on the road in July next; and arrangements are making to introduce sleeping accommodations in the night train of the through line, when the experiments of the various plans shall indicate the one to be preferred.

Material improvements have been made from time to time to the ferry of the Jersey City terminus, and on the entire line of the road. A separate boat has recently been appropriated to the Philadelphia, and the Morris and Essex, and New Brunswick Morning Express lines leaving the easterly end of the large depot at Jersey City on the arrival of the trains. A considerable part of the valuable real estate re-claimed by the company south of the large depot, and fronting on both sides of the spacious court leading from Hudson street to the ferry from the foot of Montgomery street, now called "Exchange Place," has been sold or leased, and improved with large and imposing buildings, which, with the renewed Belgian pavement and extended sidewalks, afford an ample and attractive avenue to the ferry, rendering locations for business there desirable. The old depot west of Hudson street has been re-constructed, and furnishes a canopy for the cars, and protects freight from exposure to the weather, providing on the adjacent sides platforms and freight offices for the convenient loading and unloading of produce and merchandise cars. Tracks have also been extended over Hudson street on the northerly side of the new depot, and a covered platform and other improvements are making for terminal accommodations, and ferry facilities, for the Northern Railroad of New Jersey, which has lately commenced

business under favorable auspices, drawing to its lines a most desirable transportation, and patronized by an industrious, worthy, and most substantial class of our fellow-citizens, located on the route of this enterprising and promising work, who have largely aided its construction, and are identified with its interests and prosperity. The New York and Erie Railroad Company have also made an agreement whereby their track is to be extended to the ferry, enabling them to participate with the Northern Railroad in the improvements east of Hudson street, by which passengers can go to and from the steamboat and cars under cover, and for only a short distance, instead of the long and exposed walk they have been compelled to take. From Jersey City westerly and southerly the whole road is maintained in perfect order, the tracks and bridges receiving every attention and care. The thorough graveling of the road-bed is maintained, the additional graveling beyond ordinary repairs costing upwards of \$5,000 during the past year. The firmness of the superstructure, and the smoothness of the track, saves the racking of the road by the heavy trains at high speed, and diminishes the wear and tear of the rolling stock. The United States Supreme Court have not yet reached the case of the proposed bridge at Newark by the direct route, crossing at Commercial Dock. Its place on the calendar justifies the belief that it will be argued the next term, and can, therefore, be erected as soon as the decision is made.

The construction of the remainder of the double track between Rahway and New Brunswick is vigorously prosecuted, with heavy rails of 70 pounds to the yard. A considerable portion is now in use to the great convenience of the increased trains south of Rahway; the whole is expected to be completed in August, affording a road bed, and superstructure, with double track, of unsurpassed solidity and smoothness, thus promoting ease, expedition, economy, and safety, in the running of the road. At the terminus of the junction road near the Morris and Essex depot in Newark, the company are preparing for the transportation of local freight from that part of the city to and from New York; and also for a coal yard, where coal will be received directly from the mines in cars, thus furnishing conveniences for freight and fuel more advantageous than now exists in any part of the city.

The schedule of trains for the present year shows additional trains from each place, over any previous period, and exhibit a marked contrast in ten years, as follows:

Trains in 1849 and in 1859	
Between New York and Newark..	22 70
" New York and Elizabeth..	14 32
" New York and Rahway..	12 24
" New York and New Brunswick	10 18
Total	58 144

The number of Philadelphia trains have also increased in the last ten years from 6 to 12.

The company have carried since the road went into operation 30,000,000 of passengers, without injury to life or limb, which certainly bespeaks a careful oversight of its business. The improvements made within a few years have added vastly to the comfort of the passage between New York and Philadelphia. The affairs of the company are in a most prosperous condition, and never looked better for the future. Its road earns \$30,000 per mile per annum; a larger sum per mile than any other road in the United States earns, devoted chiefly to the transportation of passengers.

The following gentlemen were chosen Directors for the current year: John S. Darcy, Stephen Whitney, Henry R. Remsen, Hamilton Fish, Dudley S. Gregory, John P. Jackson, A. O. Zabriskie, J. J. Cheetwood, John Acken.

Cincinnati, Wilmington and Zanesville R.R.

Mr. E. Gest, late receiver of this company, having terminated his relations with it, has submitted to the court a report of the operations of the company during the time they were under his charge. We know of no adequate cause for his retirement. His reports, of which he has made two, are models in their way, and present a full view of the manner in which each branch of service has been conducted. Judging from these, Mr. Gest appears to have carried out a difficult undertaking in a manner very creditable to himself and advantageous to the owners of the road. Such being the case, it is difficult for us to understand why he has been superseded by an elderly gentleman, certainly very much his inferior in activity, and in a practical knowledge of railroad affairs. It looks like jumping out of the frying pan into the fire. But appointments of the above character, like some other things, go by favor, and have seldom much reference to the qualifications of the parties.

The following is a summary of Mr. Gest's report:

The earnings and expenses from July, 1853, the period when they were first reported, to March 1, 1857, were:

	Earnings.	Expenses.
From July 1853, to April, 1856, 32 months....	\$261,860 98	\$244,355 05
From April 1856, to Nov. 1856, 7 months.....	140,133 14	174,586 07
From Nov. 1, 1856, to March, 1857, 4 mos..	70,895 92	79,567 69

Total for 43 months. \$472,890 04 \$492,508 81
—or an excess of expense over receipts of \$19,618 77.

The deterioration of property during the same time was as follows:

Ties	\$34,763 09	Culverts	\$3,000 00
Bridges	38,810 67	Fencing.....	2,150 00
Spikes	6,552 65	Buildings	6,402 25
Chairs	5,324 55	Machine shop	6,100 00
Iron	43,055 92	Cars	48,430 00
Girder bridge's	1,850 00	Locomotives.	24,000 00
Trestle work.	659 00	Miscellaneous.	5,000 00

Total depreciation \$226,098 13 || To which add above deficit..... | 19,618 77 |

Total deficit and depreciation \$245,716 90

In other words, the cost of operating the road, including the estimated deterioration, prior to March 1, 1857, exceeded the earnings \$245,716.90.

Such was the condition of the road and its outfit at the time it passed into the hands of Mr. Gest, March 4, 1857. From that time to May 1, 1859, a period of 26 months, the earnings were \$454,557.88 And the expenditures were..... 397,995.52

Or an excess of earnings of..... \$56,562.36
From which deduct depreciation of ties, bridges and iron..... 55,866.49

Leaving as net earnings. \$695.87

—over and above repairs and deterioration.

The deterioration of the property during that period was confined to these three items—the other matters pertaining to road bed, rolling stock and buildings, having not only been maintained, but their condition as a whole actually improved.

The earnings of the road for the fiscal year ending May 1, 1859, were:

From passengers.....	\$68,826 80
" freight	108,117 19
" mail, express, etc.	13,801 77

\$190,745 66

Less ordinary and extraord'y expenses:

Passenger trains.....	\$69,377 23
Freight "	102,188 11

171,565 34

Net earnings..... \$19,180 32

The above expenditures are classed as follows:

Ordinary	\$139,416 95
Extraordinary	32,148 39

\$171,565 34

Of which are chargeable to prev's yrs.:

Ordinary.....	\$8,400 00
Extraordinary	17,953 60

26,353 60

Actual expenses chargeable to the y'r. \$145,211 74

Of the extraordinary expenditures, \$25,648 was for the re-construction of some large truss bridges, trestle work, etc., 70 per cent. of which, or \$17,953 60, is chargeable to deterioration prior to March, 1857.

PROFIT AND LOSS ACCOUNT.

Receipts from March 4, 1857:

Passenger receipts.....	\$197,309 20
Freight "	268,294 68
Donation, mileage, sales of old materials, etc.....	20,107 71

\$485,711 59

Expenses for same time:

Ordinary expenses	\$373,228 26
Extraordinary expenses..	32,148 59

405,376 85

Balance to credit of profit and loss. . \$80,334 75

The following is a condensed balance sheet from Receiver's books, May 1, 1859:

	Dr.
Transportation expenses.....	\$405,376 85
Invested in real estate, cars, shop, ballasting and widening road	71,582 52
Bills receivable	1,818 05
Post office department.....	4,987 50
Materials on hand	4,458 79
Claims created prior to receivership paid out of trust fund.....	32,967 35
Due from roads and individuals.....	636 37

\$521,827 43

	Cr.
Earnings of road.....	\$485,711 59
Due sundry roads and individuals....	4,635 16
Bills payable.....	4,909 05
Pay roll.....	15,340 82
Bridge account.....	7,884 74
Receiver in advance	3,395 07

\$521,827 43

Portland, Saco and Portsmouth Railroad.

The report of the Directors for the year ending May 31st, commences by assuring the stockholders that their property in the road is safely invested, and that they are secure and certain of semi-annual dividends. The receipts of the year (May estimated) are \$208,299; expenditures, \$104,270; net income, \$104,029. After paying dividends of \$90,000, the surplus earnings of the year are \$14,029. The surplus earnings of last year were \$40,722. Several improvements have been made during the year, the most important of which are the erection of a freight house at Portland, building and renewing bridges, and the building of a new station-house at Wells.

The report was unanimously accepted. The following is the list of Directors chosen: Ihabod Goodwin, Portsmouth; George M. Browne, Boston; Francis Cogswell, Andover; Thomas West, Haverhill; Charles E. Barrett, Portland; James Hayward, Boston; Nathaniel Hooper, Boston.

This road is managed by John Russell Jr., Superintendent, and is admirably conducted.

The Railroad War--Manifesto of the Baltimore and Ohio Railroad.

At a meeting of the Directors of the Baltimore and Ohio Railroad, held on the 8th inst., the following statement was submitted by the President of that Company, Mr. Garnett, in reference to the quarrel between the four great lines.

Mr. Garnett commenced by stating that on the 13th of April he presented his views regarding the policy to be maintained by the Baltimore and Ohio Railroad Company, on the crisis arising from the extraordinary positions assumed by the New York Central Road, and the course he had felt it his duty to pursue in competition with the Atlantic lines, for the protection, in a comprehensive view, alike of the interests of the company, and of the city of Baltimore.

He had the satisfaction of receiving the unanimous approval of the Board of his action, and the policy indicated. Notwithstanding the general disapproval manifested by the press at the North, as well as the South and West, and, it is understood, by a large portion of their stockholders, the managers of the New York Central Company have continued their Quixotic crusade against the city of Baltimore to an extent which, whilst generally damaging railway property, is rapidly developing in such a contest the relative weakness of that line, and the strength and advantages of the Baltimore and Ohio Railroad and its terminus.

It is due to the magnitude of the interests involved that a distinct statement should be presented, of the issue made by the New York Central Company; and of the position occupied and maintained by this Company, and the facts and reasons governing the latter, so that the serious responsibility of continuing a state of things producing most disastrous results to vast amounts of railway property, shall be properly placed. The New York Central Company demands that the rates from New York, Boston, Philadelphia, and Baltimore, to the commercial centres of the West and South-west shall be the same. The illustration of the case, in connection with the city of Baltimore, will exhibit the fallacy and absurdity of the principles announced. Cincinnati, as the leading city of the Ohio valley, has commanded the most attention in the discussions of the conventions of the four lines. What are the relative positions of New York and the New York Central Company, and Baltimore, and the Baltimore and Ohio Company, to that city.

The distance from New York, via the New York Central Road, and the shortest railway line to Cincinnati is.....880 miles
The distance from Baltimore by the shortest railway line to Cincinnati is.....582 miles

Leaving the difference in favor of Baltimore..298 miles
The entire length of the New York Central Road from Albany to Buffalo is.....298 miles

It therefore clearly follows, unless the New York Central Road concludes to render the service for its entire length, without any remuneration whatever, if the connecting roads of the Baltimore and Ohio Company in Ohio, can work at the same rates as the connections of the New York Central, it must abandon this demand. It has claimed great relative advantages during the season of river and lake navigation, and economy of working arising from low grades, &c.

What are the facts? Assume the use of the Hudson River to Albany, and of the Lake from Buffalo to Cleveland, yet the actual rail transportation is, viz:

On New York Central Road..... 298 miles
And from Cleveland to Cincinnati..... 255 "

553 "

Whilst from Baltimore to Parkersburg, on the Ohio river, 200 miles below Pittsburgh, the distance is but.....383 "

170 "

Exhibiting the transportation by rail from the

city of New York in favor of the Baltimore route, using the canal or sea, from New York to Baltimore, making the Baltimore and Ohio line the cheapest from the city of New York, and proving, conclusively, the absolute advantages of the location of Baltimore.

The errors of that company are still more glaring as to the relative ability for an economical working. The subjoined statement furnishes the cost of fuel of the New York Central and Baltimore and Ohio Roads, for the past three fiscal years, derived from the annual reports:

	Cost of Fuel to B. & O.	Cost of Fuel to N. Y. C.	Difference.
1856....	\$201,669.39	\$768,583.21	\$566,913.82
1857....	209,665.15	847,853.14	638,187.99
1858....	167,550.64	766,903.37	599,352.73

\$578,885.18 \$2,383,339.72 \$1,804,454.54
Average difference per annum.... \$601,484.84

In consequence of the inexhaustible supplies of bituminous coal, at almost nominal prices, and of the most desirable character for generation of steam, upon a large portion of the road, the Baltimore and Ohio Company has a permanent advantage over that Company in this great economy, which has proved to average an amount exceeding \$600,000 per year—a sum equivalent to dividends of 6 per cent. on the capital stock of this Company.

During the month of April, notwithstanding the low rates of transportation forced upon the railway interests by the New York Central Company, the net profits of this road were satisfactory—the working expenses being but 47 per cent. The results for the past month are still more remarkable and interesting.

All the power of that great corporation, which for many years so largely dictated and controlled the railway policy of the country, has been wielded adversely for the interests of this company, and the fruition is a large reduction in its revenue, combined with immense losses through low rates arranged by its authority and dictation, whilst a decided increase of the revenues of the Main Stem of the road has been realized, as well as a slight aggregate increase of the entire revenues of the company beyond the same month last year.

Combined with this extraordinary exhibition of the relative success and power of the Baltimore and Ohio Road is the fact that with all the disadvantages, the working expenses for the month were but 44.76-100 per cent.

The public has practically approved the policy of the company in reference to the reasonable and safe speed of passenger trains. Thus whilst the New York Central has adopted a speed, deemed by this company reckless, dangerous, and costly, in connection with which most serious results have occurred, involving in that road loss of life and limb, this company has maintained a speed of 25 miles an hour without accident, making regular connections, and fully preserving its business, at large advantages; also, of economy in running.

The developments, therefore, exhibit the ability of this company to maintain its platform of protection of all the great interests confided to its charge, the commercial and geographical rights of Baltimore, and its dividend earning capacity for its stockholders.

As the policy has met the cordial sanction and support of the community, its shareholders and the Board, the Executive deems it proper to announce his continued determination to enforce and maintain the just advantages and rights of the city of Baltimore, and of the company.

Mr. Garret must not rely, to maintain the greater economy with which his road can be run, upon the amount previously expended for wood on the New York Central Road. This company are now making the same amount of wood go twice as far as it did two years ago. They are rapidly reducing this item of expenditure within reasonable limits. But the Central Railroad has coal, not so cheap as the Baltimore and Ohio Railroad, but they can deliver the best quality of bituminous at

\$3.00, or \$3.50, upon every portion of their line, or cheaper than the Baltimore and Ohio Railroad can deliver it at Baltimore. If this company have learned the art of burning coal, the Central can easily copy it, and in this way remove the disparity which now exists on the score of fuel.

This wood account of the Central, to which Mr. Garret refers, has, we are inclined to think, been one of the *unventilated* corners in this great concern—a sort of unknown quantity, perhaps, swelled by other unknown or uncertain quantities. We see good evidences that it is now being sharply looked after. In 1856 and 1857 it took one cord of wood to run 19 miles. Now, on some divisions of the road, a cord is made to carry the train more than twice the distance named. It is not so much matter how this saving has been effected as the fact that it has been. We have, no doubt, too, that the Central will rapidly get into the use of coal, which can be supplied at low rates, and of the best quality.

Journal of Railroad Law.

It is well known to our readers that in 1847 and 1849, that certain statutes were passed in the State of New York, providing that thereafter when any person should be killed by the wrongful neglect or default, the personal representatives might recover damages from the party causing such death, to an amount not exceeding \$5,000. Several other States of the Union have passed similar acts.

In the application of these statutes to railroad companies, the question is of considerable interest. May an action be maintained in one State, under a statute of this description, for a death caused in another State where no such statute exists? This question has arisen in two cases lately before the Supreme Court of the State of New York, before two different judges, and has been differently decided in the two cases. In such cases, of course the question must remain an open one until it shall be passed on upon appeal; but in the meantime, the views expressed on the respective sides of the question will be found to possess interest.

The first of the cases we refer to is that of *Vandeventer vs. The New York and New Haven Railroad Company*. The action arose out of what is known as the "Norwalk Disaster," which occurred at Norwalk, in Connecticut, in 1852, by the running of defendant's train off an open bridge. The plaintiff was executor of one of the persons killed by that accident; and he brought this suit in New York State to recover damages, under the statute.

On the trial the plaintiff recovered a verdict; but when he came afterwards to move for judgment in his favor, the judge before whom the motion was made, decided that no action could be maintained for the following reasons:

PEABODY, J.—The objection made by the defendant's seem to be entirely fatal to this case. The deceased was killed instantly by the negligence of the defendants. At common law no action for damages would lie for such a killing. (*Warley vs. Cincinnati, Ham. and Dayton Railroad Company*, 1 Handy's Ohio Ref. 481. *Ashby vs. White*, 2 Smith's Lead. Cas. 131 note).

This accident, and the acts and omissions complained of, occurred in Connecticut; and whether an action will lie for acts done there, depends on the laws of Connecticut. New York does not pre-

scribe what may not be done in Connecticut; nor does she decide what shall be the consequence of acts done there, or whether they be or be not actionable. What the laws of Connecticut are on the subject, does not appear, either by the pleadings or the evidence. They were neither pleaded nor proved, and we are not at liberty to speculate upon or ascertain for ourselves, this more than any other fact, material and necessary to a recovery. This Court cannot judicially know then. In the absence of all evidence on the subject, it can at most only intend that the common law prevails there; and that by that the plaintiff would have no right of action. A statute, to be sure, exists in this State which gives an action to the representatives of a person killed by the wrongful act or negligence of another, and would warrant a recovery on the facts appearing here, if they had occurred in this State. But that statute, in the nature of things, can have no extra-territorial application, and does not give an action for an act done out of this State. (*Campbell vs. Rogers*, 2 Handy's Ohio Ref. 110. 9 Law Ref. N. S. 329. 4 Am. Law Reg. 747.) Whether an act or omission affords a right of action depends on the law of the place where it is done or omitted. As to matters of this kind, the States are foreign to each other. The laws of one State are not in force as laws in another, and the act done in Connecticut may, for all the purposes of a right of action under the laws of this State, as well have been done in Russia. And as to any knowledge as to the laws of any other State or country, courts of this State may as well take cognizance of the laws of Russia, as those of Connecticut. Our statutes are not in force as law in Connecticut, and they cannot give rights of action, for causes not otherwise actionable, arising or occurring within the limits of that State. The plaintiff's right of action, and the nature and extent of his rights, and the relief to be had, depend on the law of the State where the acts complained of occurred, and the cause of action arose.

The common law as has been said we are to intend prevails there, and by that law the plaintiff could have no action. Whether there be any statutory provision in that State, and if so, what it is, we are not to know save by legal evidence. This evidence does not appear in the case. The complainant should state the fact, like any other fact, in the first place, and if it be not admitted by the pleadings, it should be proved, like any other fact on the trial. In this case, it is neither pleaded nor proved, and indeed the case and arguments of the counsel, bear ample evidence that the recovery was expected and claimed by the plaintiff, under a statute of this State, passed in the year 1847. It is, I suppose, beyond all doubt that the plaintiff cannot maintain an action by virtue of that statute, on the facts appearing here, and the judgment must accordingly be reversed.

The other case we have referred to, was that of *Beach vs. The Bay State Company*. John C. Beach was killed by explosion of a boiler on the steamboat *Empire State*, a boat owned by defendants, and running between New York and Fall River. His widow brought an action for damages in New York. The complainant did not state whether the accident happened in the State of New York or not; and defendant demurred to the complaint. The judge held that the action could be maintained on the following grounds:

CLERKE, J.—It cannot be denied that any one State or nation has a right to give its citizens redress for any injury committed without, as well as within, its territorial limits, when it obtains the means of exercising jurisdiction on the wrong-doer. This has always been recognized in the common law. Many, if not most, of the actions instituted in our courts of justice are transitory, and not local; and if the cause upon which any one of them is founded, arose in Japan, it would be just as tenable as if it arose in the State of New-York. The authority of the State, in this respect, is not curtailed because the redress is given by statute, instead of having been permitted by the common law. They are both, alike, the expression of the supreme power, and equally entitled to obedience and respect. It is erroneous, therefore, to say "that statutes (which means all statutes) are local, and only effectual within the limits of the State, on acts therein done."

A penal law, indeed, is strictly local, and has no operation beyond the jurisdiction of the county where it was enacted. But whether a remedial statute is extra-territorial in reference to the class of injuries for which it proposes to afford redress or compensation, depends, like other statutes, upon the intention of the legislature, to be gathered from the language employed; the law as it previously existed, in relation to the same subject, the mischief to be prevented, and the remedy to be applied; and we must also bear in mind that very such statute is to be liberally construed.

It has been asserted that the statutes of 1847 and 1849, allowing compensation to the representatives of deceased persons, for causing the death of those persons by wrongful act, neglect or default, are penal and not remedial statutes. The second section of the act of 1849 is undoubtedly penal. But a penal statute may also be a remedial law, (1 Wils. 126,) and a statute may be penal in one part and remedial in another. (Doug. 702.) But in the redress which these statutes afford to the bereaved families of those who have been deprived of life by the wrongful act, neglect or default of others, they are entirely remedial, and they are calculated to be most beneficial in their operation—not only in their compensatory effect in warding off, at least for a season, the destitution of many a family bereft of its provider, but in preventing the frequent occurrence of the melancholy disasters, which are too often the result of the most culpable carelessness and disregard of human life.

I can see no reason to infer that the legislature intended to confine the operation of these acts, in their remedial features, to injuries committed within the territorial limits of this State, so as to exempt persons, natural and artificial, residing in other States, provided the necessary steps are taken to obtain jurisdiction over such persons. The language is, doubtless, very general, and does not expressly specify injuries committed without the State, and does not specify anything relative to the residence or citizenship of the perpetrators of the injury; or if they are artificial persons, the place or country where they were organized. But, on the other hand, it does not except such injuries, or such persons.

And there is no reason whatever to suppose when we consider the nature of the calamity to be redressed, and the purpose for which redress is

prescribed, that the legislature intended any restriction beyond what the generality of the language itself imports.

With regard to the penal section of the act of 1849, we cannot by that construe the remedial section. Each stands by itself, on the well known rules of the constitution—a strict construction for the one, and a liberal construction for the other. And, in the absence of any thing to the contrary, we are to suppose that the legislature intended that the acts in question should be interpreted according to those rules, which are part and parcel of the law of the land, recognized by the legislature as well as by the judiciary, and all laws, it must be presumed, are formed in reference to them.

And after all, do not these statutes merely provide, in their remedial character, an extension of the remedy afforded by the common law? To be sure the death of the deceased, and not the injury which caused the death, is the immediate ground of the action. But the death is the sad result and serious aggravation of the injury by which the family are deprived of the means of support, as the deceased person himself, if he survived the injury, would, according to the extent of it, be deprived of the ability to contribute to their support. If Mr. Beach were maimed and mutilated by this explosion, and survived the accident, he certainly would, by the common law, have a right of action for damages against the defendants, whether it occurred within this State or not. The action would be undeniably transitory. Do these acts, in their remedial features, go any further than to extend and transmit this common law right, giving compensation, for the injury that produced the death, to the family and representatives of the deceased?

For these reasons I hold that this action is well brought, even on the assumption that the explosion occurred without the territorial limits of the State of New York.

Chicago and North-Western Railroad.

A few days since the old Board of Directors of the now defunct Chicago, St. Paul and Fond du Lac Railroad Company met in their office and executed conveyances to the purchasers for the bondholders, also ratifying the sale and transfer, and by their own action ceased to exist as a board. Immediately afterwards the new proprietors convened and proceeded to organize the concern under the new name of the Chicago and North-western Railroad Company. The following gentlemen were elected officers: Wm. B. Ogden, Esq., President; Perry H. Smith, Vice President; E. W. Hutchings, Treasurer; Geo. P. Lee, Assistant Treasurer at Chicago; Charles Butler, Secretary; and J. B. Redfield, Assistant Secretary at Chicago; G. L. Dunlap, Superintendent; J. F. Strong Assistant Superintendent.

A Board of Directors was elected, but they will be subjected to changes, and are not considered permanent. The Board had awarded the contracts for the building of the gap in the line from Janesville, Wis., to La Crosse Junction. It is fully expected that this part of the road will be finished by the first of December.

Dayton and Toledo Railroad.

The Dayton and Michigan Railroad have now some sixteen miles' track laid on the northern end of the road, and a sufficient force of men are at work laying the iron as fast as possible. On the 1st instant track-laying was commenced at the Lima end, and several miles are already finished toward Toledo. Should no serious delay occur, the whole line will be open from Cincinnati to Toledo by the middle of August next.

TREATISE

ON THE
PRINCIPLES OF CIVIL ENGINEERING
AS APPLIED TO THE
CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, *Civil Engineer*,
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 372.)

§ 101. It is apparent that the ultimate strength of a bridge may depend materially upon the stability of the piers or abutments by which it is supported; and some further observations upon the bulk and weight of materials employed for that purpose, and upon the composition and tenacity of mortars used to cement them, will not be inappropriate in connection with the subject of their superstructures.

§ 102. Mortars used in the formation of bridge masonry in this country, are usually composed of lime and sand, in various proportions intimately mixed, and a sufficient quantity of water to give the mass the consistency of a paste and to adapt it to convenient application with a trowel.

§ 103. White marble (*carbonate of lime*) submitted to a strong red heat until its water and carbonic acid are thoroughly expelled, becomes pure *quick lime*. If a certain quantity of water be poured upon lime-stone recently calcined, it heats, crumbles in pieces, its bulk increases to twice or three times its original volume, the water combines with the lime, in the proportion of about one part of water to three parts of lime and the whole becomes a fine white powder. This powder is the hydrate of lime, but is more generally known as *slaked lime*, *fat lime*, *common lime*, or simply as *lime*.

If pure lime be reduced to a paste with water, or with fine sand and water, and exposed to the air, it will set or become solid, and will afterward resist the action of water. But if the paste be placed in water, or in very humid earth, it will remain soft, and, in that position will never be of any value as a cement.

§ 104. The product of another kind of lime-stone will be about four parts of pure lime, two parts of silica (*flint, quartz*) and one part of alumina (pure clay).

Lime-stones of this composition, though calcined do not readily slake when moistened, but, if ground to powder, they absorb water without producing heat or augmenting their volume.

This powder when made into a paste, either with or without sand, will, in a few days, become solid and tenacious in water or moist earth, but in the air will not acquire so much hardness or tenacity. Limes which possess this singular property of hardening under water have received the names of *hydraulic lime*, *hydraulic cement* or simply *cement*.

Generally, for bridge masonry in this country, mortars are made of lime and sand, or of cement and sand, or of cement, lime and sand.

§ 105. Pure carbonate of lime, such as is derived from Iceland spar, or Carrara marble, is rarely used in the arts.

That which is commonly employed, and which is derived from ordinary limestones contains more or less silica, alumina, oxide of iron and some-

times oxide of manganese and carbonate of magnesia, and partake, to a greater or less extent, of the peculiar properties of hydraulic lime.

§ 106. *Common lime mortar.* To make this mortar, fresh quick lime of the best quality should be procured and broken to pieces not larger than walnuts. These should be spread and wet evenly with one-third to one-half their bulk of water. When completely slaked, add just enough water to make a stiff paste. To this paste add the requisite proportion of fine, sharp, clear sand. Temper with water and mix these elements thoroughly in a mortar mill, or by other means.

The proportion of sand will depend upon the use to be made of the mortar. *The less sand used the stronger will be the mortar.*

If paste and sand in equal parts are mixed, the mortar will have a tenacity in six months of about 20 lbs. per square inch, and in four years about 40 lbs. per square inch. Varying the proportions of paste and sand, the strength of the mortar will be increased or diminished nearly as follows:

Sand $\frac{1}{2}$	tenacity 20 to 40 lbs. per square inch.
" 0.2....	" 12 $\frac{1}{2}$ per cent. greater.
" $\frac{1}{3}$	" 10 " "
" $\frac{2}{3}$	" 15 " "
" $\frac{3}{4}$	" 25 " "
" 0.8....	" 30 " "

§ 107. When the stability of a structure like a pier or an abutment of a bridge, depends upon the tenacity with which the stones or bricks composing it are held together by the mortar used to cement them, very little sand should enter into the composition.

When no lateral pressure exists, and the beds of the stones are rough, and the joints necessarily large, economy may dictate the use of three or four parts of sand to one of lime.

Mortars of quick lime and sand to be used in the air, sometimes may be materially improved by the addition of hydraulic lime, or of calcined clay.

§ 108. *Cement mortar.*—To make hydraulic lime mortar, the lime-stone, on being properly calcined, should be ground to a fine powder and immediately put in air-tight barrels, or in some other manner be secured from the atmosphere until it is to be prepared for use.

The degrees of hardness and of tenacity which hydraulic mortar will acquire, depend much upon the proportion of lime and sand, their intimate mixture and the quantity of water in the composition.

As a general principle a mortar made of hydraulic lime will be weakened if any sand be added; but the strength of a mortar composed of one part of sand and two parts of hydraulic lime will not be sensibly less than that of hydraulic lime alone.

When the cement is not required to be the strongest that can be made, equal parts of hydraulic lime and sand may be used without any great diminution of tenacity. For many purposes the quantity of sand may be economically extended to two or three parts to one of lime.

The cements from Rosendale, Kingston and other localities of Ulster County in the State of New York have been extensively used and are widely known. When calcined, these cements contain, according to an analysis made by Dr. Beck,—

Carbonic acid	5.00
Lime	37.60
Silica	22.75
Alumina	13.40
Magnesia	16.65
Per-oxide of iron	3.30
Gas, etc.	1.30
	100.00

The tenacity of mortars made from this cement, allowing them one year to harden in water, may be estimated as follows:

	Per square inch.
Cement without sand	45 lbs.
" 2 parts, " 1 part	40 "
" 1 " " 1 "	30 "
" 1 " " 2 "	15 "

§ 109. Bricks are probably the lightest materials used for bridge masonry.

Only the best burned, and hardest bricks are at all suitable for this purpose.

These will weigh about 130 lbs. per cubic foot.

A brick pier of the dimensions given in section 100 (Fig. 71) contains 15,416 $\frac{1}{2}$ cubic feet and at 130 lbs. per cubic foot will weigh 2,004,167 lbs., requiring a horizontal force of 300,625 lbs. applied at A to overturn it.

To resist a further horizontal force at A of 228,575 lbs., will require an adhesion at its base of 1,523,833 lbs. equal to 2,902 lbs. per square foot or 20 $\frac{1}{2}$ lbs. per square inch.

Then the resistances of a brick pier instead of the solid granite one will be, from weight of pier.....300,625 lbs.
from weight of superstructure.....48,860
from adhesion of mortar at the base.....228,575 "

Total.....577,560 lbs.

§ 110. It will seldom happen that a substratum of solid rock will be found, upon which to build a pier, so that any reliance can be had upon the adhesion of mortar at the base.

Where a foundation is obtained by driving a great number of piles to a considerable depth, some dependence might be put in anchors of strong bars of iron secured to the piles at one end and within the body of the masonry at the other end, as a substitute for cement between the foundation rock and the base of the pier.

In nearly every case that will occur, however, the dimensions of the masonry should be such that when its materials are properly cemented together its weight alone will be sufficient to resist any force which can be brought to act against it.

§ 111. Instead of one-tenth *batir* to the sides of the pier, if it be increased to a tenth and a-half, or 0.15, the height being 50 feet and the top surface 5 by 25 feet, it will contain 21,250 cubic feet, and, at 130 lbs. per cubic foot, will weigh 2,762,500 lbs.

The base of the pier will be 20 feet, consequently the arms of leverage will be 50 and 10 feet, and $\frac{2,762,500 \times 10}{50} = 552,500$ lbs., will be the horizontal resistance at the top.

Adding the weight of the superstructure, as before, to the weight of the pier, the total horizontal resistance will be 600,860 lbs.

Dividing this pier by a horizontal plane at half its height, the upper portion will contain 6,406 $\frac{1}{2}$ cubic feet, weighing 832,812 lbs. and will have a base 12 $\frac{1}{2}$ feet wide. Then $\frac{832,812 \times 6.25}{25} = 104,101$

lbs. will be its resistance to a horizontal force applied at the top.

To enable the upper portion of the pier to resist the horizontal force of 552,500 lbs. at the top, it must act, not only by its own gravity, but must have the aid of the gravity of the lower portion by being connected to it with a tenacity of 1,377,188 lbs. equal to 3,390 lbs. per square foot of the horizontal section or 23 $\frac{1}{2}$ lbs. per square inch.

Again dividing this pier horizontally, 10 feet below the top, the upper portion will contain 1,730 cubic feet, weighing 224,900 lbs. and will have a base 8 feet in width.

The horizontal force this portion of the masonry can resist is $\frac{224,900 \times 4}{10} = 88,960$ lbs.

To resist a force of 552,500 lbs., it must be cemented to the lower portion with an adhesion of 1,156,350 lbs. or 5,162 lbs. per square foot, equal to 35.8 lbs. per square inch.

Similar calculations upon other sections of the pier at various heights will establish the fact that the strength required of mortar will increase from the bottom to the top in proportions depending upon the dimensions of the masonry.

§ 112. An embankment of earth forming an approach to a bridge, has a tendency to push the abutment forward or to turn it over. It will be well to inquire how far this tendency may counteract that of the arch or truss, to thrust outward.

If the embankment were not retained by the wall, the particles would loosen and slide, or tumble down, until there would be formed a certain inclination of surface called the *natural slope*, or *plane of repose*.

The plane of repose is perpendicular for solid rock. It is inclined to a vertical plane, about 35 degrees for very compact earth; 45 degrees for an average of soils; 55 degrees for an average of fine dry sands, and the inclination continues to increase, as the material has less cohesion and friction, until the limit of fluidity is attained, when the surface becomes horizontal.

A column of water presses with as great force laterally as vertically, on account of the constituent particles having an absolute freedom of motion among each other, without friction and without tendency to cohere.

The pressure of earth upon a wall is similar to that of water, with this difference, that the weight must be reduced by a certain ratio dependent upon the friction and cohesion of the material.

A column of sand would produce a horizontal pressure equal to its weight were there a total absence of friction and cohesion between its particles. Or, if the exact force required to overcome the resistance of friction and cohesion could be ascertained, then the difference between that force and the weight of the material would make known the quantity of force left free to act like a fluid.

Friction is the resistance opposed to the motion of one body upon the surface of another, when the two are pressed together, and the quantity of friction for each kind of material is directly as its weight.

The measure or *co-efficient* of friction, is the proportion of the weight of a body expended in overcoming its friction, and is determined by the inclination of the surface when it is just sufficient

to keep up the state of motion which the sliding body may have received, but of not sufficient inclination to cause the body to pass from a state of rest to a state of motion. The inclination of a surface under such conditions, is called the *angle of friction* or the *limiting angle of resistance*.

Cohesion is manifested by the force necessary to produce fracture or any other derangement of the form of a body. The force by which the particles of a body resist separation is estimated by the weight required to tear asunder those particles at any given surface.

The cohesion of timber and iron (§ 12) is ascertained by suspending a rod, of known dimensions, by one end and attaching weights at the other end until it breaks. A similar rod, composed of sand, clay or other earth, may be supposed to be suspended. If of any considerable length, it will break of its own weight. The weight of the greatest length of rod which will remain suspended without breaking will measure the cohesion of that material.

The following are the results of some experiments to determine the natural slopes of different soils, which have been published by various authorities.

Natural Slopes of Soils.

Kinds of Earth.	Slope. Angle with		Authority.
	Horizontal.	Perpendicular.	
Sand, very fine.	5 3	31°	59° Martony.
" fine dry.	5 3	31°	59° Gadroy.
" river, very dry 3	2	33°	57° Delanges.
" dry yellow.	3 2	34°	56° Hope.
" fine, very dry. 7	5	34½°	55½° Rondelet.
" lightest kind. 5	4	39°	51° Barlow.
Soil, perfectly dry. 6	4	39°	51° Martony.
Gravel.	4 3	37°	53° Hope.
Loose shingle perfectly dry.	5 4	39°	51° Pasley.
Soil, moist.	10 9	43°	47° Martony.
Ordinary earth, very dry.	9 10	47°	43° Rondelet.
Do. slightly humid 5	7	54°	36° Rondelet.
Do. very compact. 5	7	55°	35° Barlow.

It is found on removing the support of a mass of earth that a portion of the prism above the plane of natural slope, will separate from the other portion of the prism, and tumble down, and that afterwards the remaining portion of the prism will slide. The line of separation between the two portions of the prism is called the *line of rupture*.

M. COULOMB, M. DE PRONY, M. GOUTHEY, and other French Engineers, have adopted the theory that the line of rupture bi-sects the angle between the vertical and the natural slope of the earth. Indeed they have demonstrated that such ought to be the fact, and that the portion of the prism, between the line of rupture and the natural slope, represents the resistance of friction and cohesion, while the portion of the prism between the vertical and the line of rupture, is left free to act against the wall.

The scope of this work does not admit of giving the solution of this problem, which requires the application of the calculus; but the following practical rule may be deduced from it, for finding the pressure against a wall.

1. Find from a table of natural tangents, o

otherwise, the natural tangent of half the angle between a vertical line and the natural slope.

2. Multiply together the square of the natural tangent; the square of the height, and the weight of a cubic foot of the earth; divide the product by 6, and the quotient will be the pressure at the top of the wall, for each lineal foot.

In all cases the top of the wall is here supposed to be level with the top surface of the embankment.

EXAMPLES.

1. Required to know the horizontal force exerted at the top of a wall 50 feet high, by an embankment of very compact earth, weighing 120 lbs. per cubic foot, and having a natural slope of 35° with the vertical.

The half-angle is 17½° and its natural tangent 0.3153. Then—

$$0.3153 \times 0.3153 \times 50 \times 50 \times 120 = 4,970.7 \text{ lbs.}$$

If the length of the wall be 30 feet—the average length of the pier, § 100—the total tendency to overturn it will be—

$$4,970.7 \times 30 = 149,121 \text{ lbs.}$$

2. The wall 50 feet high. Embankment of gravel weighing 120 lbs. per cubic foot, and natural slope 53°.

Half angle 26½°. Natural tangent 0.4986. Then

$$0.4986 \times 0.4986 \times 50 \times 50 \times 120 = 12,430 \text{ lbs.}$$

Or against a wall 30 feet in length—

$$12,430 \times 30 = 372,900 \text{ lbs.}$$

3. Wall 50 feet high. Embankment vegetable earth weighing 62½ lbs. per cubic foot. Natural slope 53° 8'.

Half angle 26° 34'. Natural tangent 0.5. Then

$$0.5 \times 0.5 \times 50 \times 50 \times 62\frac{1}{2} = 6,510\frac{1}{2} \text{ lbs.}$$

4. Wall 50 feet. Embankment water. Weight per cubic foot 62½ lbs. Natural slope 90°.

Half angle 45°. Natural tangent 1. Then

$$1 \times 1 \times 50 \times 50 \times 62\frac{1}{2} = 26,042 \text{ lbs.}$$

5. Height of wall 50 feet. Embankment of solid rock weighing 150 lbs. per cubic foot.

Natural slope 0°. Half angle 0°. Natural tangent 0.

Then

$$0 \times 0 \times 50 \times 50 \times 150 = 0.$$

(To be continued.)

Terre Haute and Alton Railroad.

The annual meeting of the stockholders of the Terre Haute, Alton and St. Louis Railroad commenced at Shelbyville on Monday, and on Tuesday, under a compromise between the contending parties, the following gentlemen were elected Directors by a unanimous vote: Edwin C. Littlejohn, of New York, John Stryker, J. S. Haywood, N. Hanson, Robert Smith, John P. Usher, William D. Griswold, H. Messer, T. A. Marshall, Anthony Thornton, William Mattoon, Caleb Rice, B. B. Sutherland. In the evening, W. D. Griswold, of Terre Haute, was elected President, after which the Board adjourned to meet at Terre Haute on Thursday.

Engineer of the Saut Canal.

Joseph B. Walton, Esq., of Grand Rapids, has received the appointment of Engineer of the Saut Ste. Mary's Falls Ship Canal. Mr. Walton has been long connected with the Pennsylvania canals, and is a gentleman of capacity and experience. The appointment is rendered necessary, in order properly to carry on the work of repairs.

Cincinnati Stock Sales.

By KIRK & OHKEVER.

For the week ending June 13, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6s	83
Covington and Lexington, 2d Mortgage.	6s	80
Cinc. Ham. and Dayton, 2d Mortgage.	7s	85
Indianap. & Cincinnati, do.	7s	85
STOCKS.		
Cincinnati, Hamilton & Dayton.	62½	
Columbus and Xenia.	83	
Indianapolis & Cincinnati.	51	
Little Miami.	84	

Railroad Earnings.

The business of the Baltimore and Ohio Railroad for May was as follows:

Main Stem.	
Passengers.	\$53,367.51
Express.	4,442.09
Mails.	8,250.67
Tonnage.	275,569.85—\$341,630.12
Washington Branch.	
Passengers.	\$25,654.91
Express.	1,300.00
Mails.	1,000.00
Tonnage.	6,806.03— 34,760.94
North-western Virginia.	
Passengers.	\$3,184.85
Express. ....	.....
Mails.	866.67
Tonnage.	17,516.95— 21,568.47

Total \$397,959.53

Compared with the same month of last year, the following result is shown:

	May, 1858.	May, 1859.	Increase.
Main Stem.	\$329,937.77	\$311,630.12	\$11,691.35
N. W. Virg'a	25,310.32	21,568.57	*3,750.85
Wash. Br'h.	42,511.99	34,760.94	*7,751.04
Total..	\$397,770.07	\$397,959.53	\$189.46
* Decrease.			

* Decrease.

Showing a decrease on the North-western Virginia and Washington branches, but an increase on the Main Stem, which leaves a total increase of \$184.46. The increase is in the tonnage department, and derived principally from the coal trade, of which 40,464 tons were transported in the past month, against 23,563 tons for May, 1858.

The financial year of the company commenced with October. The receipts of the first eight months of the present year compare with those of the previous year as follows:

	1858	1857
October.	\$392,603 02	\$396,191 85
November.	383,159 22	361,443 38
December.	336,861 01	379,159 02
	1859	1858
January.	327,176 63	317,513 73
February.	321,391 10	277,044 49
March.	410,061 21	439,061 02
April.	369,067 33	483,553 45
May.	397,959 53	397,770 07
Total.	\$2,933,174 96	\$3,054,842 01
In 1857.	3,054,842 01	

Decr'se pres't year. \$117,669 96

The earnings of the Buffalo, New York and Erie Railroad Company for the month of May, 1859, are as follows, for main line from Buffalo to Corning, 42 miles:

Passengers.	\$11,842 44
Freight.	24,290 33
Other resources.	1,540 17

Total \$37,673 99

The following are the May earnings of the Norwich and Worcester Road:

In 1859.	\$27,628 88
In 1858.	23,500 30

Increase \$4,128 58

The earnings of the Stonington Railroad in May, 1859, were \$21,789 22
May, 1858, were 16,613 94

Increase \$5,175 28

The May earnings of the Brooklyn City Railroad were \$42,376 09
May, 1858, were 34,278 46

Increase \$8,137 63

The receipts of the Morris Canal have been :
Total to May 28, 1859 \$59,843 59
Total end'g June 4, 1859. 10,861 50—\$70,715 09
Total to May 29, 1858 42,182 45
Week end'g June 5, 1858. 8,783 91— 50,916 36

Increase, 1859 \$19,798 73

The May receipts of the Macon and Western Roads were :
In 1859 \$21,810 36
In 1858 20,904 06

Increase \$906 30

The May receipts of the Michigan Central Road were :
May, 1859 \$127,145 77
May, 1858 185,727 01

Decrease \$58,582 24

In the year ending May 31, the receipts have been :
1859 \$1,838,138 67
1858 2,428,758 52

Decrease \$590,619 35

The earnings of the Central Railroad Company of New Jersey for the month of May, 1859, were \$84,136 31
For the same month last year 72,978 36

Increase 15 per cent. \$11,157 95

The earnings of the Cleveland, Columbus and Cincinnati Railroad Company in May were :
Freight \$41,535 88
Passengers, mails, and express 35,422 67
Rents 6,081 29

Total \$83,039 85
Earnings in May, 1858 82,968 26

Increase \$71 59

The receipts of the Grand Trunk Railway of Canada for the week ending May 28, were \$41,833 83
Week ending May 29, 1858 41,628 46

Decrease \$205 37

Total traffic from July 1st \$2,078,333 90
Same period last year 2,169,476 13

Decrease \$91,142 23

The traffic of the Great Western Railway of Canada for the week ending June 3rd, 1859, was as follows :

Passengers \$22,387 36
Freight and live stock 7,883 95
Mails and sundries 1,436 40

Total \$31,707 71
Corresponding week of last year 36,554 71

Decrease \$4,847 00

Scott County Bonds.

The Davenport (Iowa) *Gazette*, of the 1st inst., states that the day before, Judge Dillon gave his decision in the case of Young Stokes *et al*, vs. Scott County, on an injunction applied for by Judge Grant to restrain the county issuing bonds to the amount of \$275,000, voted by the people for the building of the Cedar Valley Railroad. The

decision overruled all of Grant's positions, and the application was refused.

American Railroad Journal.

Saturday, June 18, 1859.

Fluctuations in Railroad Property.

The brilliant period in the history of our railroads, in which success seemed to be the law of these enterprises, and in which the example of the most fortunate was taken as the rate for all, has passed. A law appears to have followed the progress of these enterprises in every portion of the country. They have all had their phases of apparent extraordinary success, succeeded by extraordinary reverses. One has only to look back a short time, comparatively, to a period when the Harlem, Long Island, Morris Canal and Stonington were the prime favorites in this market, and were eagerly sought for at large premiums. The golden period in Massachusetts for its railroads was from 1844 to 1848 and '49, during which nearly every road in the State paid dividends ranging from 8 to 12 per cent., with earnings increasing so rapidly as to forbid the idea that the proportion between these and capital could ever be less. These extraordinary successes led to the legitimate consequences—extraordinary expenditures—many of which were prompted by no other motive than to relieve an overflowing treasury, and to tax wasteful and irresponsible systems of management. The end was a rude awakening of the companies from their dream of prosperity, to find themselves compelled to forego, and in many cases entirely, their accustomed dividends. The market value of the stock fell, in many instances, fifty and seventy-five per cent, while the favorable feeling with which these works had been viewed, was entirely changed.

The same thing has been repeated in the West, on a much larger scale, and with a recoil still more disastrous. Some of the roads in that section of the country returned, in a very few years, a large portion of the capital invested in them. The West, with its broad plains so favorable to their construction, and with its vast products, which derived their value from the existence of these works, seemed to be the very field in which they were to display their highest usefulness and value. Dividends were frequently paid to the amount of 20 and 30 per cent. each year. No one for a time ever dreamed that a reverse could come to this picture. It came, and hardly left a paying road among them all. Some that were supposed to be the best, and strongest, have turned out the most disastrously, and shares that yielded annually 10 or 20 per cent., are now selling for a sum smaller than a single dividend.

These contrasts seem a necessary law, universally attendant upon the progress of railroad enterprises. There are many reasons why it should be so. The early roads are built at a very low cost. They have the monopoly of their business. High rates of charges rule. Being new, they can be run for several years with slight repairs. But all these are temporary conditions, and do not present a true picture. They are often designedly and exclusively exaggerated, for the purpose of inflaming the public with a desire to possess securities that yield such extravagant returns. The charge for the lease in the meantime is steadily

going on. The cost of the road rapidly increases. Its traffic becomes shared with similar works. A fancied prosperity has destroyed everything like economy, or a sense of accountability. The parties having the road in charge come to regard it very much as their own property, in everything but looking after it properly. The result is that the dividing line between what appeared to be extraordinary prosperity, and the entire absence of it, is not an imperceptible boundary, but a *precipice*, as in the case of the Rock Island. This company could not well get rid of their surplus, with which its treasury groaned, but by an extraordinary dividend. It was paid—the last one that has been paid, we believe, and certainly the last that is likely to be for some time to come. By a bit of sharp practice, which has characterized the managers of this concern, the bondholders were not allowed to share in this feast. But they were not to be caught again in this way, so they rushed to convert their bonds, since which their investment, we believe, has produced them *nothing*. These violent alternations are not peculiar to our own country. They have been as excessive in England as in the United States. The railroads of other countries will pass through a similar transformation, though not so disastrous, from the fact that the right to build them is only sparingly dealt out.

The consequences that result from these violent changes are terrible. The failure of a railroad takes bread away from thousands—the failure of a large number from *millions*. It is now too late, in many cases to do more than to correct the mistakes and reverses that have been committed. In such, economy, faithfulness, capacity and integrity can do much to repair the losses that have been suffered. The railroads of Massachusetts have for years past been steadily recovering the ground they lost. Nearly all the roads having any merit, are resuming the payment of dividends, upon a basis that bids fair to increase rather than diminish them.

The same thing must be attempted elsewhere, and a similar result can be made to follow. Such companies as are commencing operations, or have not yet passed through the extremes of inflation and collapse, should take care never to take a step that cannot safely be followed by another of the same kind, and remember that railroads are subject to a law that controls all commercial transactions.—That only by the most prudent and competent management can a moderate degree of success, in the average, be achieved.—That excesses of every kind will be followed by a corresponding recoil.—That a road cannot afford to lose a penny, and that extraordinary earnings should never, till their continuance be well established, be made the basis of extraordinary expenditures or dividends, and that excessive earnings are often the most fatal thing that can befall a company. Let the safe means be taken, and if unusual heights are not reached, unusual depressions will be avoided. A road so managed will never be the means of deceiving its owners or the public, but will do all it is capable of doing for both.

Nashville and North-Western Railroad.

The citizens of Nashville recently voted a subscription of \$273,000 to the Nashville and North-western Railroad, payable in three yearly instalments. The proposition carried by a vote of 1,280 to 759.

Cast Steel.

We invite attention to the advertisement of Messrs. SALTUS & Co., in another column. They claim that the steel manufactured by them is the only steel made in this country of a quality equal to that imported. It has been tested in every variety of form, for tools, drills, chisels, cutlery, etc., and for all purposes where a first-class steel is required, it is most admirably adapted. Its quality is guaranteed, and a trial only is required to prove its superior merits. Those who wish to encourage American Manufactures, and at the same time to save money, are invited to give this steel a trial. Samples are sent free of expense. Address Messrs. SALTUS & Co., No. 46 Cliff Street, New York.

Brass Work.

The advertisement of Messrs. McNAB, CARR & HARLIN, will be found in another column. In consequence of the great increase in their business, they have been compelled to move their manufactory from 133 Mercer street, in this city, to Paterson, N. J., whereby they are enabled from their greatly increased facilities, to manufacture goods on a much larger scale than heretofore. The office and warerooms are at No. 16 John St., New York, where a large stock will always be found, embracing everything required by the engineer, machinist, or plumber, at prices as reasonable as those of any other establishment. Priced catalogues sent gratis upon application.

New York, Providence and Boston R. R.

Although this road was opened in the fall of 1837, we have not been able to obtain any satisfactory account of its affairs, till the re-organization of the Company in 1844. At the date of the completion of the road, its total cost was \$2,600,000, represented by \$1,300,000 of stock and an equal amount of bonds. The company soon fell into embarrassment, and at the year last named found themselves owing \$1,900,000. To relieve the company, and at the same time to exchange for a new security, one of doubtful validity, a compromise was proposed, whereby the creditors agreed to receive \$650,000 new bonds in full discharge of their debts.

By the terms of the compromise, \$50,000 was to be annually appropriated toward the principal and interest of the new bonds. The sums so appropriated, at the date of the last fiscal report of the company, had reduced the bonded debt to \$328,500. The outstanding bonds were issued August 1, 1843, and fall due August 1, 1863. Both principal and interest are payable in New York, the interest, 6 per cent., semi-annually on the first days of February and August.

From the date of the compromise, the nominal cost of the road, by the application of the sinking fund, was steadily reduced till 1848, when the sum of \$215,280 was raised for the purpose of extending the road into Providence, on the west side of the town. For this object, Extension Bonds were issued, falling due 1852. These were paid by an issue of 6 per cent. preferred stock, to the amount of \$208,000, increasing the amount of stock issued to \$1,508,000,—the original amount being \$1,300,000. The holders of the old stock were privileged to subscribe 16 shares of new to 100 of old.

A statement is annexed showing the operations

of the company for the last sixteen years. The Reports of the company have not an uncommon peculiarity of not containing a balance sheet; nor have they given any of the items that go to make up the cost of the road. It has, consequently, to be stated in the following brief manner:—

CR.—By cost of road.....	\$2,158,000
DR.—To Stock	\$1,508,000
Bonds outstanding.....	380,700
Bills payable.....	13,567
Profit and loss.....	255,733
	2,158,000

At the annual meeting of the stockholders held in Sept., 1858 authority was given to the Directors, to make new issue of bonds sufficient to retire those unpaid and falling due August 1, 1863.

Statement showing the cost, earnings, etc., etc. of the New York, Providence and Boston Railroad, since 1843.

Year.	Cost.	Mileage.	Gross receipts.	Current expenses.	Net earnings.	Rate of Divid'd.	Rec'd from pass'gers.	Rec'd from freight.	Do. Miscellaneous.
1843.....	\$1,940,000	50	\$154,724	\$111,410	\$43,314	...	\$102,138	\$39,760	\$12,824
1844.....	1,919,740	50	130,015	81,699	48,316	...	78,569	37,566	13,860
1845.....	1,902,140	50	138,842	91,081	47,811	...	86,049	41,736	10,997
1846.....	1,899,300	50	198,707	77,824	120,883	2 1/2	129,128	57,006	12,523
1847.....	1,886,650	50	181,442	86,104	95,038	5	117,908	56,469	6,754
1848.....	2,094,280	50	181,010	86,236	94,774	5	117,776	65,469	6,754
1849.....	2,064,946	50	186,510	91,197	95,313	1 1/2	116,275	64,465	5,739
1850.....	1,999,946	50	214,975	87,508	122,467	...	128,043	73,259	5,916
1851.....	1,993,000	50	211,410	95,810	115,601	...	134,410	83,809	13,598
1852.....	1,975,700	50	240,571	95,810	144,761	5	144,141	84,422	6,701
1853.....	1,953,700	50	228,115	121,518	106,597	3	175,439	102,027	11,649
1854.....	1,954,700	50	272,347	167,981	104,366	2 1/2	154,667	107,771	9,904
1855.....	1,866,700	50	249,656	180,769	68,887	2 1/2	144,251	96,373	8,943
1856.....	1,866,700	50	243,785	150,140	93,645	2 1/2	141,251	94,842	7,641
1857.....	1,839,500	50	203,841	112,928	90,913	2 1/2	120,684	74,056	9,100

New Route to New Orleans.

The Baltimore *American* states that a convention of the Presidents of the various lines from New York to Charleston was held in Baltimore a few days since to arrange a plan and enter into stipulations to carry out the proposed undertaking. The result of their deliberations will in all probability be a new line from New York to New Orleans, to the gulf side of Florida. This will be one of the most important lines now in the country. Its course is to Charleston by railroad, thence by steamer 150 miles to Fernandina, thence 150 miles by railroad to Cedar Key, thence by steam up to New Orleans. The advantages of this line, independent of reducing the time fifty per cent., says the Philadelphia *North American*, "will be such as to prove advantageous to all the roads composing it. As far as comfort is concerned, nothing can surpass it. Travelers can en-

joy their rest, and pass from the temperate to the tropical zone with little fatigue. The consummation of these arrangements will be looked to with special interest."

Concord Railroad.

We have received the 18th annual report of this company for the year ending March 31, 1859. The accounts as given below show the receipts and expenses of the road as run in connection with the Manchester and Lawrence road, from which the net receipts are apportioned to each, showing their separate income for the year. The receipts were:

From Passengers.....	\$151,083 01
" Freight.....	279,262 16
" Express, mails, rents, etc.....	29,314 82

Total gross receipts.....\$459,659 99

And the expenses were:

Repairs of engines.....	\$21,566 49
" cars.....	11,733 13
" road.....	51,211 22
" bridges.....	4,978 99
" depots & fences.....	3,645 78
General running expense.....	8,994 25
Wood.....	49,099 19
Freight expense.....	17,833 73
Passenger expense.....	19,317 74
Oil and Waste.....	4,503 60
Damages.....	5,228 65
Miscellaneous.....	16,974 99
	215,087 76

\$244,572 23

From which deduct taxes on the capital stock of the roads.....	\$12,828 94
New engine.....	9,000 00
Rent of Methuen Branch.....	8,800 00
	30,628 94

Net income.....	\$213,943 29
Two-fifths of which paid to Manchester and Lawrence Railroad.....	85,577 31

Leaves for the Concord road.....	\$128,365 98
From which deduct two dividends of 4 per cent. each.....	120,000 00

Balance to contingent fund.....	\$8,365 98
The contingent fund of the previous year was.....	47,763 42
Add joint contingent fund, or surplus of previous year.....	6,928 23
Interest received during the year....	927 20

Making the present conting't fund \$63,984 83
This fund is invested in cash, wood, stock on hand, and Vermont and Boston Telegraph stock, less \$521 50, unpaid dividends belonging to the joint roads, and interest is allowed on any amount invested beyond the proportion of the Concord road.

BALANCE SHEET.

Capital stock.....	\$1,500,000 00
Deterioration and contingent.....	63,984 83
Unpaid dividends.....	521 50
	\$1,564,506 34
Construction.....	\$1,500,000 00
Notes receivable.....	215 00
Cash.....	6,778 04
Vermont and Boston Teleg'h stock.....	2,350 00
Con., Man. and Law. R. R.....	55,163 29
	\$1,564,506 33

Chattanooga and Cleveland Railroad.

The Railroad from Chattanooga to Cleveland, Tennessee, will be completed and the cars running over it by the 1st of June. This road cuts off the long circuit by way of Dalton, and secures a very straight railroad connection from Memphis to Washington.

The Competition Question.

This vexed question seems to have been disposed of for the present. It is to be hoped, for some time. In three months more, if the interior is favored in respect to its crops, an enlarged traffic will be the best security that the prices at present agreed upon will be maintained, if not advanced.

In reference to the new arrangement, we copy the following letter from Mr. Moran:

OFFICE OF THE NEW YORK AND ERIE R. R. Co., }
NEW YORK, June 13, 1859. }

Samuel L. M. Barlow, Esq., New York:

DEAR SIR: I have to acknowledge receipt of copy of an agreement between Messrs. Corning and Thomson, and the basis of an agreement between the four lines, by which rates of transportation and passenger fares have been, or are to be raised.

This company will conform to this agreement as long as their competitors adhere to it, but I feel it due to the interests I represent, to protest once more against the ruinously low rates forced upon us by the New York Central Company on Westward-bound third and fourth classes, as well as on flour and other Eastward bound freights. I cannot understand why Eastward-bound freights should be left at nearly the lowest rates established during the late ruinous contest. The rate of 37½ cents per bbl. on flour from Buffalo to New York is totally inadequate. Last year, the difference between canal and rail rates was 10 cents per bbl., while at the present rates it is less than 5 cents above canal rates. One hundred and twenty bbls. of flour weigh 13 tons, and yield to the companies \$45 for a distance of 450 miles, say equal to ½ cent per ton per mile. Will any intelligent railroad manager say that this is an adequate compensation, particularly when the transportation requires a transshipment, thus requiring the company to pay twice for loading and unloading? Coal in large quantities is considered a losing traffic at 1 cent per ton per mile, although loaded and unloaded by the owner, and not subject to damages. It may be said that the New York Central Company transports flour between Albany and New York by the more economical river route. In that case we must deduct 5c. for river transportation, and it will leave to that company \$39 for 13 tons for 300 miles—say precisely 1c. per ton per mile. It appears to me that it would be far better to allow the canal to monopolize the entire flour traffic, rather than to transport it by rail at this low rate. In regard to Western-bound rates, our General Freight Agent, Mr. Oatman, our Agent in Broadway, and many Western Railroad Agents, say that it would be as easy to obtain \$1.20 for first class, and 50c. for fourth class from New York to Cincinnati, as the low rates established, which on fourth class are only nominally advanced.

The difference between 42c. and 50c. on fourth class is 20 per cent. on the gross, but on the net income it must exceed 100 per cent., which will explain the importance I attached to the subject. Our Agents are as eager as the New York Central managers to secure freights, and they generally lean toward low rates rather than high, so that I cannot be accused of wishing others to adopt my own views. It is to me very evident that it would be far preferable for all parties to carry one-half the tonnage at a profit, rather than double the tonnage at first cost.

If it be kept in mind that the new rates are nominally the same on the entire Eastward bound freights, except wool, and on Westward-bound third and fourth classes, as during the late contest, it will be seen that about three-quarters of the entire freight traffic will continue to be done at ruinously low rates. If this is to continue until next winter, the loss to all the parties in interest will be very great. I hope, however, wiser views will ere long prevail, and rates be once more restored to a remunerative standard.

Believe me, respectfully yours,
CHARLES MORAN, President.

We hope abundant crops will come to the rescue of all the roads. In reference to prices, we suppose the Central placed freights as high as it could, and retain the business. It has, of course, the same interest in the matter with the Erie, and much better opportunity of determining the precise figure that will keep the business from the canal. As Mr. Oatman is referred to as authority in favor of higher rates, it may be proper to state that he is largely interested in the American Transportation Company, doing business on the canal, and his opinion may possibly be influenced by his interests—high rates there being necessary to make his stock productive.

Galena and Chicago Railroad.

At the annual meeting of the stockholders of the Galena and Chicago Union Railroad Company, held in this city recently, the following gentlemen were elected Directors for the ensuing year:

William Larned, New York; Walter L. Newberry, William H. Brown, Flavel Mosely, John Wentworth, Jason McCord, Orrington Lunt, Francis B. Cooley, E. K. Rogers, Jonathan Burr, Chicago; Thomas D. Robertson, Rockford; Charles S. Hempstead, Galena; Dexter A. Knowlton, Freeport.

Of the above, William Larned received 27,910 votes, John Wentworth 27,924, Jason McCord 27,934, and Jonathan Burr 27,569: all the rest received 28,035. There were 438 votes cast for H. T. Dickey, 142 for Charles Walker, 41 for John B. Turner, and 28 for B. W. Raymond.

Before the balloting commenced, Mr. Turner, President of the Company, stated that he had some time ago tendered his resignation, to take effect at this date. He had no disposition to recall it, or to enter into a contest for re-election, and that he and his friends had no ticket to present.

Mr. Larned, of New York, addressed the meeting on behalf of New York shareholders, disclaiming any personal feeling on their part against any of the gentlemen composing the old board, especially in reference to Mr. Turner. But a difference in their respective views of the interests of the road, and the proper policy to be pursued the coming year, suggested a change of administration. He tendered the thanks of the New York shareholders to the members of the retiring board.

The voting then commenced, the result being as stated above. Captain Turner and his friends, we understand, held stock and proxies to the amount of sixteen thousand shares, but the majority being strongly against them, they cast no votes.

The election of the above board, it is understood, secures the early construction of the bridge at Clinton, and a close running connection with the Chicago, Iowa and Nebraska Railroad, now completed to within a short distance of Cedar Rapids. In fact, this is the point on which the election turned, and the occasion of Mr. Turner's withdrawal from the Presidency.

Captain Turner has been identified with the Galena and Chicago Union Railroad from the beginning. To his energy and indomitable perseverance are the people of the city and of the country through which it passes in great part indebted for its construction; and however much they may differ with him on the question of policy which has resulted in a change of administration, he will pass from his public position with no abatement of the high respect and good-wishes of the public.—*Chicago Press.*

Cincinnati, Wilmington and Zanesville R.R.

The Cincinnati Commercial states that a contract for building the line from Morrow Junction to Glendale, on the Cincinnati, Hamilton and Dayton road, has actually been taken by John H. Barnes, Esq., of Baltimore. Mr. B. is one of the bondholders in the C. W. & Z. Co., and has represented the second mortgage bondholders in the recent suits before the U. S. Courts.

Production of Copper in the United Kingdom.**1.—Mines, Ores raised, and Fine Copper Produced, 1856.**

LOCALITIES.	Number of mines worked.	Tons (2,000 lbs.) of ores raised.	Tons (2,000 lbs.) fine copper produced.
Cornwall.....	135	183,857	12,089
Devon.....	23	47,067	3,138
Cumberland.....	5	4,388	293
Anglesea.....	2	2,688	178
Caernarvon.....	2	1,752	117
Cardigan.....	6	182	12
Radnor.....	2	116	8
Total England & Wales.....	175	240,044	15,765
Cork.....	3	6,886	686
Tipperary.....	1	496	89
Waterford.....	1	4,466	448
Wickford.....	6	1,097	68
Galway.....	.	36	1
Total, Ireland.....	11	12,981	1,292
Isle of Man.....	1	35	2
Sundry districts not included in the above..	.	151,609	10,108
Total United Kingdom.....	187	404,592	27,167
Value in £ stg.....		1,744,516	2,983,611
Value in dollars.....		8,722,580	14,918,055

2.—Results of 1854, 1855, and 1856 compared.

	1854.	1855.	1856.
Mines worked, No.	151	165	187
Ores raised, Tons.	333,744	359,470	404,592
Metal prod'd "	22,286	23,849	27,157
Value of ores....	\$7,419,030	8,201,945	8,772,580
Value of metal....	12,436,875	15,214,385	14,918,055

3.—Fine Copper Produced 1821–1856.

	Tons.		Tons.
1821	11,492	1839	16,425
1822	12,340	1840	14,582
1823	10,840	1841	14,092
1824	10,869	1842	15,218
1825	11,601	1843	14,927
1826	12,424	1844	16,620
1827	13,805	1845	16,668
1828	13,650	1846	16,732
1829	13,503	1847	15,433
1830	14,819	1848	16,486
1831	16,472	1849	15,232
1832	18,184	1850	16,464
1833	14,801	1851	16,016
1834	15,732	1852	18,629
1835	16,206	1853	19,429
1836	16,542	1854	22,286
1837	11,368	1855	23,849
1838	14,078	1856	27,167

Muscogee Railroad.

The operations of this company for the past six months, says the *Columbus Times*, have been successful beyond precedent in its history, and its present condition challenges comparison with any road of equal cost or proportionate capital in the Southern country. Its road bed is in excellent order, and its superstructure has been, almost entirely, renewed within the last two years. In the prospect of a speedy and continued increase of business, it stands without a rival. The Mobile and Girard Railroad, its present great feeder, is being rapidly pushed towards Union Springs, which place it will reach in the coming fall. Beyond that point, in Pike county, Ala., its extension is now being energetically prosecuted, and within eighteen months from to-day the richest cotton growing country in Alabama will be successfully tapped. We learn from perfectly reliable authority that this company, having paid its last semi-annual dividend to the stockholders, and the interest upon preferred stock, has paid the interest upon its bonds up to this date, and its profit and loss account now shows an unappropriated balance of something over one hundred thousand dollars—

more than fifteen per cent. on the general stock. If there is another road in the South that can show a condition of greater prosperity, we should like to know it.—*Savannah Republican*.

Street Railroads.

Street Railroads are now all the rage, and for that reason they will be seized upon as a means of fleecing the unwary public by a class of men trained to take advantage of any great impulse or movement, and to convert a popular enthusiasm in hard dollars for themselves. In New York this has been done on a magnificent scale. For instance—the Third Avenue Railroad Company state the cost of graduation and masonry of their road to be \$166,000 per mile; the Sixth Avenue, \$188,000 per mile. As the grade of the streets is adopted in all cases, it will be seen that these items are very nearly a pure fiction. The *modus operandi* is this. A party in New York get a grant for a railroad. Their object is to swell its cost, as represented by its securities, to the greatest amount possible, so that for every dollar paid in, they may divide four or five in stock and bonds. If, as has been the case in New York, the roads should turn out to be productive, the securities issued to them for four times the actual cost of the roads are worked off on the public at their nominal value the difference between the two sums being the profit of the transactions.

Now as all our large towns are rushing into City Railroads, it would be well for them to bear in mind the example of New York, otherwise they will find themselves most egregiously imposed upon. Their roads will be made the means of imposing a tax upon transportation of their people twice as great as it should be, and enriching sharpers and speculators at the public expense.

Extension of North-Eastern Railroad to the Coalfields.

During the past week we had the pleasure of accompanying Mr. S. S. Solomons, Engineer in Chief, and General Superintendent of the North-eastern Railroad, under whose superintendence the survey of the Cheraw and Coalfields Railroad is being made, over the country as far as Carthage, going on the western and returning on the eastern side of Pee Dee. We were pleased to find a lively interest manifested for the enterprise everywhere. It is an important road to the Cheraw and Darlington and the North-eastern Railroads, to Charleston, and to a large section of North Carolina, and especially to the Raleigh and Gaston and Raleigh and Beaufort Railroads. It will open up one of the finest and most productive agricultural sections of the State, to say nothing of the vast dormant mineral resources to be developed. The road as soon as completed, if properly located, would have a local business that would pay on the investment.

To the many friends of the road we can say with confidence, that the survey now being made by Mr. Solomons, when completed, will display the many advantages and disadvantages of the several routes, in a manner entirely reliable. His thorough knowledge of his profession, and long practical experience, are guarantees for the faithfulness of the work, upon which all may rely with the utmost confidence. Therefore, until his report is laid before the public, it is worse than idle to speculate upon the results of the survey.—*Cheraw Gazette*.

Bedford Railroad.

Twelve miles of the new railroad between Bedford and Broad Top were let on Wednesday last. The contract was awarded to Collins, Dull & Co., at the sum of \$64,000. The work to be commenced on the 4th inst., and finished by the first of January.—*Pittsburg Post*, June 9.

Memphis and Little Rock Railroad.

The rapid rate at which the water is now receding will soon permit the necessary repairs being made to this road, which it is expected will occupy about three weeks' time, when cars will again make regular trips as far out as Madison.

The Acting Commissioner of the General Land Office has submitted to the Secretary of the Interior, for approval, a supplemental list of lands for the State of Arkansas, comprising an area of over thirty-eight thousand acres, which is applicable to the building of this road. The contract for the construction of twenty-eight miles of the road, between the St. Francis and White rivers, has been let to responsible parties, and the work is being pushed forward as rapidly as the natural impediments of the route will permit.—*Memphis Bul.*

Greenville and French Broad Railroad.

The county of Buncombe has subscribed \$125,000 to the capital stock of the above road.

Cedar Falls and Minnesota Railroad.

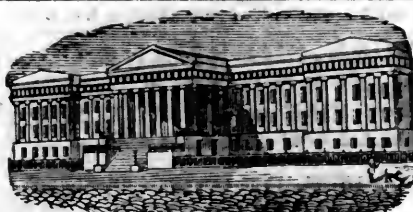
The *Dubuque Times* states that the agent of the above road has disposed of a portion of the Floyd County bonds in Boston, at par, and that he has made arrangements to dispose of the remainder at the same rate, together with the bonds of the other counties. The *Times* thinks the speedy building of the Cedar Falls and Minnesota Railroad is a settled matter.

Suez Canal.

The work of constructing this great undertaking was formally commenced on the 25th of April last, and the first sod turned by M. Ferdinand de Lesseps, in the presence of the contractor of the works, a large staff of engineers, and native workmen, assembled at the point determined on for the outlet of the canal in the Mediterranean, the construction of jetties, and the harbor of Port Said.

South-Western Railroad.

The cars are now running within a half mile of the depot, and will probably reach that building by the 23rd. Passengers, during the past week, have been brought to within two miles of the town, and from thence by stage. The passenger train, we presume, will commence running immediately. The depot will be completed by the middle of June, when the freight trains will run through.—*Cuthbert (Ga.) Reporter*, May 20.



SCIENTIFIC AMERICAN. MUNN & CO., AMERICAN AND FOREIGN

PATENT SOLICITORS,
Offices 37 Park Row, and 145 Nassau st., N.Y.
CIRCULARS OF ADVICE "How to procure American and Foreign Patents," furnished by MUNN & CO., free of charge. Address as above.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other parts.
CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, January 1, 1859.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also at—
250 Tons English Rails same size and weight.

M. K. JESUP & COMPANY,
New York, June, 1859. 44 Exchange Place.

RAILROAD IRON.

THE undersigned, Agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or cash at ports in the United States.

M. K. JESUP & COMPANY.

44 Exchange Place.
New York, 1st June, 1859.

RAILROAD IRON.

800 TONS, ABOUT 50 LBS. PER LINEAL YARD, "Crawshaw's make," and ready for immediate delivery.

For sale by THEODORE DEHONE,
No. 10 Wall St., near Broadway.

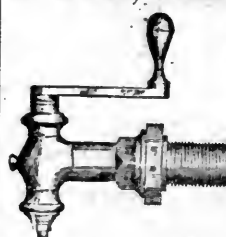
RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCROW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENGL., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL.

17 William st., N. Y.

McNAB, CARR & HARLIN,



MANUFACTURERS of Steam Engine Builders' and Plumbers' BRASS WORK, such as Globe Valves, Safety Valves, Pump Valves, Whistles, Oil Cups, Steam and Water Gauges, Bibles, Stops, Basin Cocks, Hose Pipes and Couplings, etc. All parties interested will please send for Catalogue and Price List. Address
McNAB, CARR & HARLIN,
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CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.
Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
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WEISENBORN'S PATENT

Incrustation Preventer FOR STEAM BOILERS.

EFFECTUALLY obviates the Formation of Scale on the Plates by separating the incrusting matter from the water before it enters the boiler, at the same time condensing a large portion of the steam and supplying the purified water to the boiler at about boiling heat. The apparatus is compact, simple, and applicable to all kinds of Engines. Recent modifications render it still more efficient than heretofore. Testimony as to its successful operation in preventing scale, and also as a HEATER AND CONDENSER, can be furnished by the subscriber.

Probably no modern improvement connected with Steam Power combines so many advantages as this. The economy of Fuel alone from its use soon repays the cost of the apparatus. Prices reduced. Terms easy.

STEWART KERR, Engineer,
Agent, 15 Broadway, NEW YORK.

WANTED a situation by a Draughtsman well acquainted with the practical construction of Steam Engines, particularly Locomotive Work.
Address Box 492 Paterson, N. J. 25

LOCOMOTIVES.

2 LOCOMOTIVES, about 13 tons, (second hand,) 4 ft. 8 1/2 in. gauge, in excellent order for sale at a bargain.
GEO. T. M. DAVIS,
New York, May 24, 1859. 2m 47 Exchange Place.

FOR SALE.

2,250 TONS English Rails, (advt.) 45 lbs. to the lineal yard, Erie pattern, Bars 24 feet long. Terms, Cash.
GEO. T. M. DAVIS,
New York, June 1, 1859. 4c23 47 Exchange Place.

**PATENT MICA
AND FIBROUS CEMENT ROOFING**

THIS CEMENT consists of strong glutinous substances, impregnated with fibrous matter, and covered with mica, which makes it **FIKE PROOF**, and a perfect resistant of the atmosphere in every climate. It will neither crack nor rot, and we warrant it **WATER PROOF**. It is well adapted to cover large Roofs where they are exposed to fire, such as Railroad Cars, Bridges, Depots, Station Houses, Steamboat Decks, Factories, Steam Mills, and in fact, every kind of Roof. As the material forms a smooth surface, without a joint, it presents no chance for fire to communicate. For further particulars address

JOSEPH DITTO & CO.,
378 Broadway, NEW YORK.

N. B.—Cement for sale by the barrel, with full printed instructions for applying. Also for sale, Territorial Rights for a portion of the United States.

JOSEPH DITTO & CO.

CEMENT, PLASTER, ETC.

THE HUDSON RIVER CEMENT CO.

HAVE commenced manufacturing for the season, and can now furnish a very superior article of fresh **Rosendale Cement, Calined Plaster, Farmers' Plaster and Marble Dust.** Address

HUDSON RIVER CEMENT COMPANY,
Jersey City, N. J.

Rosendale Hydraulic Cement.

THE NEWARK AND ROSENDALE CEMENT COMPANY are now receiving fresh from the Mills their approved **ROSENDALE CEMENT**, warranted pure and free from quick lime, and which has given such general satisfaction in the various government and other public works in which it has been used. Purchasers and shippers should be careful to get the genuine **ROSENDALE CEMENT**, branded "NEWARK AND ROSENDALE," "H. WILDE." This Cement does not swell and burst the hoops when stored in warm climates. It is packed in tight kiln dried barrels, and is specially adapted for safe shipping on long voyages. Terms reasonable, which may be known by addressing,

JOHN H. STEPHENS, President, Newark, N. J., or
HENRY WILDE, Secretary, 90 Wall st., N. Y.

**DELAFIELD & BAXTER'S,
Late OGDEN & DELAFIELD,
ROSENDALE CEMENT.**

WE are prepared to enter into arrangements for supplying our CEMENT for public works, or other purposes. We warrant it equal in every respect to any manufactured in this country. It attains a great degree of hardness, sets immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength. For sale in tight barrels, well papered, on application at their office, by **DELAFIELD & BAXTER**, 104 Wall st. The above CEMENT is used in most of the fortifications building by government.

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**A. & P. ROBERTS,
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OFFICE No. 410 WALNUT STREET,
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Rolled or Hammered Car Axles, Bar Iron
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ST. LOUIS STEAM FORGE.



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MANUFACTURERS

**CAR AXLES,
AND EVERY DESCRIPTION OF
LOCOMOTIVE FORGINGS.**

ALSO,

**STEAMBOAT SHAFTS, CRANKS, TOBACCO SCREWS,
HAMMERED BAR IRON,
AND EVERY VARIETY OF
Forgings for Machinery's Use.**

FREIGHT CARS for SALE.

27 CARS—Have been run about two years,—viz:—
5 long 8-wheel Box Cars, 2 with apartment for conductor
3 " " Cattle Cars.
19 " " Platform Cars.

These Cars are made in the best manner, with large axles, safety beams, brakes, lighter boxes, and have been newly painted and will be sold low for cash.

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OF THE

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THE undersigned has devised and patented the only system of ventilation for *Buildings, Vessels, RAILROAD CARS, &c.*, by which spontaneous ventilation can be effectually carried out; and is willing to dispose of the same to parties desirous of purchasing at a reasonable price.

A. dress **HENRY RUTTAN,**
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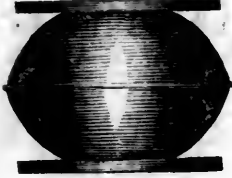
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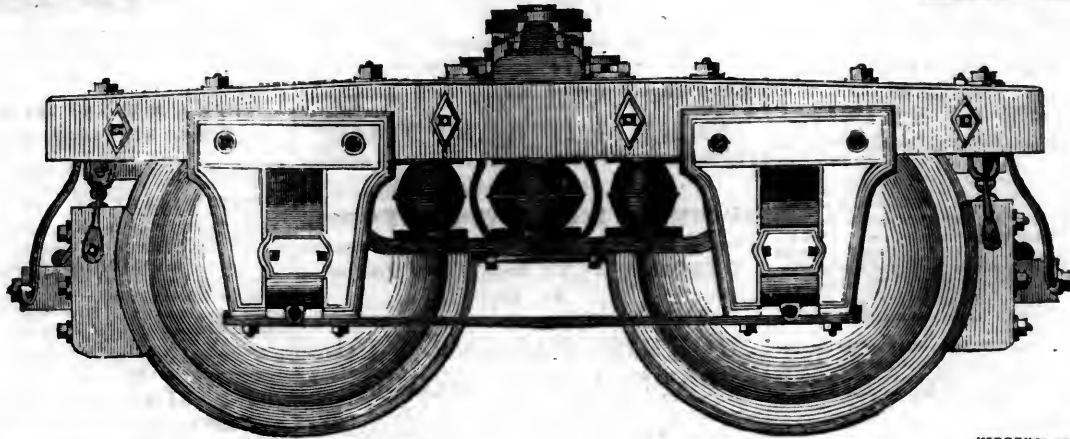
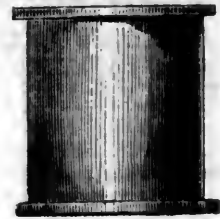


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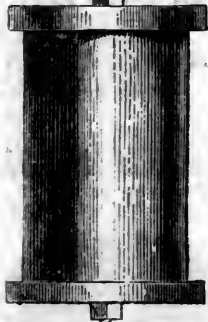
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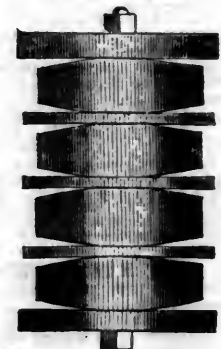


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ARE duly authorized to contract for the sale of their G. L.
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A stock of the above goods constantly on hand.

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 RAILS OF SUPERIOR QUALITY,
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Having leased the extensive Works of the

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Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,

ARE now prepared to execute, at short notice, orders for
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OFFER Rails of their own manufacture deliverable as may
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RAILROAD IRON MILL COMPANY,
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THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,
President of the Incorporation.

February, 1868.

TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater,
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make. Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati, Ohio.

RAILROAD IRON.

THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

RAILROAD IRON.

THE subscribers are prepared to contract for **RAILS** delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,
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RAILROAD IRON.

The undersigned, Agents for leading Manufacturers in **STAFFORDSHIRE AND WALES,**

ARE PREPARED TO CONTRACT FOR DELIVERY

On board ship at Liverpool, or Welsh port.

G. CONGREVE & SON,
13 Old St., N. Y.

RAILROAD IRON.
CONTRACTS FOR RAILS,

AT A FIXED PRICE OR ON COMMISSION,
DELIVERED AT AN ENGLISH PORT,
Or at a Port in United States,

WILL BE MADE BY THE UNDERSIGNED,
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10 Wall st., near Broadway, New York,
500 tons T rails on hand 54 to 57 lbs. per linear yard.

RAILROAD IRON.

The Subscribers, Agents for the Manufacturers,

ARE PREPARED TO CONTRACT FOR THE
DELIVERY OF RAILROAD IRON AT ANY PORT
in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
Boston, June, 1861. 29 Central Wharf

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for
Rails of any required pattern and weight, and to re-roll
old rails, on the most liberal terms.

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RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an
English port or at a port in the United States.

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BALTIMORE.
And 17 Nassau st., New York.

IRON BOILER FLUES.

Lap-Welded Boiler Flues,
1½ to 7 inches outside diameter, cut to definite
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Wrought Iron Welded Tubes,
from ½ to 5 inches bore, with Screw and Socket
Connections. T's, L's, Stops, Valves, Flanges,
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BOILER RIVETS, RAILROAD IRON,
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Having the selling agency of a number of the Rolling Mills
Furnaces and Forges in this State, orders for any description of
Iron can be executed.

August 16, 1864

1733

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IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

BY the completion of the Delaware, Lackawanna and
Western Railroad, this Company are enabled to obtain
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These works have been greatly enlarged the past year, and
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American correspondent *Prac. Mechanics'* J from 1854.

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SPARK ARRESTER.

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NEW INVENTION is now offered to the
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which possesses the advantage over ALL
OTHERS of being of the most simple
construction, and much more dur-
able than any ever used. The manufac-
turer invites an examination of this Ar-
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that it will meet with universal ap-
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No. 44 Water, between Congress and Kilby Streets,

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Iron Rails, Chairs, & Spikes,
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Wheels and Axles of all kinds,

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Car Trimmings, Paints, Oil, Varnish, Car and Switch
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Railroads, Engines and Cars, at lowest prices.

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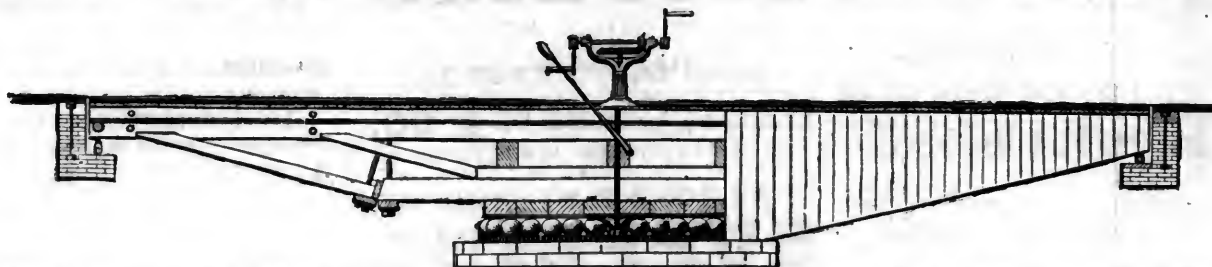
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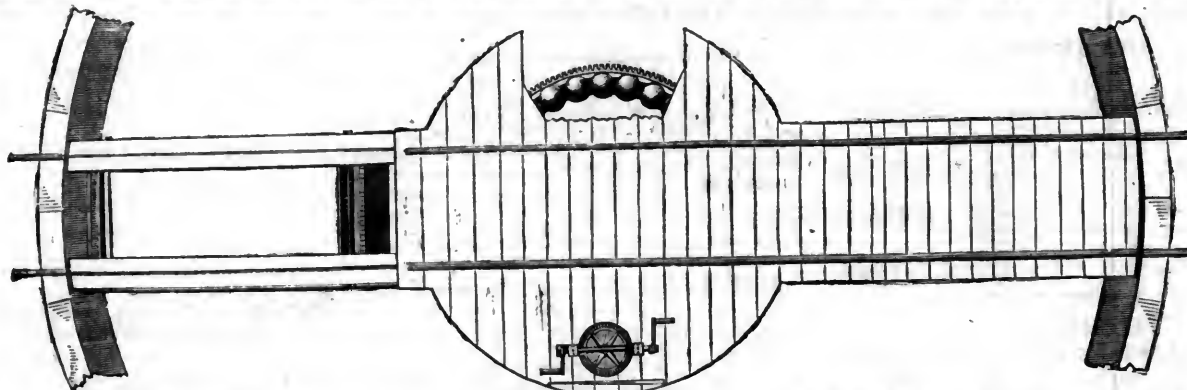
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S. M. FALTON, Pres't Phila. | W. & B. R. R.

WARD'S PATENT SELF-CENTERING TURN-TABLE.



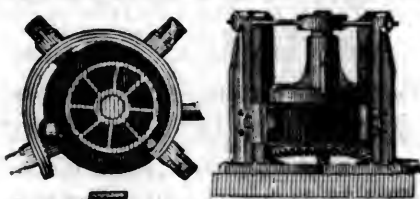
THIS TABLE is adapted to all localities and climates—is constructed without the Central-Pivot, or Rubbing Journals, thereby improving with use.—It is cheap, strong and durable, and works with ease and freedom, requiring less expensive foundations, and suitable for the turning platforms of swing-bridges, mortar-beds, pivot-gun-carriages, etc.



These TABLES are already introduced, and give general satisfaction.—They are manufactured in Toledo, Ohio, by R. F. RUSSELL, of the "Toledo Novelty Works," and in Alexandria, Virginia, by THOMAS S. JAMEISON, to either of whom orders may be sent, or to the undersigned, patentee, at Auburn, Cayuga County, New York. May 2nd, 1859.

W. H. WARD.

HENRY BURDEN'S PATENT REVOLVING SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this Machine for the United States, now offers to make transfers of the Right to run said Machine, or sell to those who may be desirous to purchase the Right for one or more of the States.

This Machine is now in successful operation in ten or twelve Iron Works in and about the vicinity of Pittsburgh, also at Phoenixville, and Reading, Pa., Corvinton Iron Works, Md., Troy Rolling Mills, and Troy Iron and Nail Factory, Troy, N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are numerous:

Considerable saving in first cost; saving in power; the entire saving in shingler's, or hammerman's wages, as no attendance whatever is necessary.

It being entirely self-acting; saving in time from the quantity of work done, as one machine is capable of working the iron from six puddling furnaces; saving of waste, as nothing but the scoria is thrown off, and that most effectually; saving of staffs, as none are used or required.

The time required to furnish a bloom being only about six seconds, the scoria has no time to set, consequently is got rid of much easier than when allowed to congeal, as under the hammer.

The iron being discharged from the machine so hot, rolls better and is much easier on the rollers and machinery.

The bars roll sounder, and are much better finished.

The subscriber feels confident that persons who will examine for themselves the machinery in operation, will find it possesses more advantages than have been enumerated.

For further particulars address the subscriber at Troy, N. Y. P. A. BURDEN.

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ALEX. ANDERSON, AGENT.

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COPPER AND BRASS WIRE,

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Wrought Iron Chairs, Clamps, Keys and Bolts for Railroad Fastenings, also made to order. A full assortment of Ship and Boat Spikes always on hand.

All orders addressed to the Agent at the Factory will receive immediate attention. WM. F. BURDEN, Agent.

Troy Iron and Nail Factory, Troy, N. Y.

Patent Machine-made Horse Shoes.



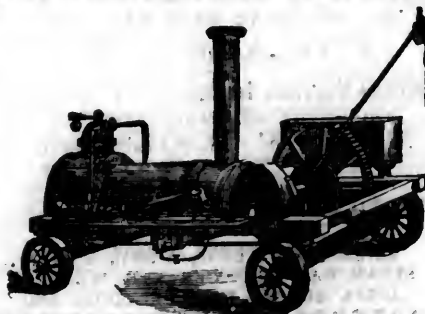
THE TROY IRON AND NAIL FACTORY have always on hand a general assortment of Horse Shoes made from Refined American Iron.

Four sizes being made, it will be well for those ordering to remember that the size of the Shoe increases as the numbers—No. 1 being the smallest.

WM. F. BURDEN, Agent.

Troy Iron and Nail Factory, Troy, N. Y.

FIRST INTRODUCED JULY, 1849



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PORTABLE STEAM HOISTING
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From 3 to 30 horse-power, and

STATIONARY ENGINES, from 3 to 100 horse-power
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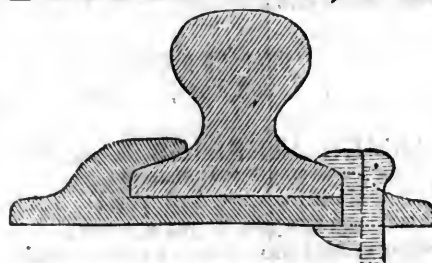
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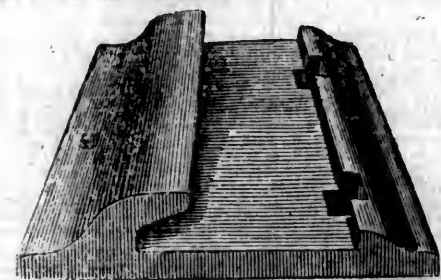
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MANUFACTURERS OF

RAILROAD SPIKES
AND CHAIRS,
PITTSBURG, PA.



HAVING built a large Rolling Mill with new and improved Machinery, we are fully prepared to execute orders at the lowest rates, for any amount of SPIKES and CHAIRS made of the best JUNIATA IRON.



Particular attention is invited to our NEW WROUGHT IRON CHAIR, as being the best in use.

DILWORTH & BIDWELL.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 26.]

SATURDAY, JUNE 25, 1859.

[WHOLE No. 1,210, Vol. XXXII.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, June 25, 1859.

LaCrosse and Milwaukee Railroad.

Mr. Newcomb Cleveland, President of what remains of the old LaCrosse Company, has issued a presidential circular to the public generally, in which he gives the following analysis of the reports of the company for three consecutive years:

	1857	1858	1859
Capital stock ..	\$2,081,200	\$6,555,574	\$10,872,000
City Milwaukee	314,000	314,000	319,000
1st mort. E. div.	942,500	921,000	903,000
2d " " "	1,000,000	1,000,000	1,000,000
Farm m. bonds.	913,500	1,108,400	inc. in stock
3d m. bonds ..	.....	.....	2,000,000
Con. 5 year b'ds	107,000	107,000	107,000
Con. bonds	35,800	210,000	210,000
1st m. l'd grants	2,500,000	.....	.....
2d " " "	353,600	.....	4,367,500
Const. of 1862.	704,000	704,000	704,000
" " 1867.	764,000	764,000	764,000
Interest scrip..	33,566	33,566	33,566
Real est'te b'ds.	6,000	6,000	6,000
S. Chamberlian's judgm't	.....	629,090	785,587
N. Cleveland's judgm't .....	.....	114,000	136,000
Floating debt..	68,607	660,478	75,000
Total	\$4,412,607	15,980,708	22,282,653

Increase in 1858, \$11,568,101: increase in 1859, \$6,301,945. Total increase in two years, \$17,870,046.

Chicago and Milwaukee Railroad.

The report of this company, embracing a period of fourteen months from November, 1, 1857, to Jan. 1, 1859, has just been received. The fiscal year of the company formerly terminated on the 30th November. For the purpose of comparison, therefore, the earnings for the 12 months to Nov. 31st, and for the succeeding two months, are given separately. They are as follows, viz:

	Passengers.	Freight.	Mails, etc.	Totals.
Nov ..	\$15,741.90	4,277.79	355.51	20,375.18
Dec. ..	12,462.18	6,005.70	252.72	18,720.60
Jan ...	9,300.21	4,889.03	271.31	14,460.55
Feb ...	7,938.12	3,908.29	1,369.85	13,216.26
March ..	11,685.14	5,493.13	289.84	17,468.11
April ..	14,469.50	4,575.25	1,112.07	20,156.82
May ..	13,256.43	3,110.91	1,686.20	18,053.54
June ..	12,836.61	2,508.30	1,885.79	17,230.70
July ..	12,791.42	2,556.35	1,200.22	16,547.99
Aug ..	12,088.58	2,129.68	683.06	14,901.32
Sept ..	13,800.95	3,032.61	1,053.87	17,887.43
Oct. ..	14,709.04	5,226.16	565.01	20,500.21

12 mos	151,080.08	47,713.18	10,725.45	209,518.71
Nov ..	12,467.90	3,940.23	1,557.35	17,965.48
Dec. ..	10,242.94	4,993.46	561.34	15,797.74

14 mos 173,790.92 56,546.87 12,844.14 243,281.93

The expenses for same time were:

To November 1, 1858.	\$92,901 56
To January 1, 1859.	15,096 29
	107,997 85

And the net earnings were:

To November 1, 1858.	\$116,617 15
To January 1, 1859.	18,666 93
	135,284 08

From which deduct:

Taxes for 1857-'58	\$11,867 16
Interest on 1st mort. bonds	35,805 00
" Income	8,157 80
" Real estate	3,575 00
" Divid'd certifi's	11,617 69
" Float'g debt in-clud'g disco't & exchange.	14,526 40
	85,549 05

Leaving the sum of..... \$49,735 03

—which is more than five per cent. on the capital stock, and which might be considered available for dividends were it not in this instance applied

towards the payment of the floating debt, and to the retirement of income bonds and dividend certificates.

In reference to the financial condition of the company, the report says:

Within the last fourteen months, the company have purchased and cancelled 15 shares of the capital stock, and the Board have passed resolutions limiting the total of 1st mortgage bonds (\$512,000, which are convertible), and the capital stock (\$988,000), to one and one-half millions.

Anticipating the maturity of their dividend certificates (\$115,435 00) on the first of November last, and for the further purpose of paying off their floating debt, the company issued \$300,000 of real estate bonds, running 10 years from the first of February, 1858, secured by a deed of trust of a valuable outside property not required for the business of the road, consisting of water front lots and blocks in the city of Chicago, estimated at \$225,000; and by a second mortgage on the entire road, also by a provision requiring that the company shall purchase and retire these bonds at the rate of \$10,000 per annum. \$186,000 of these bonds had been sold on the first of January, and the proceeds with accrued interest, amounting to \$169,034 75, applied in payment of obligations.

Of the \$100,000 income bonds originally issued, only \$62,000 are now outstanding, \$18,000 of them having been purchased and cancelled the last year.

Dividend certificates to the amount of \$63,845 have been paid or exchanged for real estate bonds; and the balance outstanding carry interest at 8 per cent. till they can be taken up. \$25,000 have been paid upon notes of the steamer Planet, maturing the past summer.

Other bills payable for discounts, land damages, depot property, etc., amounting to \$52,353 05, have also been paid.

A comparison of the capital stock, funded and floating debt, on the first of November, 1857, and the first of January, 1859, shows the following decrease:

Capital stock	\$1,500 00
Income bonds	18,000 00
Dividend certificates	63,845 00
Bills payable	77,353 05
Due individuals	2,091 28

Total

The amount of unfunded debt remaining on the first of January, 1859, was \$193,436 40. Of this amount \$167,376 40 will mature in 1859; the balance in 1860.

Provision has been made in the issue of real estate bonds, and in the proposed application of the net earnings of the road, to satisfy all demands upon the company the present year.

GENERAL STATEMENT.

Capital stock	\$988,000 00
1st mortgage bonds	512,000 00
Income bonds	62,000 00
Real estate bonds and accrued interest	188,864 75
Dividend certificates outstanding	51,590 00
Bills payable	127,687 31
Account payable	7,991 90
Unclaimed dividends	520 00
Interest scrip outstanding	295 93
Income account, Nov. 1, 1857	94,214 73
Received of other roads for account of 1857	815 59
Gross receipts for 14 months end'g Dec. 31, 1858	243,281 93
	\$2,277,262 14
Road and equipment	\$1,884,344 80
Steamboats	120,000 00
Materials on hand	22,207 15
Discount on real estate bonds	19,830 00
Bills receivable	4,000 00
Due from agents and other roads	2,503 61
Insurance and interest on steamers	10,393 80
Debts due, accounts unadjusted	12,140 20
Treasurer, cash on hand	4,870 53
Interest on funded debt, for 14 months ending Dec. 31, 1858	59,155 49
Interest on floating debt for same	14,526 40
Taxes	11,867 16
General expenditures, 1857. Paid in 1858	3,420 15
General expenditures, 14 months ending Dec. 31, 1858	107,997 85
	\$2,277,262 14

Bay de Noquet and Marquette Railroad.

This road extends from the shore of the bay into the interior 17½ miles, the stations being as follows: Franklin, 5 miles; Duncan's steam saw-mill, 9 miles; Negaunee (Pioneer works, and Jackson mine), 14 miles; Cleveland mine, 16 miles; and Lake Superior mine, 17½ miles. The rise of the road from the lake to the Lake Superior mine, is 850 feet, the termination being on the summit of the ridge, from which the streams on one side descend to Lake Superior, and on the other to Lake Michigan. From the termination of the road, as now laid, to where it will end on Lake Michigan, the descent is marked but gradual. During the ensuing year, the road will be extended two and three-fourths miles, making the twenty miles, which will entitle the company to one-third of the land grant to the railroads leading from this place.

The running stock of the road consists at present of two locomotives, one passenger and one hundred freight cars, capable of bringing from the mines to the bay about 600 tons of ore, or pig metal, per day. The stock, during the next six weeks, will be increased by fifty freight cars, so that the company will be able to deliver 1,000 tons of ore per day.

The road commenced operations May 9th. The receipts for the succeeding five weeks were 13,209 tons, of which 1,506 tons were of pig metal, from the Pioneer works, at Negaunee; leaving a balance of ore of 11,703 tons.

There has been shipped during the season the following amounts:

Lake Superior Iron Co., S. P. Ely, Sec'y,	ore	4,178 tons
Cleveland Iron Mining Co., R. Nelson,	Agent, ore	2,353 "
Jackson Iron Co., Sam'l Peck, Ag't,	ore	5,550 "
Pioneer Iron Co., T. J. Spilman, Agent,	pig iron	1,506 "
Phelps' Furnace Co., S. R. Gay, Agent,	pig iron	600 "

Total shipments.....14,187 tons

The number of hands employed at the several mines and furnaces are as follows: Lake Superior mine, 40 men; Cleveland mine, 40 men; Jackson mine, 40 men; Pioneer works, 300 men; and Phelps' furnace, 200; making a total of 620 men.

Opening of the Northern Railroad of New Jersey.

On Thursday, 26th ult., the new railroad connecting Jersey City with Piermont was opened by a celebratory excursion.

The road had long been talked-of by the farmers along the line of it, but it was supposed that its cost would forbid its construction in these days of disaster to railroads. But Mr. William Sneed, the Civil Engineer of the road, estimated that it might be done for \$17,000 per mile. They found it difficult to believe him until Messrs. Seymour & Tower offered, if \$150,000 of stock were subscribed, and \$200,000 of bonds could be sold at 90 cents, to build and equip the road for that money, taking 13 per cent. of their pay in stock, and to run it for ten years, paying 7 per cent. on the bonds, and 5 per cent. dividends on the stock. This offer was convincing; the stock was subscribed by over 300 different men; the bonds were sold in small quantities, and entirely to men along the line, and ground was broken March 31, 1858.

The lower terminus of the road, it is expected, will be located at Hoboken, after the completion of the tunnel through Bergen Hill, by the Erie Railroad Company. In the meantime, the trains will be run over the temporary track of the Erie Railroad between the slaughter House and Jersey City, arriving at and leaving the north side of the passenger depot of the New Jersey Railroad Company. From the Slaughter House, or point at which the Erie Railroad will turn for the western entrance of the Bergen Tunnel, the new railroad diverges to the north-eastward, and proceeds up the Valleys of the Hackensack and Overpeck, about two miles from the Hudson River, following the western base of the Palisade ridge to the northern terminus. The extent of the road newly constructed is 21¼ miles, which, with one mile of the Piermont Branch Railroad at the northern terminus, and about 2½ miles of the Erie Railroad at the southern terminus, will make the entire length of the road operated about 25 miles. As the road crosses no navigable streams or water courses of magnitude, no draw or truss-bridges whatever are required. There are over eighteen miles of straight track on a nearly uniform level, a few feet above tide water. An abundance of timber, &c., was found along the Palisades, and the owners of property, in most cases, cheerfully conceded the right of way. With these advantages and good management, the road has been built and equipped with two locomotives, six passenger cars, two baggage and smoking cars, five freight cars, and ten platform cars, for \$17,000 per mile; whereas, the first 25 miles on the Harlem Railroad cost \$100,000, on the Hudson River Railroad \$90,000, and on the New Haven Railroad \$80,000 per mile.

This road will bring into close and convenient connection with New York City a highly cultivated region of country, which heretofore has remained in comparative seclusion. In a single day last summer, no less than two million baskets of strawberries, and about fifty tons of vegetables, passed through English Neighborhood on their way to New York markets, and still more would have been sent but for the objections which farmers have to sending fruit in wagons over rough roads. With three or four trains a day, each way over the road, as contemplated, the farmers will not only have an opportunity of sending their fruits and vegetables to our markets, but also large additional supplies of pure milk.

During the suspension of navigation on the Hudson river in winter, the importance of this railroad will be still more fully developed, for instead of a single train a day by a circuitous route of about 50 miles, passengers from Piermont, Nyack, &c., will be enabled to reach the city after an hour's ride by the new route, either in the morning, at noon, or in the evening.

As there are fifteen way-stations on the line between Jersey City and Piermont, averaging one for every mile and a half of the road, it is evident that the local travel will be pretty well accommodated. A line of telegraph is also being constructed on the line of the road, the posts for which are al-

ready down, and offices will be opened at an early day at all the principal stations.—*Dinsmore's Metropolitan and Suburban Guide.*

Ohio and Mississippi Railroad.

The annual meeting of the stockholders of this road was held at Cincinnati on the 6th instant, at which the usual reports were submitted.

The following is a statement of the capital account under the new organization:

LIABILITIES.

Stock	\$6,584,681 00
Mortgage bonds	9,880,000 00
Floating debt, incurred prior to May 10, 1856	142,495 00
Wm. H. Aspinwall and associates	360,000 00
City of Cincinnati	600,000 00
Bills payable	22,767 01
Due foreign roads and others	135,668 16
Unpaid coupons of interest	1,069,110 00
	\$18,794,721 17

ASSETS.

Road, real estate, equipment and telegraph, including expenses and interest, paid and unpaid as per contra	\$18,635,687 87
Debts due from foreign roads, individuals, and bills receivable	112,857 55
Materials and wood on hand	43,429 21
Cash balance	2,746 54
	\$18,794,721 17

The earnings of the road for the past year were as follows:

REVENUE.

Gross revenue in	Passengers	\$492,540 67
"	Freights	322,750 43
"	Express	22,099 85
"	Mail	44,566 66
		\$881,957 61
Less—uncollected of revenue		80,966 84
		\$800,990 77

EXPENDITURES.

Operating expenses, 1858-'59	\$569,516 91
" 1857-'58	24,134 42
Construction work, 1857, '58 and '59	65,150 21
Bills payable	80,579 00
On account of old floating debt	8,665 95
Office expenses, interest, discounts, &c.	24,997 64
On account of rolling stock	5,184 19
On account of materials and wood	16,334 76
Due from individuals	3,681 15
Cash balance on hand	2,746 54
	\$800,990 77

The earnings for 1857-'58 were:

REVENUE.

Gross earnings in	Passengers	\$477,469 65
"	Freights	223,521 07
"	Express	20,072 74
"	Mail	34,645 14
		\$755,708 60
Less—uncollected of revenue		64,634 24
		\$691,074 36

EXPENDITURES.

Operating expenses	\$462,235 07
Construction work	128,838 34
Taxes, rents and real estate	28,337 27
Office expenses, interest, discounts, &c.	41,851 01
On account of floating debt	17,468 97
Due from indiv's and bills receivable	3,584 00
Cash balance in hand	8,759 70
	\$691,074 36

Burlington and Missouri River Railroad.

We learn that the grading and bridging on this road will be completed to Ottumwa within a month. This will extend the road six miles further—on which the track will soon be laid when the grade is ready.

Northern Railroad of New Hampshire.

The Directors of the above road have submitted their report for the year ending March 31, 1859. The Main line from Concord to West Lebanon is 69 miles long, and the branch from Franklin to Bristol 13 miles. The earnings for the past year have been as follows:

From passengers.....	\$83,875.37
" freight.....	256,416.97
" mail, exp. and rent.....	12,758.51
" miscellaneous sources.....	50.07—\$353,100.92

The working expenses have been:

For maintenance of way.....	\$51,521.29
" locomotive departm't.....	62,765.37
" transportation.....	30,402.97
" general expenses.....	21,275.01—165,964.64

Net earnings for the year.....	\$187,136.28
Less constr'n expend'tres.....	\$26,370.26
Am't rec'd for exchange on car.....	1,000.00—25,470.26

	\$161,666.02
Less State taxes.....	10,145.95
	\$151,520.10

Receipts from interest and dividends.....	\$2,862.60
Charged to income, dividends of 1858, telegraph stock, and transfer to contract account.....	134,910.86—132,547.26

Balance of income per last report.....	\$18,972.84
	167,573.54
	\$186,546.38

Which may be considered as invested in—	
\$225,000 of Northern Railroad Co. (N. Y.) second mortgage bonds.....	\$33,750.00
Fuel, shop stock, etc., on hand.....	66,571.42
422 shrs. Northern R. R. Co. (N. H.).....	17,668.50
Remainder in cash assets.....	68,556.46—\$186,546.38

Not included in the above statement are unadjusted claims estimated at \$4,498.16, and assets estimated at \$526.80.

Since the last report \$17,400 more of bonds have been issued under the contracts, making the whole issue to March 31, 1859, \$385,200, the interest on which has been paid as usual from receipts accruing under the contracts. During the past year there has been purchased of that issue for cancellation \$51,000, making, with \$34,700 previously bought, the amount of \$85,700, all of which have been cancelled, and charged off before closing the accounts of this year, leaving outstanding March 31, 1859, as follows:

Bonds due Jan. 1, 1860.....	\$35,200 00
" due April 1, 1861.....	71,700 00
" due April 1, 1874.....	192,600 00
	\$299,500 00

The Contingent Fund has increased somewhat during the past year. The inventory is as follows, viz:

281 shares Northern Railroad at cost.....	\$19,559 84
\$15,000 b'ds N'th. R. due in '64 } at cost 13,175 00	
\$5,000 b'ds North. R. due in '74 }	
Loans on demand, with collateral.....	8,950 00
Cash in hands of treasurer.....	624 78
	\$42,309 62

The operations for the two years past compare as follows:

Year end/g	Gross rec'pts	Exp'ses	Net income
March 31 1858.....	\$365,879 70	\$240,575 47	\$125,304 23
1859.....	353,100 92	201,580 82	151,520 10

Making an increase in the net income of \$26,215 87. The decrease in expenses has partly

arisen from the low prices of material labor, and, therefore, upon a revival of business larger prices may increase the expenditures.

Upon the Bristol branch, for the same year, the Gross receipts were \$13,389 81; and the expenses \$6,619 91; net income, \$6,769 99.

The following is the balance sheet of the treasurer of the company, March 31st, 1859:

LIABILITIES.	
Capital stock.....	\$3,068,400 00
Income bonds.....	186,546 38
Bonds outstanding.....	299,500 00
Bills payable.....	12,320 65
Dividends due and unpaid.....	4,208 76
Coupons due April 1, 1859.....	8,556 00
Contingent fund.....	624 78
Coupons due and unpaid, etc.....	89 51
	\$3,580,246 08

ASSETS.	
Construction.....	\$3,068,400 00
Contracts.....	274,767 24
Northern (Ogdensburg) R. R. stock.....	17,668 50
" " 2d mort. bonds.....	33,750 00
Shop stock, waste, fuel, and oil.....	66,571 42
Bills receivable.....	55,835 45
Cash, and cash items.....	63,253 47
	\$3,580,246 08

Morris and Essex Railroad.

The annual meeting of the stockholders of this company was held at Newark, on the 16th. From the report of the Directors we learn that the receipts of the company for the year ending May 31, 1859, were:

From passengers.....	\$138,217 38
" freights.....	92,391 47
" mails and miscellaneous.....	8,570 94
	\$239,179 79

And the expenses were:

Operating road.....	\$53,537 21
Repairs.....	50,389 91
Fuel, etc.....	17,407 55
Salaries.....	7,805 11
	129,139 78

Net income.....	110,040 01
Paid int. on funded debt.....	\$23,469 92
" div. 3 per cent. on capital stock.....	34,734 15
	58,204 07
	\$51,835 94

The gross receipts of the previous year were \$237,765 11; expenses same year, \$136,228 06; net earnings, \$101,537 04. The net earnings of the last year exceed those of the previous year by the sum of \$8,407 97. 287,630 passengers, exclusive of commuters and those passing free, have been carried over the road during the year, with entire exemption from loss of life or personal injury to any so carried. The number of passengers exceed that of last year by 14,271.

The present equipment of the road consists of 2 ten-wheel, 7 eight-wheel, and 2 six-wheel engines—total, 11; 15 eight-wheel passenger cars, 4 eight-wheel baggage cars, 1 four-wheel baggage car, and 86 freight cars.

BALANCE SHEET.	
Capital stock.....	\$1,157,805 00
Funded debt.....	340,000 00
Contingent fund.....	262,757 71
	\$1,760,562 71

Cost of road and equipment.....	\$1,613,361 40
Capital stock of Tel. Co.....	2,000 00
" " Newark and Bloomfield Railroad.....	55,000 00
Wood on hand paid for.....	10,500 00
Cash, and cash items.....	79,701 31
	\$1,760,562 71

In relation to the extension of the road to the Hudson River at Hoboken, the report says:

An arrangement has been made with E. A. Stevens, Esq., for a full subscription to the additional stock to be issued for that purpose, upon the terms stated to the stockholders at the special meeting held on the 16th of last month. The details for the regulations of the mutual business of the present road, and the extension have nearly all been arranged, and the work will be commenced at an early day. It is only necessary to say that the arrangements made is entirely satisfactory to the Board, and at a great permanent advantage, as they believe, to the Company.

The following gentlemen were elected Directors: William Wright, Joel W. Condit, Beach Vanderpool, Jeremiah T. Garthwaite, Wm. N. Wood, Aaron Robertson, Robert Hamilton, Joseph P. Bradley, Daniel P. Babbitt.

Progress of Railroads in Florida.

We copy from the *Floridian* the following resume of the progress of railroads in Florida:

The Internal Improvement act was passed in 1855, at which time the only railroad in operation was between Tallahassee and St. Marks—21 miles. The great lines of road pointed out by that act as proper objects for aid by the Internal Improvement Fund, extended from the water of Escambia Bay in the West, to Jacksonville in the East, and from Fernandina on the Atlantic to Tampa Bay, with an extension to Cedar Key, on the Gulf. Extensions also were authorized from the Main line running through Middle and Western Florida. Companies formed as speedily as circumstances would permit, and proceeded to organize the requisite means. The Florida, the Central, and the Pensacola and Georgia Companies, went vigorously to work. Surveys were made, routes adopted, and the trustees notified of the particular portions of the lines specified each company proposed to construct. The Pensacola and Georgia Company took to itself the road between Alligator and Pensacola—the Central, that portion lying between Alligator and Jacksonville, and the Florida Company undertaking the whole work from Fernandina to Cedar Keys. Look at the result. The Pensacola and Georgia has quite completed the grading of its part from Tallahassee to the Suwannee river, from which point the contractors are rapidly carrying the road-bed to Alligator, the place of junction with the Central Road, and has, in addition, ironed and equipped twenty-five miles with heavy rail; the Central has graded all its line, ironed twenty-five miles, and purchased rail for twelve more; the Florida has finished grading through to Cedar Keys, a distance of 154 miles, and laid the track on one hundred and eleven miles. In addition to this, the St. Marks road has been re-graded and re-ironed with heavy rail. When summed up these labors show about three hundred miles of grading, and one hundred and eighty-two miles of tract ironed and equipped, since the inauguration of the system in 1855! Is not this accomplishing a great deal in a short time? Indeed, we think such strides have been made within an exceedingly brief space, in progression towards placing Florida on a footing with her sister States, as to justify the strongest feelings of exultation on the part of all our people as well as the indulgence of the confident hope that the day is rapidly drawing near when our splendid system of roads will be completed. What a proud day will be to Floridians, when a few hour's pleasant ride will suffice to pass from the Gulf to the Atlantic—when that obstruction and dread to the great stream of travel, the Florida Coast, with its reefs and shoals, its dangers and difficulties, shall no longer exist, and when, by reason of our system of roads, Florida shall become the great thoroughfare for the immense tide of human beings that is ever rolling back and forth with the certainty and regularity of the ocean's swell. Patience and perseverance a while longer on the part of those who are so nobly laboring to carry these works successfully through and accomplish this

result, and the exercise of "a generous confidence" and forbearance by those who are by law in a position to interpose obstacles to their progress, is not only now a high duty, but is all that is required to secure, beyond a peradventure, the greatest good to Florida that is in the power of man to achieve.

Journal of Railroad Law.

ACTION FOR INJURIES—PLAINTIFF'S NEGLIGENCE.

The case of *Dascomb vs. The Buffalo and State Line Railroad Company*, recently reported, strikingly illustrates the rule of law that a person cannot recover, for injuries sustained through a railroad accident, or other casualty, where his own negligence has contributed to cause the injury.

The facts in that case were briefly these: The accident for which the plaintiff sought to recover, occurred at a crossing on the defendant's road. About four or five o'clock one afternoon the plaintiff, who lived about a quarter of a mile from the crossing, upon a road called the Camp Road, drove down to cross the railroad. He was in a wagon, driving a single horse. His son, about 12 years old, was in the wagon-seat by his side, and a hired man, in the employ of the plaintiff, was sitting on the bottom of the wagon behind them. There was evidence that, at that particular time, when the plaintiff drove across the track, no train was due at that crossing by the company's time-table. The plaintiff did not, nor did his son, look either way to see whether any train was coming. The hired man looked out in one direction, but not in the other. It so happened that a train, behind time, was, at that moment, coming towards the crossing from the other direction. There was a forest and embankment partly concealing the track on that side from the view at the crossing, and the party in the wagon did not see the cars, until just as the wagon drove down upon the track. The locomotive struck the wagon before the plaintiff could get quite across; the horse escaped, but the wagon was struck, the boy killed, and the hired man and the plaintiff injured.

The Court held, that the plaintiff could not recover for the reason, that his own negligence had contributed to cause the injury. The following is an extract from the opinion:

MARVIN, J.—Was there not great carelessness and negligence on the part of the plaintiff? It certainly so seems to me. It is not claimed by the plaintiff's counsel, that the plaintiff looked to the right or to the left, up or down the track; or that he particularly consulted his hearing. One of the positions of the counsel is, that the plaintiff was not negligent, as he supposed, and had a right, from the time-tables of the defendant, to suppose that the cars had passed. As there was conflicting evidence as to the time when the train did actually pass, I shall assume, for the benefit of the plaintiff, that the train was behind time; and then, in my opinion, the conduct of the plaintiff was most unfortunately and lamentably negligent. It seems to me, that it should, and must, be regarded as very little short of recklessness, for any one to drive on to the track of a railroad without first looking and listening to ascertain whether a moving locomotive is near. What difference can it make, if a train has just passed, and whether the train is on time? Another train may be approaching. It must be kept in mind that railroad companies own their roads, and have as perfect a right to use them, in a lawful manner, as the

farmer has to cultivate his farm, or the mechanic to use his tools. The law holds railroad companies to a strict accountability for any of their acts of negligence, by which any one who is without fault sustains an injury in his person or property. Assume, in this case, that it was negligence in the defendant to be behind time, and will this, in law, excuse the defendant from observing care on his part? In my opinion, it will not. Such a rule would be extremely dangerous, and there would be much difficulty in its application. It may be that those who live in the immediate vicinity of railroads, and who frequently cross them, may, when they suppose a train has just passed, be less careful, and this may grow into a habit; or they may consult time-tables, and from them reason that there can be no locomotive near, and act without regard to care; but if they do so, in my opinion, they act at their peril. They will be charged with negligence in case they rush on to the track without looking, or trying, in a proper way, to ascertain the fact whether danger is near. And they will not be permitted to recover damages for any injury which they sustain.

It is well settled in this State, as a principle of the common law, that he whose negligence has contributed, in any essential degree, to the injury he has sustained, cannot maintain an action to recover damages from the other party, whose acts of negligence have also contributed to produce the injury. When negligence is the issue, it must be an unmingled case. This rule is vastly important in every-day life. It is in constant activity in great and small affairs. The rule, properly understood, should, in my opinion, be maintained in its purity. It is generally salutary in its effects; inducing care, caution, and circumspection. The careless and negligent are taught that if they sustain an injury to which their negligence contributed, they must bear the loss; that the law will afford them no redress.

In the present case, the plaintiff, living about a fourth of a mile from the railroad track, owning a farm divided by the track, leaves his house, with a horse and wagon, taking in his son and hired man, and drives along, upon a trot, directly upon the track of the road, without taking the slightest precaution to ascertain the dangerous proximity of the locomotive. This was negligence. And if the rule to which I have referred, is to be maintained, it must be so held. If such negligence is a question of law, then the Court should have taken the cause from the jury. If it is to be regarded as a question of fact, then the verdict is against undisputed evidence, establishing a fact or facts which show, in law, that the plaintiff cannot recover. And it should, for this reason, be set aside. In my opinion, it was a question of law for the judges at the Circuit, and he should have nonsuited the plaintiff.

Negligence is, undoubtedly, often a mixed question of law and fact; and when so, it should be submitted to a jury. When the main fact or facts touching the negligence is sought to be proved by other facts, called circumstantial evidence, the question is always a question for the jury. They are to say whether the facts proved justify, by fair reasoning, the finding of the main fact in issue to be true. They draw the inferences from the circumstantial facts. But when the direct fact in issue is established by undisputed evidence, and

such fact is decisive of the cause, a question of law is raised, and the Court should decide it. The jury have no duty to perform. The fact or facts controlling the rights of the parties being ascertained, it is the duty of the Court to pronounce the law, as much so as upon a special verdict. The issue of negligence is not an exception to the rule.

The plaintiff's counsel makes the point that if the defendant was negligent, in not ringing the bell, or sounding the whistle, the plaintiff may recover, though he was careless and negligent, provided such carelessness was not so gross as to make applicable the maxim—*volenti non fit injuria*. He refers to the 39th section of the General Railroad Act (Laws of 1850, p. 232). The section referred to, requires that a bell shall be rung continually for 80 rods before crossing a traveled road or street, or that a whistle shall be so sounded, under a penalty of \$25, and declares that the corporation shall be liable for all damages which shall be sustained by any person by reason of such neglect. If this section will justify a recovery, in any case, when the plaintiff has been negligent, the question would be whether the injury had been sustained by reason of the neglect of the company to ring the bell, or sound the whistle. Such neglect on the part of the company, must be the sole cause or reason of the damage. This, of courses, supposes the plaintiff free from fault. The statute does not excuse his negligence. Cases may arise under peculiar circumstances, when the omission to ring the bell, or sound the whistle, will be the sole cause of the injury. Suppose one desires to cross the track in a very dark night. He pauses at the track, but he can neither see nor hear the train; or, if he hears it, he judges that it is at an entirely safe distance. He knows that the bell is to be rung, or the whistle sounded, a quarter of a mile. The circumstances are favorable for his hearing the sound, but he hears nothing, and proceeds to cross, and is struck. Such a case might be a proper case for the application of the statute. Others might be supposed. But in my opinion, the statute has not changed the law excusing the plaintiff for negligence.

North Pennsylvania Railroad.

Of the extension of this road to Easton, the *Journal* of that place thus speaks:

The necessity and importance of having a terminus to this road other than either Freemansburg or Bethlehem has become so apparent, that it has been resolved to extend it to Easton, and perhaps up the Delaware, to connect with the Lackawanna road in the neighborhood of Belvidere. There are but two locations possible between Freemansburg and this place. The one would run across the country to the Bushkill, and along the Bushkill to Easton; the other would run from Freemansburg along the Lehigh to Easton. This latter route would be the least expensive to the company, as the land damages would be small, compared with what they would be along the other route. It is said, also, that if the road is located along the Lehigh, it will be necessary to run it from the Lehigh to the Bushkill through Fourth street. This, as might be expected, meets with decided opposition from the property owners of Fourth street, and it is our opinion that it will be impossible to obtain the right of way from the Borough Council.

As the company this time ask no pecuniary assistance from our citizens to make this extension, and as it will be a valuable improvement to the town, we hope that no obstacle of any kind will be thrown in the way so as to embarrass or defeat the movement.

TREATISE

ON THE

PRINCIPLES OF CIVIL ENGINEERING

AS APPLIED TO THE

CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, *Civil Engineer,*
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 391.)

FOUNDATIONS.

§ 113. While the ultimate strength of the superstructure of a bridge may depend upon the stability of a pier, that stability may also be materially dependent upon the solidity of the foundation upon which the pier is erected.

When the base of a pier is made to rest upon a stratum of rock, or of earth of sufficient density and resistance to sustain the work, it is a natural foundation and the best that can be established.

Gravelly and sandy soils are incompressible, and are capable of supporting the base of any work if the precaution be taken to secure those soils from displacement. Clay and all other earthy soils are more or less compressible and present difficulties either for confining and consolidating them, or for obtaining a sufficient surface of pressure without resorting to an undue extension of the base of the work.

When a natural foundation can be obtained only at a great depth of excavation and consequently at great expense, its want is usually supplied by piles, timbers, crib-work, heaps of loose stones or some other kind of artificial fabric.

Among the most efficient of artificial foundations, and the one most common is that which consists of piles driven into the soil, their tops cut off so as to coincide with a level plane, and all connected together by timbers, forming a platform upon which the base of the pier may rest.

Piles and timbers employed in foundations will, generally, after the completion of the work, be covered to such depth by earth or water, as not to be liable to decay. Sometimes, however, piles have a part of their length above the surface of the ground or water, and are capped, braced and tied together in various way to serve as piers.

It often happens, where a bridge is to be built, that timber is plenty, while stones and bricks cannot, at the time, be obtained.

In such cases the proper foundations for masonry should be prepared. They may then be surrounded by piles or by temporary piers of framed timber, so arranged as to admit of permanent piers being constructed within them, after the road shall have been opened for traffic and before the piles or timbers decay.

The number and dimensions of piles for a foundation depend upon the area of the base of the pier, the weight to be supported, and the depth they can be made to penetrate the soil.

Experience has shown that little or no advantage is derived in placing piles nearer than $2\frac{1}{2}$ or 3 feet from centre to centre, and that they can be driven with the best advantage when a certain relation exists between their lengths and mean diameters. A cylindrical pile, 12 feet long, should have a diameter of about 10 inches. If the lengths of piles be taken in proportion to the cubes of their diameters they will have nearly the proportion which nature gives them, for

 $10^3 : 11^3 :: 12 : 16$ feet long.

 $12^3 :: 20\frac{1}{2}$ " "

 $13^3 :: 26$ " "

 $14^3 :: 33$ " "

 $15^3 :: 40\frac{1}{2}$ " "

 $16^3 :: 49$ " "

Piles are driven by means of a machine called a *pile engine*. The effect is produced by the successive percussions of a heavy body, variously called, the *hammer*, *monkey* or *ram*—usually made of cast iron—which is raised by animal or steam power, and allowed to fall upon the top of the pile.

Each pile should have its head or top cut square with its axis, and hooped with iron to prevent splitting. The foot should be pointed, and when the ground is hard the point should be shod with iron. No bark or knots should be left upon the pile and every cause of friction should, as far as possible, be diminished.

In driving, when a pile has reached the hard bottom it will descend no farther, and the interruption is absolute. But the friction of the ground against the pile may overcome the effect of the ram, in which case the interruption is only apparent and the pile is liable to settle under a continued heavy load.

The extent of an interruption, or the resistance which the ground opposes to the pile, is generally estimated by the quantity of percussion it is supposed to receive; since no force short of the momentum of the ram will produce a greater penetration of the pile, and an excess of momentum only, will be effective.

The exact quantity of percussion with which a ram strikes a pile seems never to have been determined in such a manner as to serve as a reliable basis for estimates of the resistance piles will afford for sustaining a load placed upon them.

The *momentum* of a body is defined as being its quantity of motion, that is it is the product of its mass into its velocity; consequently if one body contain twice as much matter as another, and both move with the same velocity, the quantity of motion, or the quantity of matter in motion, will be twice as great in one case as in the other.

Force has been defined (§ 1) as an agency which tends to cause or destroy motion. This is a *force of pressure*, and exists while motion does not actually take place.

When the tendency to motion takes effect so that *motion results*, the force becomes a *force of motion*.

The laws which govern the operations of the forces of motion, and those which govern forces of pressure, are as different as their phenomena and attendant circumstances. The one is an active force, the other a dead one; the one is not weight, the other has no momentum. Nevertheless, certain *relations* exist between them, and the phenomena of either may in a degree, be deduced from those of the other.

Besides the difficulty of determining the quantity of percussion, there exists a further difficulty in ascertaining how much of that percussion may be estimated as effective upon the pile, and how much lost or gained on account of the partial elasticity of the ram and the pile.

When one non-elastic body in motion strikes upon another at rest, no recoil or rebound takes place, but after the stroke they move together

with equal velocities and the sum of their moments or forces, remains the same after as before the stroke. As much motion as the striking body communicates so much it loses.

If the ram falls upon a pile free to move it will transfer to the pile a portion of its force, and whatever force the pile may acquire from the collision the same will be lost to the ram, and the total moving force of the ram and the pile will be exactly equal to the moving force of the ram before impact.

If the ram and the pile were perfectly non-elastic, they would, after impact, move on together, so that both would have the same motion, and the product of the weight and velocity of both would be equal to the product of the weight and velocity of the ram before impact. Thus, if the weight of the ram be taken at 2,000 lbs., and the pile at 1,000 lbs. both moving freely, but without acceleration by gravity, after impact, their united velocity will be two-thirds of that previously acquired by the ram alone. The product of the weight and velocity of the ram after impact will be but two-thirds of that product before impact, while the product of the weight and velocity of the pile after impact will be equal to one-third the product of the weight and velocity of the ram before impact.

Elastic bodies are those which have a certain spring by which their parts, upon being pressed inward by percussion, return to their former state, throwing off a striking body with some degree of force. When the elasticity is perfect the body restores itself with a force equal to that with which it is compressed.

When one elastic body in motion strikes upon another at rest, the one loses and the other gains *twice* as much momentum as if the bodies had been void of elasticity.

Consequently, if the body in motion be twice as great as the body at rest, the larger body, after impact, will have lost two-thirds of its velocity, and the smaller body will have acquired a velocity four times as great as that of the larger body.

If the ram and the pile were perfectly elastic bodies, and if the velocity of the ram at the impact were 30 feet per second, taking the weights as before, the velocity of the ram after impact will be at the rate of 10 feet per second, and that of the pile 40 feet per second. If perfectly non-elastic, the velocity of the ram would be 20 feet, and that of the pile also 20 feet per second. In both cases the *sum of the products of the weight into the velocity of both after impact will be equal to the product of the weight and velocity of the ram before impact*.

In one case the momenta of the pile and the ram act together to sink the pile with a force that may be represented by

$$(2,000 + 1,000) \times 20 = 60,000,$$

and in the other case the momentum of the pile, equal to $1,000 \times 40 = 40,000$ only, acts to produce penetration into the ground.

Reversing the weights, by making the ram 1,000 lbs. and the pile 2,000 lbs., and putting the velocity of the ram at the instant of impact, 30 feet per second, if non-elastic the velocity of both after impact will be 10 feet per second, or if perfectly elastic, the pile will receive a velocity of 20 feet per second, while the ram will rebound with a velocity of 10 feet per second. For in the case

of non-elasticity the ram parted with two-thirds of its momentum. In the case of a perfect elasticity, it parts with twice as much, or four-thirds of its momentum. Hence this excess of one-third of its momentum is negative or acts in the opposite direction and causes the rebound.

In the case of non-elasticity the pile and the ram will move together with a force of
 $(1,000+2,000) \times 10 = 30,000$,
 and in the case of perfect elasticity with a force of
 $2,000 \times 20 = 40,000$.

From these consideration it will appear that if the ram and pile were non-elastic, the effect upon the pile would be equal to the whole force of the blow of the ram, and that if the ram and pile were both perfectly elastic, so long as their united weights remain the same the effects of percussion, that is, the momentum of the pile will be the same whether the ram be the greater or the smaller weight.

To place the effects of elasticity and non-elasticity in more perfect contrast, as well as that of different proportions, in the relative weights of the pile and the ram, the following table has been computed on the supposition that the ram falls with a velocity of 30 feet per second at the instant of impact, and that the momentum is as the product of the weight into the velocity.

No.	Weight of Ram.	Weight of Pile.	Momentum of Ram & Pile when non-elastic.	Momentum of Pile alone when elastic.
1.....	100	900	3,000	5,400
2.....	200	800	6,000	9,600
3.....	300	700	9,000	12,600
4.....	400	600	12,000	14,400
5.....	500	500	15,000	15,000
6.....	600	400	18,000	14,400
7.....	700	300	21,000	12,600
8.....	800	200	24,000	9,600
9.....	900	100	27,000	5,400

In No. 1 the ram falls with a momentum of 3,000 and after impact moves with the pile at a velocity of three feet per second, if non-elastic, but if perfectly elastic it communicates to the pile a velocity of 6 feet per second, and the pile moves onward alone with a momentum of $900 \times 6 = 5,400$.

In No. 9 the ram falls with a momentum of $900 \times 30 = 27,000$, and after impact, if non-elastic, moves with the pile at the rate of 27 feet per second.

If perfectly elastic the ram will communicate to the pile a velocity of 54 feet per second, when the pile will move with a force of $100 \times 54 = 5,400$.

If a non-elastic body strike upon an immoveable obstacle, it will lose all its motion. A perfectly elastic body will return with a force equal to the stroke.

A ram falling upon a pile when driven home will recoil more or less, but not with a velocity equal to that of its descent; consequently, an imperfect elasticity exists between the ram and the pile, and the range of effect will be somewhere between the two columns of momenta in the table.

From this table it appears that when the ram and the pile are of equal weight, nothing is gained or lost in consequence of the elasticity or of the non-elasticity of the bodies; but there is a decided advantage in having the ram lighter than the pile, and an equal disadvantage in having it

heavier than the pile, when they are quite elastic.

It has been ascertained that near the earth surface, a body falling freely from a state of rest will descend 16 feet and 1 inch in a second of time, and that during that second the rate of speed or velocity increases from zero to 32 feet 2 inches per second.

In two seconds the body will fall 64 feet and 4 inches, and at the end of that time will be descending at the rate of 64 feet 4 inches in one second. In three seconds the body will fall from the state of rest 144 feet 9 inches, and at the end of that time will have acquired a velocity of 96 feet per second.

In four seconds the distance fallen will be 257 feet, and the greatest velocity attained will be at the rate of 128 feet per second.

Here it is seen that the distance fallen through in two seconds is four times as great as in one second. In three seconds the distance is nine times, and in four seconds it is sixteen times as great as in one second. Hence the distances fallen through, are said to be as the squares of the times. Thus—

Time in seconds. 1, 2, 3, 4, 5, 6, 7, etc.
 Spaces of $16\frac{1}{2}$ feet

each 1, 4, 9, 16, 25, 36, 49, etc.

It will also be observed that the velocity at the end of two seconds is twice as great as at the end of the first second; at the end of three seconds, three times, and at the end of four seconds, four times as great as at the end of the first second. Hence the velocity increases in proportion to the time of the fall. Thus—

At the end of seconds 1, 2, 3, 4, 5, etc,
 The velocity in feet
 per second is. $32\frac{1}{2}$, 64, 96, 128, 160, etc.

Again it will be noticed that at the end of one second the velocity is at the rate of twice the distance fallen; at the end of two seconds the rate of the velocity per second, is the same as the distance fallen in two seconds; at the end of three seconds the velocity is at the rate of two-thirds, and at the end of four seconds, one-half the distance fallen. The proportions between the distances fallen, and the velocities acquired at the ends of those distances, are then as—

Spaces of $16\frac{1}{2}$ feet
 fallen through 1, 4, 9, 16, 25, 36, 49, etc.
 Velocities of $32\frac{1}{2}$ feet
 per second 1, 2, 3, 4, 5, 6, 7, etc
 Velocities of $16\frac{1}{2}$ ft.
 per second 2, 4, 6, 8, 10, 12 14, etc.

Now, take any one of the numbers in the first series, representing the spaces or distances fallen, extract its square root and the result will be the corresponding number in the second series. Multiply this result by two and it will be the corresponding number in the third series, and this last number will represent the velocity in terms of the distance fallen.

Therefore to calculate the velocity acquired in falling through a given height, the rule is—

Multiply the height in feet by $16\frac{1}{2}$, extract the square root of the product and multiply the result by 2. Or take the square root of $64\frac{1}{2}$ times the height. ($v = \sqrt{64\frac{1}{2}h}$).

If the ram of a pile engine falls one second, or $16\frac{1}{2}$ feet, it will impinge upon the head of the pile with a force due to a velocity of $32\frac{1}{2}$ feet per second. If it falls two seconds, or 64 feet, the force will be doubled. If the fall be but one foot

the velocity attained will be $2\sqrt{1 \times 16\frac{1}{2}} = 8.023$ feet per second. If the fall be 9 feet, the velocity attained will be $2\sqrt{9 \times 16\frac{1}{2}} = 24.06$ feet per second, or if the height be 25 feet, the velocity acquired will be $2\sqrt{25 \times 16\frac{1}{2}} = 40.1$ feet per second.

(To be continued.)

A New Mode of Making Iron.

A new mode of manufacturing iron is claimed to have been discovered and put in use in St. Louis, by a Mr. Criswell. The process has been examined by a committee of experienced iron masters, who have reported favorably in reference to the same.

The experiment was commenced by filling the tubes with pulverized ore and coal, all of which was done under their own eye, so that no other ingredient could have been mixed with them. They watched the tubes thus filled for forty-eight hours, after which time they were let down in pairs into the boiling furnace below; then worked into "balls," passed through the "queezer," and rolled into "muck bars," all at the same heat. They charged sixteen pairs of tubes with 11,869 pounds of crushed iron ore from the Iron Mountain, and 4,747 pounds of crushed Illinois coal, from the Wenona mines, watching these for 48 continuous hours, when the ore being "carbonized," was let down (in pairs of tubes to a heat), and worked similarly to boiling. Weighing carefully the product of the identical tubes thus charged by them, they found the net yield to be six thousand one hundred and three (6,103) pounds of muck bar, or equal to fifty-one and forty-two hundredths (51 42-100) per cent. of pure iron from the raw ore.

From a detailed statement of the expenses incurred in making this product, they submit the following:

Five tons 6 cwt. of iron ore at \$3.25 per ton is.	\$17 20
164 27-80 bushels coal used, 10c.....	16 43
Two boilers, day and night turn.....	6 00
Two helpers " " " ".....	4 00
Two do. " " " ".....	2 50
Four men at the tubes, day and night turn.	4 00
Three men crushing ore and coal, day turn.	3 00
One laborer, wheeling ore, &c.....	1 00
Use of power per ton, 3 tons at 50c.....	1 50

Gross cost \$55 63

The yield being 2 tons, 14 cwt., 2 qrs., and 6 lbs., is equal to \$20 42-100 as cost per ton of 2,240 lbs., or 91 15-100 per 100 lbs., or less than one cent per pound. The gross ton of 2,240 lbs., was produced with 60 bushels of Illinois coal, taking the furnace as heated up, and leaving it so for further produce; or, in other words, they cut in on its work, and took its consumption and yield of 24 hours for their results.

To test its yield they charged a heating furnace with 1,105 lbs. of short piles (7 high) and its yield was 987 lbs. of merchant bar iron. The loss of weight (say 11 per cent.) and other expense of rolling (say \$5), makes the cost of the bar iron 27 66-100 per ton of 2,240 lbs., or at a net cost of 1c. per lb.

They state that in their estimate they made no allowance for wear and tear or contingencies, but endeavored, as near as possible, to get at the net cost—the gross cost would be about \$25 per ton for muck bar, or \$33 per ton for merchant bar—a price much less than the English bar can be made for at home, and certainly of a superior quality. They had this bar iron cut up into small pieces for experimental tests. It shows for itself, and they have no hesitation in pronouncing it bar iron of a superior quality, which means neither cold, short, nor red short.

The Republican contains a communication from Mr. A. Meltenberger, one of the gentlemen from whose report of their experiment and observation, we have selected the above facts, which contains some additional particulars in regard to Criswell's process, or invention, that will be found of especial interest to iron men. It is known that the old

process of making bar iron requires two furnaces—the first to make pig metal, and the other to transform it from pig or chrysotized iron, to bar or fibrous iron. The St. Louis furnace requires but one.

After stating at length the whole principle of the discovery, the writer says that the whole improvement consists in not only making pig metal with the waste heat of the furnace, but avoiding that anomaly in the manufacture of pig iron of carbonizing with charcoal, and oxydizing with an air blast, at the same time causing waste of material, and large amounts of fuel to overcome it. In hot blast furnaces part of this waste is overcome, as part of the oxygen is consumed before entering the blast furnace.

The time given it (48 hours) seems to have the effect to evaporate all the sulphur (which has ever been the bug-bear of all attempts heretofore to make good iron with sulphurous coal, for which iron has a great affinity, *without waste of material*, as the product of 51 per cent., is nearly as much as pig metal can be produced out of the same ore, (55 at the mountain works.) An examination of the muck bars shows that it is all fibrous, not a crystal in it, which are abundant in all cold short irons, and is attributed to the sulphur in the coal with which it is worked.

In reference to the Renton furnace, the failure of which, after so many sanguine predictions as to its success, had induced many to predict that Criswell's would share the same fate. Mr. Miltenberger says that at the very least, the latter is an improvement upon it, and that its success being a demonstrated fact, all other failures were but stepping-stones to the success of Criswell's furnace. He concludes by predicting that in a very few years bar iron will be shipped from Missouri to Pittsburg, and all along the Ohio river, made from Missouri ore direct into bar, and that this invention is to open up a future to the State that the wildest dreams have never reached. Detroit business men will, of course, not be long in availing themselves of the advantages which this discovery offers, and to apply it to the manufacture of our own Lake Superior ore into bar iron.

Houston and Brazoria Railroad.

This road is to run in a south-western direction from Houston, Texas, to Columbia, in Brazos Co., on the east bank of the Brazos river. The road is completed and in working order from Houston, seven miles south, to the intersection with the railroad from Buffalo Bayou west to Richmond. The rest of the distance to Columbia, forty-three miles, has been graded and ready for the iron for some time, this work being done by the planters along the route.

Last week a vessel arrived at Galveston, from Liverpool, with four hundred and fifty tons of iron for this graded section of the Houston and Brazoria Railroad. Two other vessels, with some sixteen hundred tons additional iron, and other material for the section, are expected daily at Galveston. This will be all the iron required to complete the work to Columbia by September next, directly west to the Colorado river, run nearly di-Wharton, on that stream—a distance of 100 miles. This section is being pushed rapidly ahead. —*New Orleans Picayune, June 3.*

Chicago, Iowa and Nebraska Railroad.

This road was opened on the 15th June to Cedar Rapids, Iowa, making a continuous line of railroad from Chicago to that point via Clinton, Iowa. From Cedar Rapids there is now a river navigation of 60 miles, on the Cedar river, on the direct line to Fort des Moines, Council Bluffs and Sioux City. This new route has been pushed forward so far towards its completion through the energy and perseverance of its efficient Superintendent and Engineer, Milo Smith, Esq., of Clinton, Iowa, under whose personal direction the road has been so vigorously and successfully managed. It is stated to be the nearest route to Council Bluffs, and we are told the tide of travel is now rapidly setting in this direction.

Hannibal and St. Joseph Railroad Lands.

Gov. Stewart has confirmed to the Hannibal and St. Joseph Railroad Company the lands on one hundred and forty miles of this road. All that portion of lands lying on the eastern sixty miles and on the western eighty miles of the Hannibal and St. Joseph Railroad is now in the hands of the company, and is in market, and offered for sale on the most liberal terms. These lands lie in Marion, Lewis, Buchanan, DeKalb, Pike, Knox, Andrew, Davies, Livingston, Carroll, Ralls, Monroe, Clinton, and Caldwell counties, and compose the "garden spot" of Northern Missouri. A very long credit will be allowed upon these lands, so as to bring them within the reach of all. This will result in great benefit to this portion of the State. The retaining of so large an extent of rich lands in the hands of a company, and without the reach of actual settlers, has been of great detriment to the State, and particularly to the Northwest. The offering of the above, hundreds of thousands of acres may, therefore, be regarded as a matter of great benefit to us. —*St. Joseph Gazette, 16th.*

Junction and Breakwater Railroad.

Four of the directors of the Junction and Breakwater Railroad have advanced the company the sum of \$37,000, on their own individual responsibility—the sum in addition to the available means of this company necessary to put the road in running order from the junction to the terminus of the grading in Sussex County. The iron has been purchased from the Mount Savage (Md.) Iron Works for the above amount, at the lowest cash prices. Messrs. H. B. Fiddeman and Daniel Curry, two of the directors, have contracted to pay \$10,000 cash on the delivery of two hundred tons of the iron, \$7,000 in six months, \$13,000 in twelve months, and \$7,000 in eighteen months, with interest added to each payment. Messrs. P. P. Causey and Curtis S. Watson, two other directors have given the first two their obligations that each of the four shall furnish an equal amount to the funds necessary to meet the payments as they fall due. —*Peninsula (Del.) News.*

Dubuque and Pacific Railroad.

At a meeting of the stockholders of this company on the 6th, the following named gentlemen were elected new Directors for the term of two years: J. Edgar Thomson, President of the Pennsylvania Central Railroad; John Lord, New York City; John Hodgdon, Dubuque; C. H. Booth, Dubuque; Leo Canfield, Falls Village, Ct.; J. P. Farley, S. Hempstead, Dubuque.

The following named Directors held over by virtue of a previous election, their terms not having expired: O. H. P. Rozelle, Independence; Wm. G. Stewart, F. S. Winslow, R. Bonson, J. H. Emerson, Dubuque; Wm. Ward, Boston.

The Board of Directors of the Dubuque and Pacific Railroad have elected the following officers for the ensuing year:

J. Edgar Thomson, of Philadelphia, President; J. P. Farley, of Dubuque, Vice President; C. H. Booth, do., Treasurer; James M. McKinlay, do., Secretary.

Reading and Columbia Railroad.

The friends of this project held a meeting at Ephrata on the 31st of May, and passed a series of resolutions. The *Reading Gazette* says: "There is a good prospect of the early construction of this railroad. It is only 36 miles, and three routes have been proposed, either of which would not be more expensive, to make than the East Pennsylvania Railroad. One route starts from a point near Reading, by way of Yocum's forge to the Red Lion tavern, thence along Stony run to Reamstown, thence, along the west side of the Ephrata ridge to the Cocalico, near Forney's tavern, 4 miles south-west of Ephrata, and thence following the survey made by Mr. Wilson a few years since, to Diller-ville, near Lancaster, and to Columbia. Another route runs from the Black Horse and Sinking Spring, through the valley to the same point on Cocalico creek, either east or west of New Ephrata."

Cincinnati Stock Sales.

By KIRK & OHNEVER.

For the week ending June 20, 1859.

BONDS.	Per cent.	
Little Miami, 1st Mort.	68	83 and int.
Covington and Lexington, 2d Mortgage	68	80
Cinc. Ham. and Dayton, 2d Mortgage	78	85
Indianap. & Cincinnati, do.	78	85
STOCKS.		
Cincinnati, Hamilton & Dayton	62	1/4
Columbus and Xenia	83	
Indianapolis & Cincinnati	53	
Little Miami	84	
Ohio and Mississippi	3	

Railroad Earnings.

The following are the receipts of the Memphis and Charleston Railroad for May, 1859:

Amount of passenger receipts	\$57,905 14
" freight	25,715 52
" mail service	4,597 91
" express, etc.	1,137 92
Total receipts	\$89,356 49
" expenses	48,699 83

Total amount of net earnings \$40,656 66

The May earnings of the Toledo and Western (Wabash Valley) were:

Passengers	\$19,794 90
Freight	36,959 84
Miscellaneous	3,316 66

Total \$60,071 39

The following is a statement of the earnings of the New York Central Railroad, for the month of May, 1859, compared with its earnings for the corresponding month of the previous year:

1859	\$412,665 83
1858	510,197 42

Decrease \$97,531 59

The following statement shows the business of the Philadelphia and Reading Railroad Company, for the month of May, 1859, compared with the corresponding month of last year:—

	1859.	1858.
Received from coal	\$148,707 06	\$100,678 84
Do. merchandise	43,333 06	26,551 50
Do. travel, etc.	33,423 53	24,553 27

Total	\$225,463 65	\$216,783 61
Transportation road-way, drayage, re-newal fund, and all charges	113,657 60	114,051 81

Net profit for the month	111,806 05	\$102,731 80
Do. for previous 5 mos.	399,059 73	329,552 87

Total net profit for 6 months	\$510,865 78	\$432,284 67
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The traffic of the Great Western Railway of Canada for the week ending June 10, 1859, was as follows:

Passengers	\$22,324 41
Freight and live stock	7,516 61
Mails and sundries	1,727 81

Total	\$31,568 83
Corresponding week of last year	32,778 18

Decrease \$1,209 30

The receipts of the Grand Trunk Railway of Canada for the week ending June 4,

were	\$40,386 61
Week ending May 29, 1858	38,732 36

Increase \$1,654 25

Total traffic from July 1st.	\$2,118,720 51
Same period last year	2,208,208 49

Decrease \$89,487 98

The annexed are the comparative earnings of the Erie road, for May:

May, 1858.....	\$469,573
May, 1859.....	349,953
Decrease.....	\$119,629
The earnings of the Catawissa Railroad Company, for May, 1859, were.....	\$26,516 21
Do. May, 1858	22,707 70
Increase.....	\$3,808 51
Net receipts for nine months ending May 31st	\$214,147 74
Same time last year	171,083 56
Increase (25 per cent.).....	\$43,064 18

American Railroad Journal.

Saturday, June 25, 1859.

What is to be Done to Make our Railroads Profitable?

The Erie Canal is the direct competitor of the New York Central Railroad in the transportation of freight. As the Central is the competitor of the other three great lines, the Canal must, consequently, stand in similar relations to them. This fact was recognized by the recent compact between the four companies. They are compelled to carry low priced freights at reduced rates to take the business from this great water line.

We do not refer to this by way of discouragement, but for the purpose of pointing out to the railroads their true condition, and consequent duties. There is no doubt that charges for the transportation of property must rule low for some time to come, and permanently lower than they have been for five years past. During this period, the capacity of the Canal has been vastly increased, followed by a corresponding reduction in the cost of transportation.

The railroads must meet this improved condition of the Canal, by a reduction of current expenses. The Central certainly save \$500,000 annually, in fuel, over the cost of this article for 1856 and 1857. Coal can be had, per ton, as cheaply as wood, per cord. A ton of coal is equivalent to two cords. The annual interest on the *bonus* bonds now amount to only about \$500,000 annually. An amount nearly equal to this immense sum should and can be saved in *one* item of current expenditure. The door is open to the Erie for a very large saving by the use of coal. Its line skirts the coalfields of Pennsylvania for nearly its entire length. There is no good reason why coal is not used upon this road to the same extent that it is upon the Baltimore and Ohio. All that is wanting to this end is the requisite skill and resolute determination that coal *shall* be used. We are aware that engine drivers and firemen are strongly opposed to the introduction of this kind of fuel, and unless they are sharply looked after, they will take good care to have all experiments turn out failures.

Coal is obtainable at low cost by every railroad in the United States to which wood costs high. That it must come into general use there can be no doubt. By its use, the cost of fuel can be reduced to six and eight, and sometimes to three or four per cent. per mile run. In England, where coke is commonly used, the cost of fuel per mile is only about six cents. It costs many of our best roads

in this country, all the way, from twenty to thirty cents per mile for wood; or one-quarter of their entire current expenditure.

There is undoubtedly in all our roads a large margin for profit in the reduction of current expenditures. This is a subject that deserves the more attention from the fact that low rates must henceforward rule for portions of the year, at least, on many of our most important lines. No road can be successful in the long run that is not managed with economy. While with it, there is hardly a road among us, having tolerably fair receipts, that may not be made productive on a reasonable cost.

Why the Net Income of our roads is not in ratio to the Gross Receipts.

It would seem reasonable to suppose that the expenses of operating a railroad ought not to increase in direct ratio to the increase of its gross receipts—that where the earnings of a railroad go from \$500,000 to \$1,000,000, the current expenses ought not to go, for instance, from \$250,000 to \$500,000, as the enlarged receipts may be attended apparently, with only a slightly increased amount of service. So, too, it would seem reasonable that the ratio of profits of various roads should be in direct ratio to the amount of their gross receipts; that if a road earning \$4,000 per mile can save 40 per cent. of this amount, a road earning \$8,000 per mile, should certainly be able to show a net profit of 50 per cent.

While such are inferences that cannot be gainsayed, the results usually obtained, are very wide of them. In fact they seem to contradict them. Take for instance two New England roads—the Boston and Lowell, and the Portland, Saco and Portsmouth. The former earns say \$15,000 per mile; the latter only about \$4,250. The total earnings of the Boston and Lowell Railroad since it went into operation have been \$7,778,838; operating expenses \$4,633,043, or 60 per cent. of the earnings. The total earnings of the Portland, Saco and Portsmouth Road (not including the year just closed), have been \$2,891,000; operating expenses \$1,270,000, or 43 per cent. of the receipts. There is no apparent reason why there should be such a wide difference. The Boston Lowell Road has a better line, and has uniformly charged higher rates of transportation. We can refer the difference to no other cause, than to the difference in the capability with which the two roads have been managed.

The instances cited, are not extreme or uncommon ones. They are so common that no ratio whatever is to be looked for between the gross and net earnings of a railroad. Why there is none, is due to the fact that able, or economical management is rather a matter of chance, or luck, than anything to be calculated upon with a reasonable degree of certainty. Under our present system very little stimulus, or motive, to good conduct is held out to the employees on a road. These are not regarded as responsible for *want* of success. They hold their places by equally safe tenure, whether the road be profitable or not. Their compensation bears no relation to the *value* of their services. Whether valuable or not becomes a matter of indifference to them. The result of a system so faulty, is seen in the great number of our roads having large receipts, but which return nothing to their owners.

The remedy for such a state of things we have already described. Our roads must be so managed that any person employed on them shall be compensated in proportion to the *value* of his services. On such a system extraordinary qualities would soon place to net earnings every penny that could be made out of them.

Rock Island Railroad.

It is reported, we do not know with what truth, that the bridge over the Mississippi at Rock Island, partly owned by this company, has received an injury so serious as to prevent its present use. This fact is made the occasion of a feeble comment on the policy of the company by one of our city papers, and of a kind of inferential defense by another.

This matter of the bridge accident we regard as of small moment. Direct injuries or losses are always trifling, compared with those resulting from design or incompetency. *Ten thousand* dollars may be sufficient to repair the bridge. *A hundred* times that sum would not repair the loss resulting from the Bureau Valley lease, which the directors of the Rock Island saddled upon their company, a portion of them being contractors for building the leased road. Have directors of one road the right to contract for the construction of a another, taking a portion of their pay in stock and bonds, and then cause a lease of the same to be taken by the company of which they are directors, at three or four times its worth, as a means of making their securities valuable, and three or four hundred per cent. on their investment. Supposing the thing to be legal, can a greater offence against property, or a greater piece of rascality be committed? Directors of railroads should be the custodians of the property they have in charge; not *plunderers* of it. There would be less cause of complaint, did the directors of the Rock Island road ever tell us anything about the cost, earnings, etc., etc., of their leased line. But they are too cunning to furnish the public with the figures which would convict them of the commission of a gross outrage, well knowing that resentment and clamor dies out unless fed upon something that is tangible.

So, too, with the Rock Island Bridge. This structure has cost an immense sum. Who can tell how much, the revenues it yields, or who lose or make by it? We suppose it has cost a half a million of dollars. Here is a sum large enough to be deserving of a statement of it to appear somewhere. If half of it belongs to the Rock Island Company, should not some account of it appear in the reports of that company? It may be, that while half nominally belongs to another company, the Mississippi and Missouri, the money has been mainly furnished by the Rock Island, as the most able of the two companies. The same parties who control the latter, are the contractors, or are owners of securities of, the Mississippi and Missouri Railroad. It would be natural that they should desire to crowd off such liabilities, as they may be able, upon the Rock Island Company. Their success in the Bureau Valley lease is a precedent too valuable not to be attempted a second time. At any rate, after this achievement, they are proper parties to be looked after sharply, especially when they take especial pains to cover their trail, and as directors, keep from the public information most important to be communicated. Will the next report of the company, soon to be made, supply it?

Interest and Dividends.

Coupons for interest maturing July 1, 1859, on the Chicago, Burlington and Quincy Railroad Company, the Chicago and Aurora Railroad Company, will be paid at maturity at the Bank of Commerce in New York. The interest due July 1st on the freeland bonds of the Florida, Atlantic and Gulf Central Railroad will be paid on and after that day by Joseph Grice, 96 Wall street.

The coupons due on the bonds of the New York and New Haven Railroad will be paid at the depot, corner of Twenty-seventh street, or at the Bank of the Republic.

The coupons of the Sacramento Valley Railroad Company, due July 1, 1859, on \$400,000 first mortgage bonds, will be paid on and after that date, at the office of Schuchardt & Gebhard.

The coupons on the bonds of the Alabama and Florida Railroad Company of Florida, due 1st July next, will be paid on that day at the Bank of the State of New York.

The semi-annual interest due July 1st, on the Missouri Railroad bonds, will be paid on and after that date at the Bank of Commerce.

The interest accruing on the debt of the State of Illinois, July 6th, will be paid by Mr. James Miller, Treasurer of Illinois, at the office of Howe, Hamlen & Co., No. 95 Wall street, on and after the 5th prox. All interest not collected between the 5th day of August next will be paid at the office in Springfield.

The Worcester and Nashua Railroad has declared a semi-annual dividend of \$4 per share, payable July 11th.

The Panama Railroad Company, a semi-annual dividend of 6 per cent., payable July 1.

The Illinois Central Railroad are now paying their scrip, due July 1st—less the interest to that date.

The Boston and Worcester Railroad has declared a semi-annual dividend of 3 per cent., payable July 1st.

The Broadway Bank has declared a semi-annual dividend of 5 per cent., payable on the 1st prox. The Chemical Bank, a quarterly dividend of 6 per cent. The Bank of New York, a semi-annual dividend of 3 per cent., payable July 1st. The Seventh Ward Bank, 5 per cent. The Mechanics' Bank, a semi-annual dividend of 4 per cent., payable July 1st. The Bank of America, a semi-annual dividend of 3½ per cent., payable July 1st. The Tradesmen's Bank, a semi-annual dividend of 4 per cent., payable July 1st. The Atlantic Bank of Brooklyn, a semi-annual dividend of 5 per cent., payable July 1st.

The usual semi-annual interest dividend of 3½ per cent. has been declared by the Great Western Marine Insurance Company. The Goodhue Insurance Company has declared a dividend of 6 per cent. The Fulton Fire Insurance Company, an extra dividend of two and a-half dollars per share. The Park Fire Insurance Company, a semi-annual dividend of 10 per cent., payable July 1st. The Brooklyn Fire Insurance, a semi-annual dividend of 10 per cent., payable 1st July. The Mercantile Mutual Insurance Company has declared a semi-annual interest dividend of 3½ per cent. on the capital stock. The Metropolitan Fire Insurance Company, an extra dividend of 3 per cent., payable July 1st. The Mechanics' Fire Insurance Company, Brooklyn, a semi-annual dividend of 10 per cent., payable July 1st.

Railroads of New Hampshire.

Statement showing the cost, earnings, etc., etc. of the Railroads of New Hampshire, for 1858-9.

Name of Road.	Cost.	Gross receipts.	Current expenses.	Net earnings.	Rec'd from pass'gers.	Rec'd from freight.	Do. Miscellaneous.
Ashuelot.....	\$395,018	\$30,000	\$141,382	\$6,338	\$61,238	\$151,314	\$12,168
Boston, Concord and Montreal.....	3,015,880	227,720	30,125	19,362	25,219	29,623	3,646
Concord and Portsmouth.....	250,000	58,488	80,125	18,815	97,237	165,806	17,821
Cheshire.....	3,082,757	297,332	188,815	108,527	17,063	83,199	4,278
Cocheco.....	866,659	44,709	27,646	17,063	17,281	257,975	29,314
Concord and Manchester and St. Lawrence.....	2,663,463	459,659	244,572	213,943	151,088	10,440	1,000
Contoocook River.....	200,000	16,608	16,074	1,528	4,801	17,212	3,632
Great Falls and Conway.....	408,564	27,826	13,990	13,836	9,613	10,440	1,000
Merimac and Connecticut Rivers.....	1,282,380	59,774	38,618	21,156	19,623	33,896	6,802
Northern.....	3,580,246	358,100	176,110	176,990	83,876	256,416	12,809
Sullivan.....	1,250,000	63,874	43,976	19,897	27,146	32,761	8,967
Wilton.....	227,497	13,620	10,449	6,169	6,185	9,280	1,162
White Mountains.....	200,000	15,628	10,449	6,169	6,185	9,280	1,162
Totals.....	\$17,017,464	1,768,333	\$930,657	\$828,676	\$499,147	\$1,000,924	\$208,324

Portland, Saco and Portsmouth Railroad.

The earnings of this road for the past year were:

From passengers.....	\$155,953
" freight.....	44,317
" mails, etc.....	11,727

Total.....\$211,997

The current expenses for the year were \$100,853, to which was added \$10,000 for renewals, making the total net income \$101,144. Two dividends of 8 per cent. each, amounting to \$90,000, were paid. The surplus for the year was \$11,144, which, added to this fund, made the total amount in hand May 31st, \$40,844.

The capital account is represented entirely by stock, of which \$1,500,000 has been issued.

The road is represented to be in excellent condition, which we may well credit from the fact that it has never failed to make and earn yearly dividends of 6 per cent. It could not have regu-

larly done this unless it had been well managed and maintained. The earnings of the road have never exceeded \$5,000 per mile. It has a vigorous steamboat competition, yet by good management it has been enabled to make a fair return upon its cost, which many of our roads have failed to do upon receipts relatively twice as great.

New York and Erie Railroad.

We understand that steps have already been taken by some of the mortgage bondholders to foreclose their mortgages, for the purpose of obtaining possession of the road. All such measures are to be deprecated and avoided, if possible. In the emergency should not a meeting of the stock and bondholders be called? There is not only no well-defined opinion as to the real value of the road, but there is also a want of adequate basis, or knowledge upon which to form such an opinion. For two years past the ratio of expenses to earnings have been nearly 75 per cent. Is this to be the rule, or an exception? If the rule, then the sooner the fourth mortgage bondholders go into peaceable possession of the road the better. On the other hand, if the road can be operated at a lower rate than 75 per cent. of its earnings, it is important to have the approximate figures, as a means of knowing how large a burden the road can carry. A public meeting of all interested, would have a tendency to draw out the desired information.

Mississippi and Tennessee Railroad.

We learn from the Memphis *Avalanche* that track-laying on the southern section of this road has been commenced, that it will continue until fifteen or twenty miles are laid. The road will certainly be opened for business as far as the Yokena river, a distance of seventy-two miles from Memphis, on or about the 1st day of October, and in all probability, to the Oakland Depot, a distance of eight miles beyond the river, by the 1st of November. The entire road is under contract, to be completed by the 1st day of January, 1861.

The receipts of this road for the eight months ending May 31, 1859, amounted to \$136,053.85.

Cleveland and Toledo Railroad.

The earnings of this road for the year ending April 30, were—

From Passengers.....	\$485,337 45
" Freight, mails, &c.....	312,818 20

Total.....\$798,155 65

Running expenses for the same period. 383,699 73

Net earnings.....\$414,455 92

From this is to be deducted:

Interest on funded debt.....	\$269,500 00
Rent of C. C. and Cincinnati road....	66,000 00
Sinking fund.....	38,000 00
Interest on floating debt, &c.....	35,000 00

Total.....\$408,500 00

Net earnings.....5,955 00

The earnings are \$132,096 81 less than for the preceding year. The report says:

The financial position of the company has not materially changed since the last annual statement. The interest on the bonded debt has been paid, and the obligations of the company have been met as they became due. The total amount of the outstanding notes of the company June 1, 1859, is \$358,605.64. The outstanding bonds of the company amount to \$3,842,720. A gradual exchange of the outstanding bonds of the company for the sinking fund mortgage bonds has

been going on during the year, so that at the present time the outstanding bonded debt includes \$640,000 of said bonds.

Alexandria, Loudoun and Hampshire Road.

We learn from the *Washington States* that the rails have been laid upon this road as far as Arlington Mills. The road passes some three miles to the south of the District of Columbia, and it is proposed to connect with the District cities by a branch road crossing the Potomac Aqueduct at Georgetown. Surveys have been made upon the whole line, which passes through some of the most populous and wealthy counties of Virginia, and terminates in the centre of the vast mineral region covered by the counties of Hampshire and Hardy. The grading is already completed as far as Leesburg, in Loudoun County, to which point the road will be opened in the course of the summer. When completed, it will be one of the most valuable feeders ever opened to the business of the cities of Washington, Georgetown and Alexandria.

Michigan Central Railroad.

The result of the operations of this road for the current year are stated to be about as follows:

The annexed are said to be figures of the forthcoming Michigan Central Railroad report:

Gross receipts for the year end'g June 1. \$1,889,000
Expenses..... 1,072,737

Interest for year, &c \$806,268
735,000

Net profits \$71,268
Credit of income account, 1858..... 87,419

Aggregate credit..... \$168,687

Sunbury and Erie Railroad.

We learn from the *Philadelphia News* that the last rail necessary to complete the track of the Sunbury and Erie Railroad to Lockhaven has been laid. The first passenger car between Williamsport and the Bald Eagle Bridge, which is a short distance below Lockhaven, was run over the road to that point on the 15th, carrying, among other gentlemen, the Governor of the State, and the President and Chief Engineer of the Company. The line is now complete from Sunbury to Lockhaven, and arrangements are nearly completed for the regular running of the trains between these points. Above Lockhaven, and to the head waters of the Sinnemahoning, the grading of the road is nearly all completed, and a very short time will be sufficient to have the rail down to this point. The present extension, in connection with some lateral roads already constructed, reaches the rich coal fields of the West branch, and a very large trade from this source is now ready to go on the road. The entire work of construction on the middle and western divisions will be vigorously pressed during the present season, and it is confidently expected that the rails will be laid to the

The Clinton Bridge.

Respecting the Clinton bridge, which is to connect the Galena and Chicago with Iowa Railroad the *Chicago Democrat* of the 17th, says:

"The bridge at this place is progressing rapidly under the energetic superintendence of the contractors, Messrs. Cross & Wicks, assisted by D. Harper, Esq., of this city. The masonry and pile work is about three-quarters done, and the superstructure half done. The bridge will cost, in all, about \$100,000, which is comparatively a small sum. It is being constructed by a company of Boston capitalists.

Louisville and Frankfort Railroad.

The completion of this road to Franklin was celebrated on Saturday morning last by a barbecue.

Dayton and Michigan Railroad Company.

The annual meeting of the stockholders of this company was recently held at their office in Dayton. The attendance was unusually large for such an assemblage. The reports of the present Superintendent and Secretary were listened to with great interest, and seemed to give very general satisfaction.—The affairs of the company would seem to be in a prosperous condition. The iron for the remaining seventy miles (Lima to Toledo) is purchased and now being laid in the track.—Great hope is expressed that the road will be completed to Toledo by the first of September next. From the Superintendent's report, we learn that although that portion of the road between Lima and Sidney was not in full operation until the 22d day of September, the gross earnings were—

From passengers \$69,340 84
" freight 49,825 32
" mails and express 5,393 32

Total earnings..... \$124,559 48
The operating expenses amount to... 57,779 58

Leaving for net earnings.... \$66,779 90

The total mileage for engines 144,606 miles, at a cost for repairing, etc., of \$5,862 26, or 4½ cents per mile run. The number of passengers transported was 83,496, at an average fare of eighty-three cents each.

From the above, it will be seen that the operating expenses were about 46½ per cent. of the gross earnings. The election for directors was held at the same time and place, and the old members were unanimously re-elected.—*Cin. Commercial*.

Chicago, Detroit and Canada G. T. Junction Railway.

The *Detroit Advertiser* states that the work on this line of road from Detroit to Port Huron is progressing favorably. The first locomotive with iron for the Mount Clemens section, passed over the ten miles already constructed, on Monday.

The station to which this iron was forwarded is called Fraser's station. We understand that arrangements are so far complete that the rails can now be placed at the rate of one mile *per diem*. The contractors are pursuing their work with great diligence and efficiency.

The Delaware and Maryland Railroad.

The Somerset (Md.) *Union* predicts that this road will be in actual operation to Salisbury, in that county, by the close of the present year. It is already under contract to the Maryland State line, at a cost of only thirty-six cents for the right of way to Seaford, Del., a distance of 13 miles. The bridge across the Nanticoke, at Seaford, is nearly completed, and in two months trains will be enabled to run as far as Laurel. It is expected that in a few days the road will be under contract to Salisbury, on favorable terms.

Ground has been broken on this road at a point near Bethlehem, Penn. The road is to connect the North Pennsylvania, and the Delaware, Lackawanna and Western. It is expected that it will be finished in May next.

The Ohio County Bonds.

The *Wheeling Intelligencer* says: The County Court of Ohio county, Va., has decided not to make a levy for the payment of the warrants and coupons due, and becoming due, during the coming year, for the interest on the bonds of Ohio county issued to the Hempfield Railroad Company. The Court made an order appointing a commission to ascertain from the holders of the bonds by what sum they will surrender the same for cash, on or before the first day of May next.

Provincial Canals.

Reduction of Tolls.—By an order in Council, to take effect on the 15th inst., considerable reductions have been made on the tolls upon the Welland and St. Lawrence Canals. On the Welland Canal articles in the third class have been reduced from 20 cents to 15 cents per ton; those in the fourth class from 25 cents to 20 cents; those of the fifth class from 30 cents to 25 cents; and those of the sixth class from \$1 to 50 cents; while boards, planks, scantling, and other sawed lumber, which lately paid 30 cents per 1,000 superficial feet, are now charged 20 cents. Barrel staves and headings 30 cents, instead of 40 per M; pipe staves \$1.50, instead of \$2, and West Indian staves 60 cents, in lieu of 75 cents.

The following articles, which hitherto paid \$1, as coming under the 6th class, have been transferred to the 5th class, paying 25 cents per ton only, viz: rosin, tar, pitch, whiting, chalk, ships' stores, crockery, iron safes, soda ash, white lead, paint, turpentine, dye woods and dye stuffs, leather, manufactured tobacco, mahogany, and agricultural implements. Ice has been placed in 3d or lowest class, and horses, and all kinds of oil in barrels, have been put in the 4th class.

Liabilities of Towns for Subscriptions to Railroads.

The suits involving the liability of several towns of this county upon bonds issued to aid in the construction of the L. O. A. & N. Y. R. R., which had been argued before the General Term of the Supreme Court, have just been decided by that Court in full bench, Judge Strong presiding, and Judges Welles, Smith, and Johnson, associates.

The Court sustains the validity of the bonds, and holds the towns liable to pay them to bona fide holders. The opinion is written by Judge Strong, and it is understood to cover the whole ground of overruling all points of defence, and to be concurred in by the whole bench. This decision sustains the good faith of the towns. They will doubtless cheerfully comply with the judgment of the Court.—*Auburn Advertiser*.

Auburn and Allentown Railroad.

Since the announcement of the increase of tolls on the railroad and canal, the business men of Schuylkill county seem determined to secure an outlet to New York direct, if possible. A number of persons met a committee connected with the Auburn and Allentown Railroad in New York last week, and they proposed to push the road through as rapidly as possible, provided the sum of \$150,000 is subscribed in and by those interested in Schuylkill county, for the purchase of iron—said amount to be taken in stock or bonds, if any bonds should be issued. The company prefer building the whole road with stock only, if it can be secured, and issue no bonds. About \$350,000 have already been expended—\$800,000 are ready—and the balance over and above the \$150,000 for the purchase of the iron, will be forthcoming as soon as the \$150,000 is subscribed. No money will be required until the roadway is graded.—*Pottsville*

Macon and Brunswick Railroad Commenced.

In the early part of last week, Mr. McNeill, with his corps of engineers and assistants, commenced the location of the Macon and Brunswick Railroad. The location has been completed to the point at which the Ocmulgee is to be crossed, and on yesterday the camp was moved to the east bank, and it is expected that the work will be vigorously prosecuted until forty miles is finished, when the contracts for the grading, superstructure, &c., will be let out.—*Macon Telegraph*, 12th inst.

Androscoggin Railroad.

This road is completed to Farmington, to which place a passenger train run on Monday last. By the completion of this road the fertile valley of Sandy river is brought in close connection with our city, which, we have no doubt, will result to the advantage of both places.—*Portland Advertiser*.

Maysville City Bonds.

A few days since the Court of Appeals affirmed the decision rendered by Judge Phister, at the April Term of the Mason Circuit Court for 1858, in the case of Graham & Knox agt. Alex. Maddox and others, composing the Board of Councilmen for the city of Maysville.

This was an application upon the part of the plaintiffs, holding certain bonds of the city of Maysville, issued in part payment of its subscription to the capital stock of the Maysville and Lexington Railroad Company, for a mandamus to compel the city council to levy and collect a tax to pay the interest due and in arrears on said bonds; and the case having been elaborately argued on the 29th day of April, 1858, Judge Phister rendered a decision in favor of the plaintiffs. The defendants appealed, and the decision of the Circuit Court is sustained. The Court of Appeals has awarded a mandamus, as asked for by the plaintiffs, and its decision is emphatic on all the points involved.

Louisville and Nashville Railroad.

Travelers are now making the trip from this city to Nashville in twenty-seven hours. The trains leave Nashville at three and a half o'clock, P. M., and arrive at Louisville at six o'clock, P. M., next day. By the Louisville route passengers reach New York in less than three days. In November the road will be completed, when those who journey can breakfast in one city and sup in the other. —*Louisville Courier*, 13th.

Illinois River Railroad.

The iron for this road is now being received at New York. Thirteen vessels loaded with it have arrived. The iron brought by seven of them had been shipped for Chicago, a portion of which had reached the latter place, and would be forwarded to Pekin at the earliest practicable moment. Track-laying will soon commence. —*Alton (Ill.) Courier*, June 18.

Competition on the Lakes.

The Cincinnati *Gazette*, of the 17th, says new difficulties have arisen at the West among the railroad people:

"The steamboat lines on Lake Erie and the Hudson river, not having been included in the compromise, are competing for the passenger travel by selling tickets from Cleveland to New York at reduced rates. To meet this, the Lake Shore Railroad, we understand, reduced its fare \$1. This latter reduction, if persisted in, will, of course, be followed by a corresponding change in the tariff of the Pennsylvania Road."

Hudson River Railroad.

On the 13th instant, the following gentlemen were elected as Directors of the Hudson River Road: Samuel Sloan, James Boorman, John David Wolfe, Edward Jones, William Kelly, D. Thomas Vail, Erastus Corning, William H. Hays, Robert P. Getty, Henry A. Smythe, E. M. Gilbert, J. B. Johnston, E. H. Miller. Mr. Samuel Sloan was unanimously re-elected President, and Mr. D. Thomas Vail, Vice-President.

Amboy and Grand Traverse Road.

The citizens of Saginaw city have agreed to loan \$60,000 for twenty years to the Amboy, Lansing and Grand Traverse Bay Railroad, and also in behalf of the city to subscribe a like amount. The Directors of the road agreed on their part, in event of prompt payment of \$100,000, to grade the road between that city and Owosso within six months of the time of the ratification of the contract, and finish and equip the same by one year from July 4 next ensuing.

Cincinnati and Chicago via Logansport.

The U. S. Circuit Court has appointed Wm. Ball, of Terre Haute, Receiver for the Cincinnati and Chicago Road—Richmond to Logansport—and that gentleman has entered upon the discharge of his duties. The management of the road is not to be interfered with.

Peoria and Bureau Valley Railroad.

The annual meeting of the Peoria and Bureau Valley Railroad Company was held in Chicago on the 9th inst., when the old Board of Directors was re-elected, as follows: Henry Farnham, N. B. Judd, of Chicago; Charles W. Durant, F. H. Tows, of New York city; John L. Griswold, John Hamblin, of Peoria.

At a subsequent meeting of the Directors, N. B. Judd was re-elected President, Washington Cockle, of Peoria, Secretary, and C. W. Durant, Treasurer.

European and North American Railway.

On Wednesday, June 8th, the European and North American Railway was opened from St. John to Hampton with appropriate ceremonies and rejoicings.

Southern Railroad.

Wm. M. Wadley, Esq., late of the New Orleans, Jackson and Great Northern Railroad, has been appointed Superintendent of the Southern Railroad.

Baltimore City Passenger Cars.

The track on Broadway for the City Passenger Railway is completed to within a few feet of Baltimore street, and a large force of laborers are engaged in filling in between the tracks with earth and repaving the street. Messrs. POOLE & HUNT have contracted for building the cars, which are to be handsome and tasteful. The contractors intend commencing on Baltimore street to-morrow with an increased force of excavators. They design commencing at the other end in a short period, so as to complete the work by the end of August. —*Balt. American*, June 23d.

Nashville and North-Western Railroad.

We learn from advertisements that proposals are invited for the grading, bridging, and masonry, of twenty-three miles of the Nashville and North-western Railroad out from Nashville, the contracts to be awarded on the 12th of July.

DR. A. MERRIMAN, DENTIST.

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A MERCHANT IRON AND WIRE ROD ROLLING MILL, situated in the City of Wheeling, Va., with Coal banks in rear of the mill containing an abundance of good bituminous coal.

The cost of the fuel delivered to the furnaces is but two and a-half cents per bushel.

Attached to the mill is a WIRE FACTORY and its appendages. Also a KIRK STEAM HAMMER for Forging Car Axles, etc. There is extra shafting and surplus of power for other work if required.

The extraordinary cheapness of the fuel, and the facilities for obtaining metals, and for shipping, both by water and rail, to all parts, particularly west and south, makes the locality a desirable one for the manufacture of IRON in any or all its branches.

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To Locomotive Builders.

WANTED a situation by a Draughtsman well acquainted with the practical construction of Steam Engines, particularly Locomotive Work
Address Box 492 Paterson, N. J. 25

FREIGHT CARS for SALE.

11 CARS—Have been run about one year, viz:—
2 long 8-wheel Box Cars,
9 " " Platform Cars.

These Cars are made in the best manner, with large axles, brakes, Lighter boxes, etc., and will be sold low for cash.
WILLIAMS & PAGE,
44 Water st., Boston.

FOR SALE.

2,250 TONS English Rails, (about), 54 lbs. to the lineal yard, Erie pattern, Bars 24 feet long. Terms, Cash.
GEO. T. M. DAVIS,
New York, June 1, 1859. 4123 47 Exchange Place.

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2 FIRST CLASS LOCOMOTIVES, warranted to be superior in every respect. Weight 21 tons. Gauge 4 feet 8 1/2 inches. Cylinder 15x23 inches. Outside connection. Boiler 44 inches diameter. 130 Copper Flues, each 10 feet 6 inches long, 2 inches diameter. 800 sq. feet Fire Surface. Tender 1,700 gallons. 5 feet Drivers. Are entirely new, never having been used. For terms apply to
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BAR, TOOL, DRILL, AND DIE STEEL
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.

CAR SPRING STEEL.

Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough.
Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

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HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at Jonesboro, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

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THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

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MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS, of every variety of pattern.

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And 17 NASSAU STREET, NEW YORK.

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THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
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RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.

M. K. JESUP & COMPANY,
New York, June, 1859. 44 Exchange Place.

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THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAGHAN, proprietors of the **ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG.,** are prepared to contract for the sale of **RAILROAD IRON** of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COMPY,
44 Exchange Place.

New York, 1st June, 1859.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in **STAFFORDSHIRE and WALES**, are prepared to contract for delivery on board ship at **LIVERPOOL, or WELSH port.**

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13 Cliff st., N. Y.

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CONTRACTS FOR RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

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500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

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Boston, June, 1851.

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THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

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Erie Rails, 57 to 58 lbs. per yard, on hand in **NEW YORK and NEW ORLEANS.**

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THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the **Dowlais Iron Works**, near Cardiff, South Wales, are duly authorized to contract for the sale of their **G.I. Railroad Iron, and Common Bars**, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

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VOSE, LIVINGSTON & CO.,
9 South William st.

New York, Aug. 1, 1858.

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MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new **ROLLING MILL**, having been working only eighteen months, and confined to work for roads on this line between **Buffalo and Chicago** in re-rolling old Rails. The capacity is **Forty Tons** per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

from Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation.

February, 1858.

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The **Crescent Manufacturing Company,**
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

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Lap-Welded Boiler Flues,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
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Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

See list 18, 1854

1758

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These works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for **RAILROAD IRON** of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T rails, of the following weights per lineal yard, viz:—25, 30, 35, 40, 45, 50, 60, 62, and 75 lbs.

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Address **J. H. SCRANTON, President,**
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WELSH or **Staffordshire** make, delivered on board at an English port or at a port in the United States.

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OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

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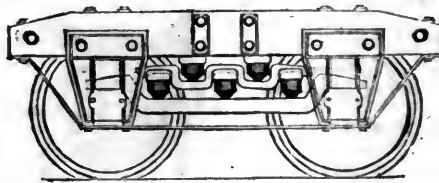
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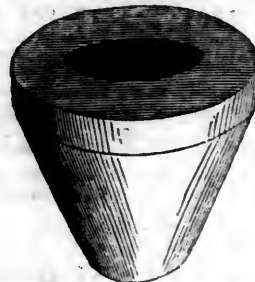
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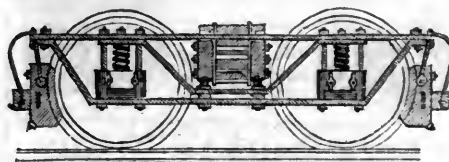


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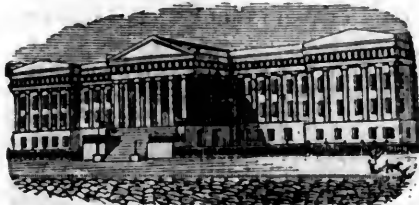
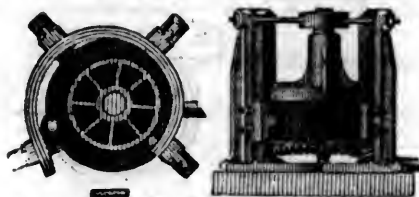
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The subscriber feels confident that persons who will examine
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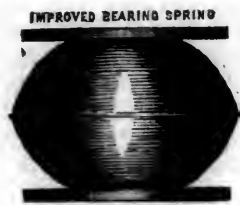
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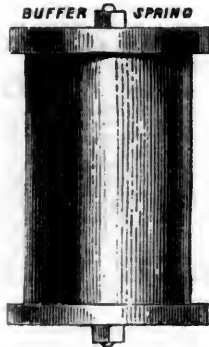
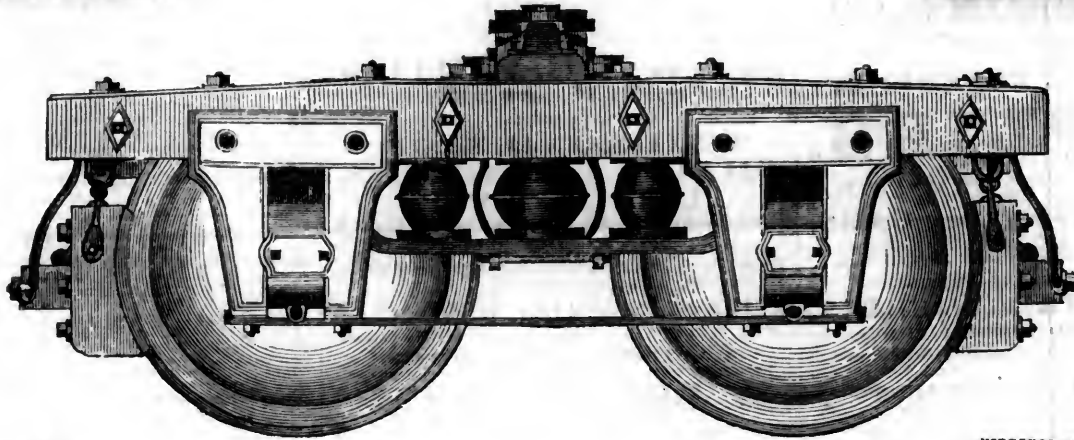
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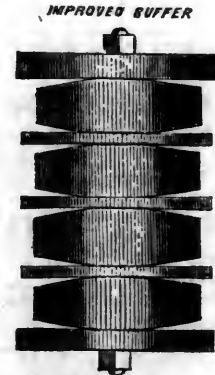
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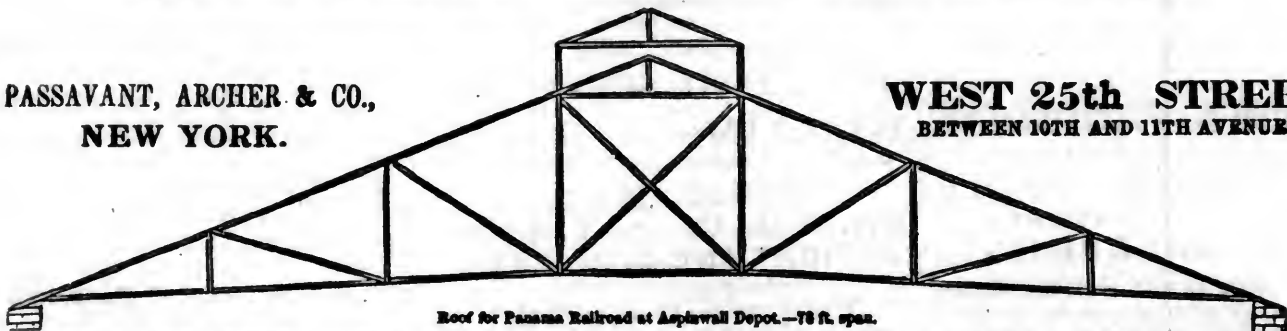
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 27.]

SATURDAY, JULY 2, 1859.

[WHOLE No. 1,211, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, July 3, 1859.

Parkville and Grand River Railroad.

This is a proposed railroad to connect the Missouri River, near the western boundary of the State, in Platte County, with the Hannibal and St. Joseph Railroad. The distance is from 45 to 50 miles. The route has been located, and a section of five miles placed under contract. It is proposed to raise the means for its construction in a rather novel, but very proper manner—to assess its cost upon the real and personal property lying within five miles of its line. For this purpose authority has been obtained from the legislature to submit the question to a vote of the parties proposed to be taxed. Should a favorable result be obtained, the road can be built without issuing bonds. The route is an easy one. The whole cost being estimated at \$750,000. A sufficient sum has already been subscribed to grade the road. The report of the directors speak in an encouraging manner of its probable success. The present board consists of L. C. Prunty, Robert Cain, Wm. K. Faulconer, Geo. S. Park, Levi Hinkle, C. P. Summers, Alfred Gray, J. W. Wright, F. Johnson, of which Geo. S. Park is President. The office of the company is at Parkville, Mo.

How much can our people pay annually for the Transportation of Persons and Property?

In the construction of a railroad, or of a system of railroad, a lucrative business is assumed as a matter of course. Our people never stop to consider whether there must not be a limit to the ability of a people to contribute to the support of such works—a necessary relation between their number and the extent of their commerce—and whether all beyond a certain outlay for works of improvement must not remain without adequate employment.

What is the extent of the contributions that a community can make toward the support of railroads? The people of Massachusetts pay more, to these works than any other community in the world. The receipts of her roads compared with her population for 9 years past have been as follows:—

	Earnings.	Population.
1850	\$7,089,159	973,654
1851	7,281,346	1,005,397
1852	7,713,208	1,037,140
1853	8,966,441	1,068,853
1854	9,973,377	1,100,626
1855	10,100,914	1,132,369
1856	10,884,667	1,164,112
1857	10,583,574	1,195,855
1858	9,522,968	1,227,598

The above statement shows the ratio of earnings of railroads in Massachusetts to be very nearly nine dollars to each person.

In England and Wales, the largest earnings for any one year, 1858, were \$97,862,781, for a population of about \$19,100,000, giving a ratio of \$5.125 to each person.

The earnings of the railroads of New York, for 1856 were \$21,289,340: Population for the same year, 3,550,000: Ratio of earnings to population, \$6.

New England has a railroad system peculiar to itself. Only a very small portion of its receipts is contributed by the people of other States. The earnings of its roads for 1856 were \$18,657,273: its population very nearly 3,100,000: ratio of earnings to population the same as in New York, \$6 per head.

There is, of course, a constantly increasing ratio between the earnings of railroads and the population contributing to their support, but not

a rapid one. We cannot expect then that any State or section should show, immediately, more favorable results than those obtained in New England and New York.

If we take the States named as the most favorable instances of large earnings, what have we a right to expect from the Western States in which this interest is now greatly depressed? The population of these States is now very nearly 7,400,000, made up as follows:—

Ohio	2,300,000
Indiana	1,200,000
Michigan	800,000
Illinois	1,500,000
Wisconsin	800,000
Iowa	600,000
Minnesota	200,000
	7,400,000

The earnings of all the railroads of these States for 1858, were very nearly \$33,000,000 or \$4.46 per head. Five dollars per head, we conceive, would be a large average. It will be several years before it will go as high as \$6 per head. At \$5 per head the gross earnings would be \$37,000,000. This ratio, with good crops, will probably be reached the coming year. Sixty per cent. of this sum which certainly ought to be *net*, would be \$14,800,000. The total cost of the roads of these States amounts to \$250,000,000.

Such a result in gross would show net earnings equal to six per cent. upon the whole investment. The railroads of Massachusetts have earned in the aggregate just about six per cent. on their cost from the date of the construction of the first road. But the earnings of the roads, as in the west, are so unequally distributed, that a large amount of capital invested remains unproductive.

The experience of the railroads running into Chicago shows that their receipts cannot be expected to increase in the same ratio as their mileage. Every new road constructed reduces just so much the productiveness of capital already invested, either by dividing the business, or by turning trade in new directions. Ohio, Indiana and Illinois are already overstocked with these works. It would be well if those of the newer States could proceed at a slower and more uniform rate than has characterized their progress in the States named. Only so much money

can be got out of a given area, or a given population. The amount to be invested should have direct reference to those two elements. The instant the true ratio is exceeded, loss must ensue. We have had too much experience to throw away the lesson it has taught us.

It is now pretty easy to determine what a proposed road will be likely to earn. Not to adapt the expenditure to such probable earnings, is to wilfully throw away the experience we have gained.

Mississippi Central Railroad.

PRESIDENT'S REPORT.

During the fiscal year ending April 30, contracts were entered into for all the graduation, and bridging, on the line of the road not previously under contract. Sixty-five hundred tons of iron rails were purchased of Geo. Peabody & Co., of London, in September last, to be delivered in New Orleans. This is deemed sufficient to complete the main track of the road. Three thousand tons have been received; the residue may soon be expected.

All the necessary fastenings for laying down the iron have been purchased, a large part of them received, and the remainder will be delivered as required for the prosecution of the work.

The non-compliance of many of those who had entered into contracts for the delivery of cross-ties, with the terms of their agreement, has been a fruitful source of delay and disappointment in the progress of track-laying. To avoid which, in future, contracts have been entered into for a much greater number of ties than are necessary to lay down the entire track.

An agreement has been made with the contractors to lay all of the unfinished portions of the road-track—to place additional force on any unfinished work on the line of the road, that may without such aid retard their progress in track-laying, and to complete the whole by the first of December next.

Seven additional locomotive engines, four first class and two second class passenger cars, three baggage and eighty freight cars, have been purchased, to be delivered before October next. An additional number of passenger, baggage, and freight cars, will be necessary to accommodate the traffic of the road by the time the track is completed, and contracts should be made for them at an early day to insure their delivery by the time they will be required.

Payments on all contracts entered into during the past fiscal year, for constructions and equipments, are payable in whole, or in part, in the mortgage, or income bonds, of the company, with the exception of the contract for iron rails.

Freight buildings, with platforms of suitable dimensions, for the reception and protection of freights, have been erected at all stations on that part of the road now in operation. Houses for the accommodation of passengers should be constructed at all important stations, at as early a time as the means of the company will permit.

Arrangements have been made for the erection of a brick engine house at Canton, and a freight house at Grenada. Freight houses will have to be built during the present year at the several stations on that part of the road not yet completed.

The work of construction, during the past fiscal year, has not been prosecuted with the degree of energy desired by the Directory, or that your interest demanded, in consequence of the inability of the Directory to command, in the early part of the year, the necessary amount of funds required for that purpose. At no time has the work been suspended, but to enable the Directory to comply with their engagements to contractors, with the limited means at their command, they were compelled to reduce the quantity of work to be executed to the smallest possible amount that would satisfy those who had undertaken it, and to decline putting other work under contract unless it could be done on the most favorable terms of payment.

Circumstances beyond the control of the Directory, prevented the delivery and the laying down as early as expected at the date of my last annual report, the fifteen hundred tons of iron rails purchased in the early part of last year. It was then expected the track would be extended to Coffeeville and Durant by the first of October, but in consequence of the delay in the delivery of the iron, it did not reach those points until about the first of January last; a period when the best business portion of the year had passed, and thus materially lessening the anticipated earnings of the road.

The amount expended by the company for construction and equipment of the road from its organization to the expiration of the fiscal year, now just closed, has been as follows:

On account of construction, including engineering, grading, bridging, superstructure, right of way, salaries, and other incidental expenses.....	\$2,729,545 73
On account of depot grounds and buildings, machine shops, tools, engine houses, locomotives, passenger, freight, and other cars....	332,273 60
On account of discount on company and other bonds, int. on funded and floating debt.....	334,145 53
Conducting transportation, repairs to equipments, and maintenance of way, for the past fiscal year.....	112,213 82

Total expenditures.....\$3,508,178 68

This sum has been derived from the following sources:

Amount received on account of capital stock.....	\$1,641,947 72
Amount rec'd from net earnings of the road to May 1st, 1858.....	106,295 54
Amount rec'd on account of interest " earnings of the road for the fiscal year ending April 30th, 1859.....	148 32
Amount of funded debt of the company.....	239,585 54
Amount of floating debt of the Company.....	1,346,362 67
.....	383,129 94

Total receipts.....\$3,717,469 73

Remaining in the hands of the treasurer, cash—bills receivable—and other cash assets, to the amount of. \$209,291 05

From the foregoing expenditures of \$3,508,178 68, for construction and equipments, should be deducted \$317,871 84 discount on the company and other bonds sold, and the interest since paid thereon, which would leave \$3,190,306 84 as the actual cash expenditure for construction and equipments.

The funded debt of the company consists of the following items:

Amount of first mortgage seven per cent. bonds sold.....	\$1,007,363 60
Amount of income ten per cent. bonds sold.....	91,200 00
Amount of Tennessee State six per cent. bonds.....	45,000 00
Loan of Chickasaw school fund from the State, bearing eight per cent. interest.....	181,850 00
Loan of three per cent. fund from the State without interest.....	20,949 07

Total funded debt.....\$1,346,362 67

The Floating Debt is comprised of the following:

Bills payable, becoming due during the present and succeeding year....	\$249,443 98
Balances due to contractors and others.....	120,790 86
Balances to become due to contractors on completion of contract.....	12,895 10

Total Floating Debt.....\$383,129 94

Of the amount of bills payable, the sum of \$99,257 92 has been issued in payment of iron rails and engines. And this amount will be considerably increased on the arrival of iron now in transitu. About half of the aggregate amount of bills paya-

ble now outstanding, are payable during the present year, and the residue will become due during the following year.

To liquidate the Floating Debt, provide for interest on the Funded Debt, and to prosecute the work of construction and equipment of the road, the company possess the following assets:

Funds in the hands of the Treasurer.....	\$209,291
Balance due from the State on account of Chickasaw school fund loan.....	18,150
Balance to become due from the State on account of Internal Improvements. Land invested in the capital stock of the company (estimated).....	65,000
To be derived from loan of three per cent. fund from the State.....	20,000
First mortgage, seven per cent. bonds unsold.....	342,500
Income ten per cent. bonds unsold.....	408,800
Balance due on reliable subscription to capital stock.....	930,000

Total assets.....\$1,156,741

To these assets should be added the prospective earnings of the road during the present fiscal year. Past experience has confirmed me in the opinion that the estimate in my last annual report of a net annual income of \$680,000 would be realized from the operations of the road after its completion, is not an exaggerated one. The local traffic of that part of the road operated, has exceeded the estimates, and the most productive districts to be traversed by it has not yet been penetrated. The aggregate earnings of the road during the present year must depend in a great degree upon the time when the track is completed. If this is accomplished before the commencement of the next business season, as is now anticipated, the earnings will be very large; if not effected until the beginning of the next year, they will be materially lessened by the delay.

The interest of every stockholder will, therefore, be promoted by extending every possible aid to secure the speedy completion of the road.

Taking the operations of the past year as a basis of an estimate, and the first of January, 1860, as the time when the entire road will be in working condition, the net income of the road for the present fiscal year will not be less than \$325,000.

From this income must be taken the following items:

Interest on 7 per cent. Mort. Bonds sold..	\$70,500
" " 10 per cent. Inc. Bonds sold..	10,000
" " \$45,000 Tenn. State Bds. 6 per cent.....	2,700
" " Chickasaw School Fund Loan..	14,500
" " Floating debt (estimated).....	15,000

Total interest to be paid.....\$112,700

There remains \$212,300 of the estimated net income to be added to the other assets of the Company, making an aggregate amount of \$1,369,041 05—less any loss that may be sustained on future sales of bonds—applicable to the payment of the floating debt, and the construction and equipment of the road.

If the net earnings of the road, after completion, equal, or approximate the estimates heretofore made, and the assets of the company, exclusive of the mortgage and income bonds, are realized during the present and succeeding year, it will enable the company to discharge all of its present floating debt, pay the cost of completing the road, and for all materials necessary for that purpose, and supplying the road with all necessary buildings and equipment, without a sale of any additional amount of the securities of the company, or, if a sale of the income bonds should be effected, to expedite the completion and equipment of the road, its future earnings will supply the necessary means to retire them before they become due and payable.

I also submit the report of the Treasurer, exhibiting the receipts and disbursements of his department during the fiscal year.

At the date of his last annual report there was remaining in his hands funds to the amount of.....\$36,036 82
 Since that time he has received on account of subscription to capital stock. 66,473 72
 On account of interest. 148 32
 On account of sales of 1st mort. bonds of the company517,718 07
 On account of sale of income bonds... 91,200 00
 On account of sale of personal property 2,365 25
 On account of earnings of the road from transportation of freights, passengers and mail.....239,585 54

Total receipts.....\$953,527 72

DISBURSEMENTS.

On account of construction, materials, expenses, salaries, &c.....\$426,805 23
 On account of equipments, water stations, &c..... 90,107 57
 On account of discount, interest on floating and funded debt, &c..... 64,885 67
 On account of floating debt 50,224 38
 On account of operating expenses of the road, repairs of road, engines and cars..... 112,213 82

Total disbursements.....\$744,236 67

Remaining in the hands of the Treasurer, cash and other available assets 209,291 05

\$953,527 72

The earnings of the Northern Division of the road for the fiscal year were derived from the following sources:

PASSENGERS.

22,330 passengers going north.....\$32,969 62
 24,282 " " south..... 37,183 51
 News agency 160 00

\$70,313 13

FREIGHTS.

14,168 tons going north...\$44,315 67
 12,408 " " south... 50,310 00

\$94,646 77

United States Mails..... 14,198 07

Total receipts.....\$179,157 97

The expenditures have been:

Conducting transportation..\$36,587 66
 Motive power 7,808 65
 Repairs of cars 9,965 79
 Maintenance of way..... 31,924 85

Total expenses..... 86,285 00

Net earnings.....\$92,872 97

The proportion of expenses to gross earnings has been 48½ per cent. It is proper, however, to remark, that a portion of the expenses included in the above items were incurred during the previous year, and by an inadvertency were omitted in the operating expenses of the year to which they were chargeable.

The expenses of operating the Northern Division, with its heavy grades and deep sandy cuts, and consequent liability to abrasion from rains, will for many years exceed those of the Southern Division, where the grades are light and but few excavations.

There have been carried in the cars on the Northern Division, during the year, 46,612 passengers and 52,738 bales of cotton.

The earnings of the Southern Division have been derived from the following sources:

PASSENGERS.

9,476 pass'gers going north..\$11,186 03
 9,124 " " south. 10,547 35

\$21,733 38

FREIGHTS.

Freight going north.....\$14,014 00
 " " south..... 19,213 53

33,227 53

United States Mail..... 5,466 66

Total earnings.....\$60,427 57

The expenditures have been as follows:

Conducting transportation ..\$9,610 23
 Motive power 7,634 19
 Repairs of cars 944 31
 Maintenance of way..... 7,848 14

26,036 87

Net earnings.....\$34,390 30
 being 57 per cent. of the gross receipts.

There have been 18,597 passengers carried in the cars on the Southern Division, and 33,793 bales of cotton transported.

The gross earnings of both Divisions of the road have been:

From passengers\$92,046 51
 " freights 127,874 30
 " United States Mails. 19,664 73

Total earnings\$239,585 54

The operating expenses have been on the

Northern Division.....\$86,285 00
 Southern " 26,036 87

Total expenses.....\$112,321 87

Net earnings.....\$127,263 67

There have been carried on the cars, during the year, 65,209 passengers, and 86,581 bales of cotton. It has not been claimed that the road, when fully completed and equipped, would transport more than 150,000 local passengers, and 125,000 bales of cotton. Yet, during the past year, on an average length of 107 miles of road, more than two-thirds of the number of bales of cotton claimed for 188 miles, and nearly one-half the number of local passengers have been transported. The net earnings have been about \$1,200 per mile operated, or seven per cent. on entire cost when finished, and will be \$3,500 per mile when completed and fully equipped.

Had the track of the road been extended to Durant and Coffeeville by the first of October last, as was expected at your last meeting, the receipts would have been increased fully fifty thousand dollars.

The following is the amount of equipments now on the road: 11 locomotives, 6 passenger and 3 baggage cars, and 152 freight and construction cars.

The report of Mr. Robert Sterling, Chief Engineer, is also submitted. Mr. Sterling estimates the cost of preparing the unfinished portions of road-bed between Coffeeville and Durant, and laying down the superstructure, at \$268,141 13. In this sum is included all buildings that will be required between the points named.

The ascertained and estimated cost of the Northern Division of the road, extending from Grand Junction to Grenada, a distance of 99.94 miles, including all necessary buildings at the termini, as well as on the line of road—repair shops, bridges, masonry, iron rails, and other materials and labor of construction, at \$18,609 05 per mile of road. The ascertained and estimated cost of the Southern Division, extending from Grenada to Canton, a distance of 88.27 miles, including all buildings required on the line and at Canton, iron rails and labor, at \$16,907 26 per mile, making the average cost of the whole road \$17,758 15 per mile, exclusive of equipments.

If the cost of equipments, now on the road, with that for which contracts have recently been made, including the estimated cost of what will be required by the time the track is finished, are added, then the ascertained and estimated cost of the road, when completed, with all necessary buildings and equipments, will be \$19,935 per mile of road. The substitution of masonry for the present wooden structures should be adopted at as early a period as possible, and thus secure a more permanent way than you have at present. In all repairs of bridges, timber should be discarded and more durable materials adopted.

An agreement has been made with the Mississippi Central and Tennessee Railroad Company for the consolidation of that Company with yours under the name and style of the Mississippi Cen-

tral Railroad Company, in accordance with the provisions of the charter of the respective companies. The Mississippi Central and Tennessee Railroad is forty-eight miles in length, extending from Grand Junction to Jackson, Tenn., where it intersects the Mobile and Ohio Railroad. It has been well and economically constructed; is in good repair, and well supplied with equipments.

The consolidation has been in contemplation from the time of the organization of the Tennessee Company, and when finally consummated, will constitute a road of two hundred and thirty-six miles in length under the supervision of one Board of Directors. The employees of the respective companies may be reduced in number, and the ordinary expenses of the separate companies diminished by consolidation, and the earnings of the united roads may be increased without a corresponding increase of traffic from the greater distance that freight and passengers may be transported, a unity of interests with uniform rules of management, and avoidance of trans-shipment at Grand Junction, will insure a greater economy in operation, and have a tendency to increase the amount of both passenger and freight traffic. The capital liabilities and property of the respective companies will become the capital liabilities and property of the consolidated company.

The cost of the forty-eight miles of road, including equipments, station buildings, work shops and real estate, has been \$1,023,469 99, or \$21,322 per mile. This amount was derived from the following sources:

Subscription to the capital stock of the Co. \$309,562 26

FUNDED DEBT.

Six per ct. bonds of the State of Tenn.....\$529,000 00
 Company bonds sold... 95,500 00

\$624,500 00

FLOATING DEBT.

Bills payable\$16,721 03
 Due individuals and other roads 43,521 52

Net earnings of the road 58,417 21

Total receipts.....\$1,052,722 02

Less cash and other reliable assets on hand, exclusive of \$14,737 74, due on subscription to the capital stock of the company 29,252 03

Total cost of road and equipm't. \$1,023,469 99

The assets of the company are as follows:

Cash on hand\$4,702 47
 Due from agents, connecting roads and individuals 14,388 51
 Bills receivable 6,551 25
 United States Post Office Department. 6,159 80

\$29,252 03

To this sum should be added amount due on subscription to

Capital stock\$14,737 74

Total assets.....\$43,989 77

The net earnings of the road for the year ending April 30th, have been \$43,436 31.

The property of this company, exclusive of road, station buildings, work-shops and office furniture, is as follows: 4 locomotives; 3 passenger, 2 baggage and 46 freight cars; 1,000 acres of timber land on the line of road.

Chicago, Burlington and Quincy Railroad.

At the annual meeting of the stockholders of the Chicago, Burlington and Quincy Railroad Company, held in Chicago, 24th ult., the following Board of Directors was chosen: John Van Nortwick, Batavia, Ill.; Chauncey S. Colton, Galesburg, Ill.; Isaac H. Burch, Chicago; Jas. F. Joy, Detroit; Erastus Corning, Albany; Edward C. Baker, New Bedford, Mass.; John M. Forbes, John W. Brooks, Samuel R. Spinney, Robert S. Watson, William Boott, Boston.

Mechanics, Physics, and Chemistry.

On the coefficients of Elasticity and Rupture in Wrought Iron, in relation to the volume of the metallic mass, its metallurgical treatment, and the axial direction of its constituent crystals.
By R. MALLET, M. Inst. C. E.

It was assumed that amidst the numerous theoretical treatises upon, and practical investigations into, the strength and other properties of iron, the two questions which formed the prominent features of the author's present experimental inquiry, had remained comparatively untouched. The conditions of manufacture and the resultant qualities had been hitherto too lightly passed over.

Iron was formerly entirely worked under tilt hammers; the process of rolling was then introduced, and now, in consequence of modern engineering requirements, masses of iron of considerable magnitude were produced by faggotting together, under heavy forge hammers, from large numbers, either of bars or slabs grouped together. The masses were not, however, found to possess ultimate strength in proportion to the number of bars of which they were composed; in fact, it appeared that the strength of the mass became less in some proportion as the bulk became greater. This was admitted as a fact, but no one had hitherto attempted to show, experimentally—what function of the magnitude was the strength of a given kind of iron, manufactured in a given manner; or how the same forged mass, when very large, differed in strength in different directions with reference to its form; or how the mechanical part of the process of manufacture of the same iron affected its actual strength, either as a rolled bar or forged mass.

Addressing himself to this investigation, the author dealt generally with three points of the inquiry, viz:

1°. What difference did the same bars of unwrought iron afford to forces of tension and of compression when prepared by rolling, or by hammering under a steam hammer?

2°. How much weaker per unit of section, was the iron of very massive hammer forgings than the original iron bars of which the mass was composed?

3°. What was the average or safe measure of strength per unit of section, of the iron composing such very massive forgings as compared with the acknowledged mean strength of good British bar iron?

In the investigation of these questions other subordinate but very important points arose; such as the determination of the relative longitudinal and circumferential strength of equal sections of the iron in massive cylindrical forgings.

The proper measure of the strength of iron, or any imperfectly elastic material, was the "work done," whether by extension, compression, rupture, or crushing, due to any force applied to it. The coefficients T_e and T_r were designed by Poncelet to express this work done by an extending or compressing force upon any elastic prismatic body at the point where its elasticity became permanently impaired, and its form distorted, and at the further point where rupture occurred. The method of arriving at these co-efficients was then given, and it was shown that, though they were not sufficiently attended to in practice, yet that they were the true measures of the safe and ultimate resistance of materials when applied constructively in machines or otherwise.

The crystalline structure of iron was then considered, and quoting from the author's communication to the Royal Irish Academy (*Trans.* vol. 55, p. 1, 1855), it was shown to be a law that "Iron, whether in the state of cast or of wrought iron, has the principal axes of its integrant crystals arranged in the lines of least pressure within the mass."

If consolidation from fusion took place undisturbed, as in cast iron, the principal axes would be arranged in the directions in which the heat-wave had passed outwards from the body in cooling; which would be perpendicular to its surface contour—those being the direction of least pressure of the internal constraining forces, produced by contraction in cooling, which were necessarily parallel to the planes of external contour.

The effects of rolling and of hammering masses of wrought iron of different contents were then treated of, and it was shown that what was termed "fibre" was the longitudinal extension of the principal axes of the crystals. The original development of these crystals, under the constraining forces due to temperature, &c., was "*cateris paribus*" proportioned to the time given for such development. Thus, in very large forgings the crystals were generally extensively developed, in consequence of the length of time which the mass had been under the operations of heating and forging.

It had long been admitted that large forgings became weaker in proportion as their bulk was increased, but as no definite ratio was recognized it became of importance to fix the conditions of strength in wrought iron under various circumstances. The author was enabled to undertake this investigation, under the authority of the Minister of War, and with the concurrence of the Royal Society, when making the forgings for the two 36-inch wrought iron mortars constructed on his design for the Government; he then selected specimens of iron upon which the experiments of tension and compression were tried.

The methods were then explained by which the specimens of iron were obtained from large masses, and the apparatus was described by which the observations were made, when the specimens were undergoing the operations of extension and compression. In cutting and boring into the massive cylindrical forgings to obtain the pieces of iron from the various parts, it was invariably found that there existed internally large transverse rents, with jagged and crystalline irregular surfaces, the opposite faces of which were counterparts, and presented distinct evidences of having been torn asunder by contraction from the centre towards the circumference as the mass cooled. The rationale of the phenomenon appeared to be, that this action was simply due to the contraction of the external shell before the temperature of the centre had been perceptibly lowered; this, in its turn, was cooled, and in contracting produced these visible rents or fissures, and, no doubt, caused other minor dislocations, which detracted from the general strength of the mass.

This was evidently the cause of the difficulty of obtaining very large forgings of a cylindrical form quite sound; as if the diameter was sufficiently great, all such cylindrical forgings so built in construction, and so treated by heating, hammering, and cooling, in manipulation, must become unsound internally by the opening within the mass of one or more of these rents in the direction of the axis during the process of cooling. In solid cylinders, or conic frustra, it must occur whenever the dimensions were such that the total amount of contraction of the metal in any one diameter from its highest temperature down to that of the atmosphere, as fixed by the circumference of rigidity due to the outer cold shell, exceeded the limit of tension of the iron at rupture due to the length of the diameter of the interior core, which cooled last. This was the theoretic limit of size of forging, beyond which internal rents must occur. The practical illustration was, that almost all cylindrical shafts of wrought iron exceeding 12 inches in diameter were found to have one or more of these rents in them, thus having their strength impaired. This reduction of strength was altogether distinct from any deterioration of quality of the metal, arising from its being alternately heated and cooled and hammered.

The remedy for this play of molecular forces was to construct and work the large forgings hollow. This course had been pursued with success at the Mersey Iron Works, Liverpool. When a cylinder had a large concentric cylindrical hole along its axis, it cooled at the same time, though not equally, on both the internal and external surfaces, and thus the extremes of internal streams were avoided, and the hollow centre yielded more readily to the forcible compressive grasp of the exterior.

A minute description was then given of all the

irons which had been experimented upon, specimens of each being exhibited at the meeting. They were divided into classes according to their several characteristics and modes of working, and into the most analogous class was imported Clay's puddled steel, a comparatively new material, which had been brought into this investigation for the purpose of comparison, and the results were such as promised to be of great practical importance. The general results were the separation of several classes into two grand divisions: 1°. The crystalline, or sub-crystalline in fracture, which were always the result of manufacture by the hammer. 2°. The fibrous, or crystallo-fibrous, which were always produced by the rolling process, but which might be produced by careful and continuous elongation under the hammer.

The very weakest wrought iron of all those experimented upon was found to be that cut transversely from the end of a very heavy cylindrical forging, which had been exposed to heat and percussion for nearly six weeks. Exposed to tension its elastic resistance was only $3\frac{1}{4}$ tons per square inch, which was less than the average of cast iron; thus, as regarded pressure, it was the very weakest iron produced by any method of manufacture; whilst the faggot bars of which the mass was built and welded up, bore a tension of upwards of 12 tons per square inch before losing their elasticity, and of nearly 23 tons at rupture, and a pressure of nearly $21\frac{1}{2}$ tons before losing elasticity, and of nearly $27\frac{3}{4}$ tons at the point of total distension or crushing; thus proving the fact that the extreme weakness of wrought iron in heavy forging was not due to any metallurgical alteration in the constitution of the metal, but to changes in its state of aggregation, induced by a process of forging, by the long-continued and unequal heating, and by the hammering.

Hence was deduced the conclusion, that practically the iron of very heavy shafts, forged guns, huge cranks, and other similar masses, might be expected to become permanently set and crippled at a trifle above 7 tons per square inch, and to give way, by fracture, at about 15 tons per square inch by tension, and to completely lose form at pressures of from 15 to 18 tons per square inch. Therefore, it followed, that allowing a deduction of one-half, as sanctioned by practice, from the elastic limits of tension, and of pressure, for the margin of safety, the iron of such forged masses should not be trusted for impulsive strains exceeding about $1\frac{1}{2}$ tons per square inch of tension, and about $4\frac{1}{2}$ tons per square inch of pressure, or for passive tensile-strains of $3\frac{1}{2}$ tons per square inch, or for passive pressure beyond 9 tons per square inch.

Further experiments demonstrated that in heavy rectangular forged slabs of upwards of 12 inches in thickness, in the plane of the slab, the resistance to all the forces was much higher, and hence large cranks, which were usually cut out of such rectangular forgings, were stronger than the shafts to which they were attached, in the ratio of 8 to 6. The physical cause of the difference in strength between large cylindrical and rectangular forgings, although made from the same original material, was to be found in the difference of the molecular arrangement. The integrant crystals of the cylindrical masses were stained, distorted, and partially separated, by the effects of hammering in various directions, and by the peculiar constraining forces due to the contraction in cooling; whereas, none of these forces acted to the same extent upon rectangular masses, which were only hammered in three directions, and the constraining forces of cooling were all parallel to the faces of the parallelepiped, or in three directions only.

A special peculiarity noticed in heavy forgings was the sudden and extreme inequalities of texture and of strength found in different and even in closely adjacent portions of the same mass, producing greater uncertainty of result in practice.

Another peculiar feature was, that the rates of extension, or of compression, did not move uniformly, but by fits and starts. This phenomenon obviously arose from the *per saltum* disintegration

of planes of crystallization, and their more or less complete separation in a crystallized, but yet ductile body. This had never been observed in fibrous irons, or in those in which the finely elongated crystals were all rolled parallel, and in the line of the length of the bar, or of the sheet.

If the original, or integrant, faggot bars, from which a heavy forging was built and welded up, and a tensile elastic strength of 12 tons per square inch, the forged mass itself would have a mean tensile elastic strength of only 7 tons per square inch; and correspondingly if the faggot bar had a compressive elastic resistance of $2\frac{1}{2}$ tons, the forged mass itself would range under 18 tons per square inch.

Thus, within the limits of practice, the work of passive resistance, sustainable by heavy forgings, was about one-half that of the faggot iron from which they were manufactured; but at the ultimate point of rupture they gave a better result. Heavy forgings were also more trustworthy when exposed to tensile strains in direction of their length, or to transverse strains, as in girders, which ultimately were resolved into longitudinal strains, than when subjected to twisting strains, as in shafts, or to direct pull across the direction of length.

These, and other considerations, induced attention to the apparently superior power of puddled steel to support the forces by which the ordinary forged masses of wrought iron were fractured, especially as by the employment of smaller and lighter masses, greater strength in shafts, &c., could be secured. One special peculiarity appeared to be, that in the heaviest pieces of this material the internal structure was as fine and close in the grain as it was in the smallest bar. The elastic limit was above that of the best wrought iron, and the elasticity was so much more perfect, that it might be trusted almost up to the elastic limit of about 15 tons per square inch, and in forged masses it possessed this strength nearly equally in every direction. The range of extension at the elastic limit was rather greater than that of fibrous hammered bar iron of excellent quality. Beyond the elastic limit, with equal increments of strain, its extension did not rapidly diverge and increase, as in wrought iron; it slowly increased up to about 20 tons per square inch, and gradually and everly enlarged up to the breaking point, which was not reached within 42 tons per square inch, and was often found to reach 48 tons per square inch.

This puddled steel was not like cast steel, a harsh, rigid, and glassy material, which possessed, indeed, enormous cohesion, but yet was so rigid and unaccommodating to forces variable in direction, and impulsive in character, as to deprive it of trustworthiness in practice. On the contrary, puddled steel appeared to combine the great strength of cast steel with ductility, and perfect elasticity, of the best wrought iron. Its resistance to pressure was very remarkable, being more than double that of harsh crystalline wrought iron, and more than three times that of the best fibrous wrought iron in bars or plates. Thus, it may be safely used under a passive strain, or load, of 20 tons per square inch, after allowing a margin of one-half for security.

Puddled steel would thus evidently become an important practical adjunct in the construction of machinery, in building vessels of light draft of water, and for artillery of the largest calibre. It possessed also the peculiarity of resisting corrosion much better than wrought iron plates, and thus had an additional value for ship-building.

An investigation was then entered into of the causes of the manifestly greater strength of the integrant slabs than of the large forgings built up from them; but it was shown that this quality did not extend to the boiler-plates which it acquired a certain amount of rigidity. This was also possessed by the puddled steel, and it was anticipated that it would ultimately be extensively employed, for the boilers, and even the fire-boxes of the locomotive boiler.

From this investigation nothing of a certain

character could be concluded as to any fixed relation between the strength and the specific gravity of the several sorts of iron experimented upon. The weakest irons—those from the heavy forgings—having generally the highest specific gravities, though always lower than their integrant faggot bars. Thus, it appeared that specific gravity was a characteristic to which too great importance had hitherto been attached in relation to strength both in cast and in wrought iron. It was modified, increased, or diminished, by the mechanical operations of manufacture to an extent far beyond anything that chemical difference of constitution produced, and, in reality, it afforded no criterion of strength, although in fibrous irons it did afford an index of their degree of extensibility for equal size.

The modulus of elasticity deducible from these experiments, from the mean results of the great forgings, was 12,559,680 lbs., or 3,771,675 feet for iron forged in great cylindrical masses. The mean specific gravity being taken at 7,663, the weight of 1 foot long by 1 inch square of this iron was 3.33 lbs. The modulus for great forged rectangular masses or slabs was 18,079,200 lbs., or 5,478,545 feet; the specific gravity being 7,610, and the weight of a bar 1 foot long and 1 inch square, 3.30 lbs. Both fell far below the modulus for good English bar iron of 7,550,000 feet as deduced by Tredgold, or even below 6,787,878 feet as deduced by Edwin Clark from Eaton Hodgkinson's experiments.

The author concluded his paper by recording the obligations he was under to Messrs. Horsfall, and to Mr. Clay, of the Mersey Steel Works, Liverpool, and to the officers of the War Department, and Royal Arsenal, Woolwich, for the facilities afforded to him during his investigation.—*C. E. and Art Jour.*

Pennsylvania Railroad.

This company is sparing neither expense nor labor in providing the necessary facilities for their largely increasing business, and the comfort and convenience of their patrons. They are now erecting at the Gap, Parkesburg, and other places along the line of the road, new and extensive warehouses or freight depots. The new buildings are brick, are to be large and commodious, and to be constructed in the most substantial manner. Other improvements are contemplated when these structures are completed. The wooden bridge across Mill Creek is to be superseded by an iron one, and the work has already been commenced. Within a short time, we understand, the company will commence straightening the track, and tearing down the old buildings in Lancaster, preparatory to the erection of the new depot in that city. The work is now being under the supervision of J. C. Sharpless, the Assistant Engineer of the company. All the buildings put up by this company have been of the most substantial and beautiful kind; but this one, it is said, will surpass all others. The management know how to please the public—in fact it would be difficult to find anybody who know the wants of persons who patronize railroads, as J. Edgar Thomson, Wm. B. Foster, Jr., and Thos. A. Scott, and while they continue to administer the affairs of the Pennsylvania Railroad Company, stockholders, business men, and travelers in general, need not fear of having their interests properly attended to.—*Phila. Evening Journal.*

Camden and Atlantic Railroad,

The annual meeting of the stockholders of this road was held recently, when the following gentlemen were elected directors for the ensuing year: John Brodhead, Stephen Colwell, Wm. Schmoele, Andrew K. Hay, Joseph Porter, Jonathan Pitney, William Coffin, Enoch Doughty, Francis M. Drexel, William B. Foster, Jr., A. J. Antelo, John Clement, and Thomas McKeen. The last five, though new directors, are not unknown to the public, and will tend considerably to strengthen the present very efficient management. John Brodhead, the gentlemanly and energetic President, was re-elected.

TREATISE

ON THE
PRINCIPLES OF CIVIL ENGINEERING
AS APPLIED TO THE
CONSTRUCTION OF WOODEN BRIDGES.

By S. S. Post, Civil Engineer,
And late Chief Engineer of the N. Y. & Erie R. R.

(Continued from p. 405.)

The effective blow of the ram is the consequence of its momentum, and the rule given by mathematicians to ascertain the momentum is, to multiply the *weight* of the body by its velocity in feet per second.

This rule is unquestionably correct in comparing the forces of two or more moving bodies, but not in comparing the force of pressure of a body at rest, with the force of a body in motion. For it is self-evident that the force of a body in motion cannot be less than when it is at rest. Suppose the weight of a body to be 1,000 lbs. and to fall a distance of 0.01 of a foot. By the rule given, the velocity acquired will be $2\sqrt{0.001 \times 16} = 0.802$ of a foot per second, and the momentum $1,000 \times 0.802 = 802$ lbs, a result that cannot be true.

The writer has been unable to find an account of any experiments which satisfactorily determine the true relations existing between an active force and a dead weight.

It is said that, according to an experiment made by MARIOTTE, a body weighing 2.27 lbs. falling 0.59 of a foot produced a shock equivalent to a pressure of 430 lbs.; but there must be an error in the translation, or, otherwise, an exaggeration in this statement.

By Mr. BEVAS's experiments "the percussive force required to drive the common six-penny nail to the depth of one inch and a-half into dry Christiana deal, with a cast iron weight of 6.275 lbs., was four blows or strokes falling freely the space of one foot: and the steady pressure to produce the same effect was 400 lbs."

The data sought for estimating the weight which may be allowed to repose upon a pile, not being within reach from other sources, the writer has had recourse to such means as were immediately at hand to ascertain, approximately, the real value of the force, or shock of the ram as compared with its weight.

The experiments here alluded to were made with a Salter's improved spring balance, graduated to only 24 lbs. The scale was tested and corrected for every half pound by the application of weights from half a pound upward—the weights from Fairbank's small scales being used for the purpose. These weights are slotted on one side to the centre and can be conveniently attached to a string. The cord used to suspend the weights was of hemp, about $\frac{1}{4}$ of an inch in diameter.

The experiments were made by letting one pound fall one foot and noting the degree on the scale indicated by the pointer; then by letting it fall 2 feet, and 3 feet. After which a half pound weight was attached and allowed to fall successively 1 foot, 2 ft., 3 ft., etc. to 9 feet. The index of the balance was made to register the force by means of beeswax applied to the plate on which the degrees were marked,

Each experiment was repeated five or more times and the mean result taken.

The weights indicated by the first series of experiments were as follows:

1 lb. falling	1 foot indicated	13½ lbs.
1 " " 2 feet	" "	18½ "
1 " " 3 " "	" "	22½ "
½ " " 1 foot	" "	6½ "
½ " " 2 feet	" "	10 "
½ " " 3 " "	" "	11½ "
½ " " 4 " "	" "	13 "
½ " " 5 " "	" "	14½ "
½ " " 6 " "	" "	16 "
½ " " 7 " "	" "	18 "
½ " " 8 " "	" "	18½ "
½ " " 9 " "	" "	19½ "

Again repeating the experiment with a pound weight falling one foot, the scale indicated 13½ lbs. as before. The limb of the balance which acted upon the spiral spring had its lower extremity enlarged by a square offset, to allow a hole of sufficient size to attach the hook. By pressing down upon the hook a wedge could be inserted between the shoulder of this offset and the socket so that the pointer would indicate weight when none was applied.

On wedging the spring down to 13½ lbs. and letting the pound weight fall one foot, the pointer registered some sixteen pounds. On wedging the spring at 16 lbs. and letting fall the weight 17½ lbs. were indicated, and on wedging down to 17½ lbs. the pointer registered 18 lbs. very nearly. Wedging the spring at 18 lbs. and letting the weight fall, the wedge would drop, but no decided impression was made upon the wax, by the pointer. Here was clearly an absorption of 4½ lbs. by the elasticity of the spring. This series of experiments was continued with the following results:

1 pound falling	1 foot indicated	18 lbs.
½ " " 1 " "	" "	9 "
½ " " 2 " "	" "	12½ "
½ " " 3 " "	" "	15½ "
½ " " 4 " "	" "	17½ "
½ " " 5 " "	" "	19½ "
½ " " 6 " "	" "	21½ "

Comparing these two series of experiments it is found that the minimum increase is 25 per cent., the maximum 39 per cent., and the mean increase of force 33½ per cent.

The distance from 0 to 13½, on the graduated scale of the balance, was 0.095 of a foot, or at the rate of 0.007 of a foot per pound.

A momentum of 18 lbs. acting against a resistance increasing from 0 to 13½ lbs. in 0.095 of a foot, was thereby reduced one-fourth, and a proportional loss of force was sustained in each of the other cases.

An experiment to determine the quantity of elasticity of the cord, through the medium of which the weight acted upon the spiral spring was also made. A length of 5 feet was carefully measured and marked upon the cord, by which half a pound was already suspended. 20 lbs. were then added when the distance between the marks was increased 1.2 inches or 0.1 of a foot. On removing the 20 lbs. the length between the marks upon the cord was restored to 5 feet. The elasticity of the cord was therefore 0.001 of a foot per pound per foot, and one pound falling one foot with a force of 18 lbs. produced an extension of the cord of .018 of a foot or a little less than one-fifth of the compression of the spring.

The inference from this experiment is that if

one pound falling one foot lost one-fourth part of its momentum on account of the elasticity of the steel spring, it also lost one-fifth as much, or one-twentieth part of its momentum by the elasticity of the hempen spring or cord. And if the inference be correct *one pound falling one foot will produce a shock which will be equivalent to a pressure of 18.9 lbs.*

The velocity acquired by a body falling one foot was found to be at the rate of 8.02 feet per second. If this velocity be multiplied by 2.36 times the weight in lbs. the result for one pound will be $1 \times 2.36 \times 8.02 = 18.9$.

As the momentum can never be less than the weight, that weight should be considered as a constant quantity, to be added to a variable quantity which increases as the motion increases, the sum of these two quantities being the amount of force produced. The variable quantity will be a function of the constant quantity or weight multiplied by the velocity. For instance, the momentum of 1 pound falling 1 foot may be expressed thus:— $1 + (1 \times 2.36 \times 8.02) = 18.9$ lbs.

Collecting the experiments into one table adding to the second series one-twentieth of its indicated force,—for the effect of elasticity of the cord,—and comparing the results with those obtained in accordance with the expression just given, they will be as follows:

Weight in lbs.	Fall in feet.	Velocity acquired per second in feet.	Weight in lbs. registered in 1st series of experiments.	Weight in lbs. registered in 2nd series of experiments.	Weight in lbs. corrected for elasticity of the cord.
1	1	8.02	18½	18	18.90
2	1	16.04	37	36	37.80
3	1	24.06	55½	54	56.70
4	1	32.08	74	72	75.60
5	1	40.10	93	90	94.50
6	1	48.12	111½	108	113.40
7	1	56.14	130	126	132.30
8	1	64.16	148½	144	151.20
9	1	72.18	167	162	170.10
10	1	80.20	185½	180	189.00
11	1	88.22	204	198	207.90
12	1	96.24	222½	216	226.80
13	1	104.26	241	234	245.70
14	1	112.28	259½	252	264.60
15	1	120.30	278	270	283.50
16	1	128.32	296½	288	302.40
17	1	136.34	315	306	321.30
18	1	144.36	333½	324	340.20
19	1	152.38	352	342	359.10
20	1	160.40	370½	360	378.00
21	1	168.42	389	378	396.90
22	1	176.44	407½	396	415.80
23	1	184.46	426	414	434.70
24	1	192.48	444½	432	453.60
25	1	200.50	463	450	472.50
26	1	208.52	481½	468	491.40
27	1	216.54	500	486	510.30
28	1	224.56	518½	504	529.20
29	1	232.58	537	522	548.10
30	1	240.60	555½	540	567.00
31	1	248.62	574	558	585.90
32	1	256.64	592½	576	604.80
33	1	264.66	611	594	623.70
34	1	272.68	629½	612	642.60
35	1	280.70	648	630	661.50
36	1	288.72	666½	648	680.40
37	1	296.74	685	666	699.30
38	1	304.76	703½	684	718.20
39	1	312.78	722	702	737.10
40	1	320.80	740½	720	756.00
41	1	328.82	759	738	774.90
42	1	336.84	777½	756	793.80
43	1	344.86	796	774	812.70
44	1	352.88	814½	792	831.60
45	1	360.90	833	810	850.50
46	1	368.92	851½	828	869.40
47	1	376.94	870	846	888.30
48	1	384.96	888½	864	907.20
49	1	392.98	907	882	926.10
50	1	400.00	925½	900	945.00

Applying these principles in estimating the pressure that, for a moment, will be equivalent to the shock of a ram weighing 1,000 lbs. and falling 25 feet, the result will be

$$1,000 + (1,000 \times 2.36 \times 40.1) = 90,423 \text{ lbs.}$$

When the fall is from 20 to 30 feet as it often will be in giving the finishing strokes, the weight of the ram will be small compared with its force of motion, and may be neglected, in which case the following rule may be adopted.

To estimate the force of percussion of the ram, multiply its velocity by 2½ times its weight.

For a ram weighing 1,000 lbs. falling 25 feet, this rule will give $1,000 \times 2.25 \times 40.1 = 90,225$ lbs.

as the force of percussion, or one-fifth of one per cent. less than the former result.

Opposed to the force of percussion of the ram, is the resistance to penetration of the pile. If there were no tendency to overcome the force communicated from the ram to the pile, the resistance to penetration would be equal to zero, or, if that force were 90,225 lbs. the resistance would be

$$\frac{90,225}{\infty} = 0.$$

On the other hand, if the resistance were absolute, so that no penetration could be effected by any quantity whatever of force, then that resistance may be said to be infinite, and may be expressed by $\frac{90,225}{0} = \infty$. But if the resistance is only relative and balances the force applied it will be represented by the expression

$$\frac{90,225}{1} = 90,225.$$

The resistance to penetration, then, is inversely as the distance penetrated; the density and friction of the body penetrated being uniform. Thus a stiff clay will be less easily penetrated than a light loam, but a pile may be driven in loam, as well as in clay, to a depth so great as to resist further impact of a ram of given weight falling from a given height. In either case the product of the co-efficient of friction into the depth penetrated will be equal to the mechanical effect of the percussions.

EXAMPLE.

Suppose that a pile has penetrated a bed of clay, of uniform texture and indefinite thickness, to a depth of 20 feet, and that under the fall of a ram with a force of 90,225 lbs. it should be found to penetrate one foot more.

During the penetration of one foot, 20½ feet of the pile will be acted against on its sides by the friction of the clay. This friction is at the rate of $\frac{90,225}{20.5} = 4,401$ lbs. per foot.

Consequently to sink the pile from 20 to 21 feet, required 4,401 lbs. more force than to sink it from 19 to 20 feet.

To sink the pile from 21 to 22 feet will require a force of $90,225 + 4,401 = 94,626$ lbs.; to sink it from 22 to 23 feet, the force required will be $94,626 + 4,401 = 99,027$ lbs.

The force of 90,225 lbs. with which the pile was sunk from a depth of 20 ft. to 21 ft., was due to a fall of 25 feet. For the next stroke the fall will be 26 feet, and the force of percussion will be

$2\sqrt{26 \times 16\frac{1}{2}} \times 1,000 \times 2\frac{1}{2} = 40.9 \times 2,250 = 92,025$ lbs. The force of this blow is, then, 1,800 lbs. greater than the one immediately preceding it, and the depth it will sink the pile, will be

$$4,401 : 1,800 :: 1 : 0.409 \text{ of a foot.}$$

The force of the next stroke will be

$2\sqrt{26.409 \times 16\frac{1}{2}} \times 1,000 \times 2\frac{1}{2} = 41.22 \times 2,250 = 92,745$ lbs. or 720 lbs. greater than the next preceding blow.

The depth sunk by the last stroke was 4,401 : 720 :: 1 : 0.164 of a foot. The next stroke will be

$2\sqrt{26.573 \times 16\frac{1}{2}} \times 1,000 \times 2\frac{1}{2} = 41.35 \times 2,250 = 93,037$ lbs. or 292 lbs. of augmented force, which will give an increased depth to the pile of 0.067 of a foot; for 4,401 : 292 :: 1 : 0.067.

At a fall of about 26¾ feet the force of the ram will only equal the resistance of the pile,

without motion,—and the interruption will not be overcome unless the ram can be made to fall from a greater height by elevating the machine, or by otherwise increasing the force.

In this example the earth was supposed to offer a uniform resistance for the whole depth. In practice, soils varying in density and friction, will be most likely to occur.

When first driven, the earth immediately surrounding the pile will be compressed into less space than it before occupied, but in time the particles so compressed will be relieved by reaction upon the surrounding mass, and their pressure against the pile will be reduced. Water will find its way along the sides of the pile softening the surrounding material and acting as a lubricator. The driving a great number of piles within a short distance of each other has a tendency to shatter the soil, and the vibrations in consequence of the shocks tend to loosen it near the surface.

For these and other reasons the friction which resists penetration at first, cannot be relied upon to continue indefinitely to the same degree.

The cause tending to reduce the resistance to penetration, will generally be much more active near the surface than at a considerable depth.

It would be no more judicious to load a pile to the full extent of the force of the ram, than to load a beam to its ultimate strength; but it seems reasonable to conclude that the greater the depth penetrated, the less will the resistance be diminished from any cause, and consequently that the deeper the pile, the greater will be the proportionate weight it can safely be trusted to sustain.

On being driven 'home,' if the pile shall have penetrated but one or two feet for instance, it may not be safe to subject it to a permanent load of more than one-sixth or one-fifth of the force with which it was driven, while, if the penetration be 16 feet or more, it may be safely loaded with two-thirds, or, if the penetration has reached 30 feet, the load may perhaps be increased to nine-tenths of the effective momentum of the ram.

The base of the granite pier, § 100, was supposed to be 15 by 35 feet. If piles were to be driven for the foundation of such a pier, and placed 3½ feet from centre to centre, there would be five rows, of eleven piles in a row, or altogether 55 piles.

The weight of the pier was 2,620,833 lbs., and the half weight of the bridge 241,800 lbs.

If the pier be required to support two half spans on opposite sides, the whole weight will be 3,104,433 lbs., or 56,444 lbs. per pile. Or if only a half span rests upon the masonry as an abutment, the piles composing the rows on the side toward the span will be subjected to as great pressure for the same number of piles as in the case of the pier supporting two half spans.

To cover all the contingencies of extreme weight of locomotive, extraordinary concussions of wheels on the open joints of rails, and the tendencies to diminution of friction against the sides of the piles, a liberal allowance should be made. If 50 per cent. be deemed proper in this case, the pressure with which each pile must be driven, will be 84,066 lbs.

The momentum of a ram weighing 1,050 lbs. falling 20 feet will be—

$$2\sqrt{20 \times 16 \frac{1}{2} \times 1,050 \times 24} = 84,743 \text{ lbs.}$$

Massachusetts Railroad Dividends.

The following dividends are payable in July at the dates given in the margin. They are all for six months, except the Berkshire, which is quarterly. They are all payable in Boston, except the Providence and Worcester Railroad, at Providence, R. I., Worcester and Nashua at Worcester, and Stoughton Branch at Canton, Mass., at the several Treasurers' offices. The Boston and Maine has increased its dividend ½ per cent.; Stoughton Branch ½, and Boston and Lowell ½ per cent. on its regular payment, besides paying 1½ per cent. extra, as receipts from "disputed accounts." The Michigan Central will again pass its dividend. The Old Colony railroad bonds have all been paid off. Interest on a portion of the Eastern railroad 5 per cent. bonds due in 1862, originally negotiated in London, is now payable. The Michigan Central will pay in cash \$256,000 of bonds maturing July 1st, which swells the total of the bond account.

Stocks.	Capital.	Div.	Am't.
<i>Railroad Companies.</i>			
11 Berkshire	\$320,500	1½	\$5,609
1 Boston & Lowell....	1,830,000	*5	91,500
1 Boston & Maine....	4,155,700	4	166,228
1 Boston & Providence,	3,160,000	3	94,800
1 Boston & Worcester..	4,500,000	3	135,000
1 Fitchburg	3,540,000	3	106,200
1 Metropolitan (Horse).	450,000	5	22,500
1 Middlesex (Horse)...	295,100	4	11,804
1 Old Col'y & Fall River	3,015,100	3	90,453
1 Pittsfield & N. Adams	450,000	3	13,500
1 Providence & Worcester	1,550,000	3	46,500
1 Stoughton Branch...	85,400	3½	2,989
1 Taunton Branch.....	250,000	4	10,000
5 Western	5,150,000	4	206,000
11 Worcester & Nashua..	15,220 sh'rs	\$2	30,440

* 3¼ regular, 1½ extra. \$1,033,523

Interest on Bonds.

1 Albany & W. Western ..	\$1,000,000	3	30,000
1 Boston City Stock....	Interest ..	135,000	
1 Boston, Con. & Mont'r'l	About ..	11,000	
1 Boston & Providence	About ..	3,000	
1 Boston & Worcester ..	500,000	3	15,000
1 Cambridge (Horse)...	150,000	3	4,500
1 Cheshire	700,000	3	21,000
1 Dorchester & Milton...	25,000	3	750
1 East'n 5's, '62, (in part)	150,000	2½	3,750
1 Essex	213,600	3	6,408
1 Massachusetts State..	Interest ..	2,500	
1 Do. (Eastern Loan)...	Interest ..	8,750	
1 Do. (Nor. & Wor. Loan)	400,000	3	12,000
1 Michigan Central	Interest ..	12,000	
1 Michigan Central	Principal ..	256,000	
1 Peterboro' & Shirley ..	40,000	3	1,200
1 Portland City	About ..	15,000	
1 United States Loan...	About ..	25,000	
1 Vermont & Mass.	1,000,000	3	30,000
			\$592,858

RECAPITULATION.

Interest on bonds	\$592,858
Railroad dividends	1,033,523
Total July, 1859	\$1,626,381
" January, 1859	1,431,387
" July, 1858	1,548,438
" January, 1858	1,296,392

The following dividends either have been paid recently, or are now payable:—

Companies.	Capital.	Div'd.	Am't.
Passumpsic railroad bonds..	\$725,000	3	21,750
Port'd & Saco R. R. div'd..	1,500,000	3	45,000
			\$66,750

The total of dividends for July is larger than one year ago, but about the average previous to that time.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending June 27, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	68.....	83
Oovington and Lexington, 2d Mortgage....	68.....	50
Cinc., Ham. and Dayton, 2d Mortgage....	78.....	85
Indianap. & Cincinnati, do. do.	78.....	85
STOCKS.		
Cincinnati, Hamilton & Dayton	65	
Columbus and Xenon	83½	
Indianapolis & Cincinnati	53	
Little Miami	84	
Ohio and Mississippi	2½	

Railroad Earnings.

The May earnings of the Great Western railroad of Illinois were:—

May, 1859.....	\$36,630 06
May, 1858.....	28,695 44

Increase.....\$7,934 62

On the Sandusky, Mansfield and Newark Railroad the earnings were:—

May, 1859.....	\$20,250 35
May, 1858.....	18,144 59

Increase.....\$2,105 76

On the Scioto and Hocking Valley Railroad the earnings were May, 1859.....\$8,689 11

The receipts of the Grand Trunk Railway of Canada for the week ending June 11, were.....\$38,917 27
Week ending June 12, 1858.....28,828 27

Increase.....\$89 00

Total traffic from July 1st.....\$2,157,637 78
Same period last year.....2,247,086 76

Decrease.....\$89,398 98

The traffic of the Great Western Railway of Canada for the week ending June 18, 1859, was as follows:

Passengers	\$22,636 71
Freight and live stock	9,192 91
Mails and sundries.....	1,350 61

Total.....\$33,180 22
Corresponding week of last year.....37,584 53

Decrease.....\$4,404 30

Mobile and Ohio Railroad.

The Columbus Branch of the Mobile and Ohio Railroad is to be completed by the 4th of July, and the people of Columbus—says the Columbus (Miss.) Democrat—propose giving a grand celebration of the event.

Commerce of Copper.*

1.—Imports into the United States.

Year.	Copper Ores.	Bar or Pig and Old.	In plates (Sheathing.)
1849.....	\$177,736	\$988,683	\$1,044,755
1850.....	195,332	1,167,411	716,614
1851.....	65,266	1,531,704	734,610
1852.....	257,357	1,499,467	610,755
1853.....	443,796	1,529,295	1,155,414
1854.....	558,628	1,846,170	851,434
1855.....	889,007	2,227,457	740,223
1856.....	695,740	1,888,812	377,655
1857.....	1,440,314	1,659,513	354,311
1858.....	1,131,362	1,068,551	111,698

Year.	Manufactures of Copper.	Brass and Manuf. of	Total Value.
1849.....	\$232,038	\$175,021	\$2,618,233
1850.....	338,743	179,893	2,596,993
1851.....	367,196	173,639	2,872,415
1852.....	135,340	155,992	2,658,911
1853.....	282,321	236,341	3,647,067
1854.....	174,391	337,700	3,768,323
1855.....	165,676	258,770	4,281,133
1856.....	239,588	224,209	2,926,004
1857.....	173,130	222,012	3,849,280
1858.....	109,545	202,484	2,623,640

* Not including coin.

2.—Re-exported from the United States.

Year.	Copper Ores.	Bar or Pig and Old.	In plates (Sheating.)	Total Value.
1849.....	\$625	\$63,481	\$59,846	
1850.....	6,700	290,068	32,849	
1851.....		109,498	23,718	
1852.....		3,980	27,848	
1853.....		72,929	24,225	
1854.....		56,408	56,408	
1855.....	43,009	913,062	30,735	
1856.....		86,841	21,802	
1857.....	54,965	391,330	13,795	
1858.....	470,637	508,437	24,863	
Year.	Manufactures of Copper.	Brass and Manuf. of	Total Value.	
1849.....	\$1,845	\$814	\$126,611	
1850.....	648	767	331,032	
1851.....	649	4,237	138,102	
1852.....	3,150	276	35,254	
1853.....	44	1,371	98,569	
1854.....	8,717	18,315	83,440	
1855.....	10,547	41,022	1,038,375	
1856.....	7,921	2,808	119,372	
1857.....	17,843	6,216	487,149	
1858.....	99,537	7,984	1,111,458	

3.—Retained for Consumption in the United States.

Year.	Copper Ores.	Brass and Old.	In plates (Sheating.)	Total Value.
1849.....	\$177,111	\$925,202	\$984,909	
1850.....	188,632	877,343	682,765	
1851.....	65,266	1,422,206	710,892	
1852.....	257,357	1,495,487	582,907	
1853.....	443,796	1,456,366	1,131,189	
1854.....	558,628	1,846,170	795,026	
1855.....	845,998	1,314,395	709,488	
1856.....	995,740	1,301,971	355,853	
1857.....	1,885,349	1,265,183	337,516	
1858.....	660,725	560,114	86,835	
Year.	Manufactures of Copper.	Brass and Manuf. of	Total Value.	
1849.....	\$230,193	\$174,207	\$2,491,622	
1850.....	338,095	179,126	2,265,951	
1851.....	366,547	169,402	2,734,313	
1852.....	132,190	155,716	2,623,657	
1853.....	282,177	234,970	3,548,498	
1854.....	165,674	319,385	3,684,883	
1855.....	155,129	217,748	3,242,758	
1856.....	231,667	221,401	2,806,632	
1857.....	155,287	215,796	3,362,031	
1858.....	10,008	194,500	1,512,182	

4.—Domestic Copper and Brass, and Manufactures of, Exported.

Year.	Value.
1849.....	\$66,203
1850.....	105,060
1851.....	91,871
1852.....	103,039
1853.....	108,205
1854.....	91,984
1855.....	690,966
1856.....	534,845
1857.....	607,054
1858.....	1,985,223

Interest on Public Debts.

The interest on the Public Debt of the Federal and State Governments, due July 1st, will be paid in this city on and after that date as follows, viz:

Interest on Debt of	Payable at	Amount
United States.....	Sub-Treasury.....	\$1,000,000
State of Missouri.....	Bank of Commerce.....	600,000
Virginia.....	B'k of State N. York.....	320,000
New York.....	Manhattan Co.....	350,000
Kentucky.....	Bank of America.....	120,000
Tennessee.....	Merchants' Bank.....	300,000
Ohio.....	Ag'cy, 25 William st.....	425,000
North Carolina.....	Bank of Republic.....	120,000
Georgia.....	Bank of Republic.....	30,000
Illinois.....	Treas. at 95 Wall st.....	300,000
Indiana.....	Agency, 27 Wall st.....	170,000
Minnesota.....	Atlantic Bank.....	10,000
Michigan.....	Treas. in New York.....	75,000

Total interest in New York.....\$3,820,000

The Public Debt of the United States actually outstanding on 20th June was:

In 5 to 6 per cents., 1862-68.....	\$25,164,000
In new 5 per cents., 1874.....	18,500,000
In Treasury bills, 1859.....	13,116,000

Total outstanding June 20.....\$56,880,000

New 5 per cents. authorized.....\$1,500,000

Re-issue Treas. bills ditto, 6,884,000— 8,384,000

Total issued and authorized.....\$65,264,000

In addition to the Virginia interest, payable as above in New York, the Commonwealth will pay on about \$14,000,000 registered stock in Richmond, and on \$1,875,000 in 5 per cent. Sterling bonds in London.

American Railroad Journal.

Saturday, July 2, 1859.

Lease of the Erie Railroad.

Mr. CHARLES MINOT, formerly Superintendent of this road, having associated several gentlemen with him, has submitted to the company a proposition for a lease of this road for a period of 10 years, agreeing to pay \$1,500,000 the first year, \$1,600,000 the second, \$1,700,000 the third, \$1,800,000 the fourth, \$1,900,000 the fifth, and \$2,000,000 the remaining five of the ten years, with privilege of a renewal of the lease for an additional ten years, at \$2,500,000 per annum.

The proposed lessees act upon the idea that there is an ample margin for profit in the saving to be effected out of what it would cost the company to carry on the road. This is reasonable. They propose to divide among six or eight competent parties the different departments of services, and by interesting their subordinates in the result, to secure the most efficient co-operation of all employed. In this way they expect to be able to operate the road at a much less rate than it can be done by the company.

We do not see how a great road like the Erie can be successfully conducted in any other manner. There are, in ordinary times, employed upon it, five or six thousand men. Every soul of this great army has his compensation measured by a regular salary, graduated according to the supposed dignity, or responsibility, of his duties. All of a similar grade receive very nearly the same rate of compensation, although some of the parties instead of being valuable officers, may possess no qualifications whatever for their duties, but may be the cause of great loss to the company. The ultimate rule of conduct of each subordinate is the will of the chief executive. With the widest training and experience he can hardly be expected to infuse his own intelligence and energy into those under him, nor exact from them a proper degree of accountability. But if he be entirely inexperienced in their duties, they have no other rule of conduct than their wills. It is easy to see that such a relationship will end in a complete demoralization of the whole operating force.

To remedy such evils a new principle must be introduced into the management of our roads. An inducement must be held out to every person occupying a responsible position, sufficient to make him, at all times, vigilant and faithful, and qualify himself for the discharge of his duties in the best manner possible. The amount of his compensation must be made to depend upon the amount he can

save to, or make for, the company. The strongest motive that can be presented to man, is always before him. As a person would be compensated in proportion to his qualifications, the most competent would soon work their way to the most important stations, and the best talent in the country always be found in the management of our roads.

As it is, qualifications have now nothing to do with appointments to office. Presidents and Superintendents are often selected who have never seen an hour of service. These, after trying their hand at their duties, and failing of success, give way to others as incapable as themselves. In this way are our roads constantly shifting their managers, and constantly becoming less and less productive, till one after another is wound up under some one of its mortgages.

Such will be the fate of the Erie unless an entire change of system is inaugurated. We hope, therefore, that the proposition of Mr. Minot will receive careful attention, and that it, or one of a similar character, will receive the assent of the company.

Mississippi Central Railroad.

We give in the present number of the JOURNAL, the late report of this company for the year ending April 30th, 1859, from which it will be seen that this important work is rapidly approaching its completion.

One of the great benefits which this road will confer, will be the formation of a continuous line of railroad to New Orleans. Up to the present time, this great southern metropolis is reached only by water—by the Gulf on one side and the Mississippi river on the other. The delays and dangers of the river navigation are proverbial. The year that has just past has been the witness of terrible disasters. When the road is opened, the route to New Orleans from all important places in the interior will be reduced to one-sixth the time now required. This greater expedition will be obtained with greater safety and at reduced cost for traveling. The annual migration between the North and South, vast as it now is, will receive an additional impulse from the new facilities afforded to it.

This road nearly 200 miles long, will be built and equipped at a cost not exceeding \$20,000 per mile. The means have been supplied by people living upon its route. Its cost represents the dollars that have actually been expended in construction, and has not been swelled by fat contracts, or by excessive issues of securities, for the want of adequate means. Other roads, not a whit more expensive, in fact, show a nominal cost exceeding twice that of the Mississippi Central.

The road is now so nearly completed as to be beyond the reach of favorable or unfavorable opinions as to its earnings. We shall be greatly disappointed, however, if these do not excel those of any road in the country of no greater cost. It traverses a very rich planting district, whose market is New Orleans. To the travel of the entire valley of the Mississippi it must sustain the same relation that this river does to its commerce. Millions of dollars are annually paid for the transportation of passengers on that portion of the river parallel to the road. These will be entirely drawn to the road on its completion.

An influence no less valuable will be a political

and moral one. Adequate means of intercourse between the North and the extreme South do not yet exist. This road will go far toward supplying what is wanting. It should bring New Orleans within three and a-half days' travel of New York,—the distance being 1,500 miles. With a few other leading railroads completed, our general system of railroads may be said to be perfect.—The roads to be built will be the *woof* to the great *warp* which will exist.

Post on Wooden Bridges.

We this week conclude the treatise on bridges by Mr. Post. Many inquiries have been made for this work in book form. We understand that it is the intention of the author, at some future time, to pursue the subject; and, if the sections we have published shall appear to meet the approbation of the engineering and architectural professions, the work will be revised, considerably extended and suitably illustrated, and will be published in a shape more useful and convenient for reference.

Interest and Dividends.

The July interest on the County Bonds of the Belmont and Muskingum Counties and the City Bonds of Zanesville, Ohio, issued to the Ohio Central and the Zanesville Roads, will be paid at the Nassau Bank.

Messrs. Morse & Wolff, No. 41 William street, will pay July 1, the coupons of the Dubuque City ten per cent. Bonds.

Messrs. Ashley & Norris, No. 52 Exchange Place, will pay the coupons on the Chicago Sewerage Bonds, due 1st July.

The interest coupons of the Lackawanna and Bloomsburg Railroad Company, due July 1, will be paid on presentation at the Mercantile Bank of this city on and after that date.

The interest of the Bonds of the County of Muscatine, County of Washington, County of Iowa, County of Poweshiek and County of Pottawattamie, of the State of Iowa, issued to the Mississippi and Missouri Railroad Company, due July 1, will be paid at the Corn Exchange Bank.

Messrs. Winslow, Lanier & Co. will pay the following coupons, due July 1: State of Indiana 5 per cent. Bank Bond; Indiana Central Railroad 10 per cent. Bonds, 2d Mortgage; Ross County, Ohio, 7 per cent. Bonds; town of Harmar, Ohio, 7 per cent. Bonds; town of Marietta, Ohio, 7 per cent. Bonds.

The Bank of America will pay the interest coupons of the city of New Orleans, and all other bonds of the city, or former municipalities, on which the interest is payable in New York on the 1st of July; also the coupons, No. 6 of the First Mortgage Bonds of the New Orleans, Jackson and Great Northern Railroad Company, payable in New York on the 1st of July.

The interest on Minnesota State Bonds, due 1st July next, will be paid upon presentation of the proper coupons at the Atlantic Bank, New York.

The interest on the bonds of the Mississippi and Missouri Railroad Company, due 1st of July, will be paid by the Corn Exchange Bank.

The semi-annual interest on the bonds of the Joliet and Chicago Railroad of Illinois, due July 1, will be paid on presentation at the office of M. K. Jesup & Co., No. 44 Exchange Place.

The Ocean Bank will pay the coupons of the Jackson County, Ohio, Bonds, due July 1, 1859.

The interest coupons of the Hartford City Bonds, issued to the Hartford, Providence and Fishkill Railroad Company, due on the 1st of July, will be paid at the Phoenix Bank, in the city of Hartford.

The interest coupons of the Bonds of the city of Quincy, Ill., due 1st July, will be paid by Woodruff & Co., 40 Broad street.

The semi-annual interest due July 1, on the Bonds of the Cumberland Coal and Iron Company, will be paid at their office in this city, on and after that date.

The coupons of the Virginia and Tennessee Railroad Company, due July 1, will be paid by Messrs. Peters, Campbell & Co., 50 Wall street, New York.

The coupons on the State of Iowa Bonds; Henderson Co. Bonds, Illinois; Mason Co. Bonds, Illinois; and Rock Island Co. Bonds, Illinois, will be paid, on presentation, at the office of Halstead & Gilman, No. 47 Exchange Place.

The unpaid interest, July 1, on the Bonds of the Yuba County, California, of the issues of 1857 and 1858; and the interest on the Bonds of the County of Athens, Ohio, from No. 1 to 100, inclusive, will be paid on and after that date by Wm. Hoge & Co. No. 50 Wall street.

The coupons on the Bonds of the Long Island Railroad Company, due 1st July, will be paid at the City Bank, Brooklyn.

The coupons of the Jersey City Water Bonds, falling due July 1, 1857, will be paid on presentation at the Continental Bank, N. Y., or at the Mechanics' and Traders' Bank, Jersey City, on the 1st proximo.

The interest on the Third Mortgage Bonds of the Harlem Railroad, due 1st July, will be paid at the office of the Company in 26th street.

The coupons of the Brooklyn City Bonds, due July 1, will be paid at the Long Island Bank.

The Assistant-Treasurer at New York is prepared to pay the half-yearly dividend on the Public Debt of the United States, due July 1st.

The Albany Journal gives notice that the surviving Trustees of the old Albany and Schenectady Railroad Company have declared a final dividend of sixty-two cents on each share of the capital stock.

The Western Railroad of Massachusetts has declared a semi-annual dividend of 4 per cent., payable July 5.

The Directors of the Little Miami Railroad, in the early part of last month, declared a semi-annual dividend of four per cent., which was payable on and after the 13th.

The New York, Providence and Boston (Stonington) Railroad, a dividend of two and a half per cent., payable July 1.

We understand that the Cleveland and Columbus Company have the money in hand to pay the usual half-yearly dividend of 5 per cent. in July.

The Nassau Bank, the Bank of Commerce, the People's Bank, the Continental Bank, the New York County Bank, the Hanover Bank, the Bank of North America, the Market Bank, the Commonwealth Bank, the Phoenix Bank, the Atlantic Bank, and the Grocers' Bank, have each declared their half-yearly dividend for July, at the rate of $3\frac{1}{2}$ per cent. The Metropolitan Bank and the Bank of the Metropolis, each 4 per cent.

The Commonwealth Fire Insurance Company

has declared a semi-annual dividend of 5 per cent., payable July 1. The half-yearly dividend of the Mercantile Fire Insurance Company is 6 per cent. The Long Island Insurance Company a semi-annual dividend of 10 per cent. The American Fire Insurance Company a dividend of \$7 per share. The Harmony Fire and Marine Insurance Company a dividend of 5 per cent. The New Amsterdam Fire Insurance Company a semi-annual dividend of 8 per cent. The People's Fire Insurance Company a semi-annual dividend of 6 per cent., payable June 6. The Hamilton Fire Insurance Company, a dividend of four per cent., payable on the 5th of July.

Southern Pacific Railroad—Mr. J. Edgar Thomson President of it.

We copy the following from the St. Louis News:

OFFICE PENNSYLVANIA RAILROAD CO.,
Philadelphia, June 18, 1859.

DEAR SIR—Referring to our conversation at the Saint Nicholas Hotel, New York, I can state that I will accept (on the conditions then named,) the Presidency of the Southern Pacific Railroad Company upon the fulfilment of the following conditions:

First—That the company shall be freed from all its existing debts.

Second—That all questions between the authorities of Texas and the company, involving its legal or corporate rights, shall be satisfactorily settled.

Third—That additional share capital, amounting to at least two hundred and fifty thousand dollars, in addition to the sum required to meet all of the liabilities of the company, shall be obtained in cash.

Yours very truly,

J. EDGAR THOMSON.

J. FOWLKES, M. D., President.

The News states that the terms named have been complied with, making Mr. Thomson's conditional acceptance an absolute one. It does not state whether or not Mr. Thomson proposes to go South—such a movement on his part would seem inconsistent with the many duties he owes to several important northern railroads.

Junction Railroad.

The first section of this road from Hamilton to Oxford has been opened for business.

Journal of Railroad Law.

LIABILITY OF RAILROAD CORPORATION FOR DIVERSION OF WATER-COURSE.

The case of Robinson vs. The New York and Erie Railroad Company, recently decided in the New York Supreme Court, determines some interesting principles in respect to interference with running streams in the construction of a railway.

The action was commenced in July, 1855, for the recovery of damages to the plaintiff's land and buildings, in the village of Corning, arising from the overflow of a stream, known as the Monkey Run. It was claimed that this overflowing was occasioned by the obstructions placed in the stream by the defendants, at the point where it crosses Erie avenue, in that village.

It appeared on the trial, that the defendants' railroad ran along Erie avenue, and where it crossed the stream in question, an excavation of the banks of the creek was necessary to conform the ground to the grade of the railroad. The defendants deepened the channel of the creek, and constructed two sluices for the passage of the water, ten feet wide each, three feet deep.

In June, 1855, there were three extraordinary floods in the creek. The highest of these floods occurred on the 30th of June, when a great quan-

tity of gravel and earth was washed down the stream, and filled up the sluices under the railroad, and covered the track of the road itself, five or six feet deep. This obstruction turned the water of the creek into Erie avenue, and from thence it ran into, and filled, the cellars of the plaintiff's buildings, and did other damage to his premises. The sluices constructed by the defendants were sufficient to pass all the water of the stream in the highest flood that had ever been known in the creek; the flood of the 30th of June, and which did the damage to the plaintiff's premises, was much the highest flood that had ever been known in the stream. The bank of the creek on the side of the plaintiff's premises, was in its natural state, five or six feet above the bed of the creek. The defendants had cut down this bank in grading its track, and had, at the same time, lowered the bed of the creek, but precisely to what extent did not clearly appear.

The Judge charged the jury, amongst other things, that the general course and flow of streams on the surface of the earth, being governed and controlled by the formation of the surface, no one had any right to make any change or innovation upon the surface, so as to change the established course and flow of any stream, to the prejudice of another. That every person owning and occupying premises in the vicinity of a stream of water, was entitled to have the natural banks and barriers remain unmolested, so far as was necessary for his protection against the overflow and diversion of the stream; and that any person digging down the bank, or removing a natural barrier, by reason of which, such stream overflowing, or was diverted from its natural and established course, to the injury of another, was liable for the injury thus occasioned. That the defendants, although they had by law the right to cross streams in the construction of their road, were liable, if in crossing any stream, they removed the banks to such an extent as to occasion the overflow, or diversion, of the water of such stream by which individuals in the vicinity sustained injury. And if the jury should find, from the evidence, that the injury and damage to the plaintiff, was occasioned by the excavation and removal of the banks of the stream by the defendants, and but for such excavation and removal, the injury and damage complained of, would not have occurred, the defendants were liable in this action.

The defendants' Counsel requested the Judge to charge:

First. That if the jury were satisfied from the evidence, that the defendants in the construction of their road, made provision for the passage of any flood that had ever before been known in this stream, and had exercised such caution and care to provide against damage to others, as prudent men would exercise in like cases, for the protection of their own property, then the defendants were not liable for the damage resulting from this extraordinary flood.

Second. That the defendants, in the construction of their road, were in the exercise of a lawful right, and were not responsible when all reasonable provision and caution was observed to protect others against injury. That if the jury believed from the evidence, that the defendants, in the construction of the road over the water-way in question, exercised as much caution as a prudent man would

exercise in the protection of his property, if he owned both the road and property affected, then the defendants ought not to be made liable to the plaintiff.

The Judge refused to charge as thus requested; and to the charge and refusal, the defendants' Counsel excepted. The jury found a verdict in favor of the plaintiff for \$3,735; for which sum, with costs, judgment was entered, and the defendants appealed.

The following is the substance of the opinion of the Court on the appeal:

E. DARWIN SMITH, J.—In the two propositions submitted by the defendants' Counsel, they claimed, in substance, the defendants were in the exercise of a lawful right in constructing their railroad at the place in question, and that, in the exercise of that right, they were not responsible, when all reasonable prudence and caution was observed on their part, to protect others from injury. The charge treats the defendants—a railroad corporation—as the private owners of property, using and improving it for its own benefit; and, like natural persons, responsible for all direct or consequential injuries resulting to others from such use or improvement. The defendants' Counsel claimed, in effect, that the defendants, as such corporation, were only liable for injuries resulting from negligence, or unskillfulness, like municipal corporations, or public officers, acting in the discharge of a public duty. The rule of liability of private corporations is precisely the same as that of individuals. (9 Wheat. 904. 12 *id.* 40. 4 *id.* 688. 4 Hammond 500, 514. 3 Hill 529.)

It is true that the defendants, under the General Railroad Act, were entitled to construct their road across, along, or upon, any stream of water, water-course, street, highway, plank road, turnpike road, or canal, which the route of its road might touch or intersect, restoring the same to its former state, so as not unnecessarily to have impaired its usefulness. (Sess. L. of 1850, ch. 140, § 28.)

But I do not see that this act relieves the defendants' from their liability in this action. The right of the defendants to construct their railroad across this creek is not denied, and is undeniable. But this act of the Legislature, merely gave authority to defendants to cross this creek. It did not, and could not, give any authority to them to invade any private right, without just compensation. The legislative grant authorized the defendants to enter upon, take and appropriate to their own use, on making a just compensation therefor, such lands as they might require for the use of their said railroad, and to cross all intervening waters and streams. But the legislative grant could go no further, so far as it effected private rights. It exempted the defendants from all liabilities, as respects the public, to indictment for a nuisance, or otherwise; but it left all rights of property unaffected. It gave merely a franchise, and could confer no exemption upon the defendants for wrongs to the rights of private property. (21 Conn. Ref. 294, Williams *vs.* The Central Railroad Co. 16 N. Y. Ref. 97, 3 Hill 567.)

Under the charge in this case, the jury have found that the injuries sustained by the plaintiff, would not have occurred but for the excavation and removal of the banks of the stream made by the defendants. Such removal and excavation

were made by the defendants for their own use and benefit, and necessarily at their own risk, so far as the rights of others might be affected thereby. No one has the right to change, or interfere with, the flow, course, channel, or banks, of a natural stream, at the risk of others, or to their prejudice. The Legislature authorized the defendants to cross this stream; but it bound them, if they in any way interfered with the flow of water on the banks of the stream, "to restore it to its former state, so as not unnecessarily to have impaired its usefulness." The defendants interfered with the banks and channel of the stream. Did they restore it to its former state, so as not to have impaired its usefulness? They were bound so to restore it, as to leave the rights of other persons in respect to the stream precisely as before they interfered with it—precisely as they stood in the former state of the stream and its banks. In all cases, a railroad corporation under the provisions of the General Railroad Act, or any private charter, where they do not change or affect rights of property, or appropriate the same, and make compensation therefor, must cross, intersect, or run along streams and highways, or other roads, at their peril. If they alter, change, or affect, the stream or the road, they must restore it to its former state, so that the rights of third persons be, in no way, affected injuriously by such change, or they will be responsible in damages for any injury sustained from such omission. And this is practically the rule asserted by the Judge at the Circuit, as the basis of the defendants' liability in this action.

The defendants claim that they are not liable, unless they are guilty of negligence, or unskillfulness, in making the erection, or alteration, involved in crossing a stream or road. The riparian owner upon a stream, or the private owner of the lot situate upon a street or highway, except as against the public authorities, is entitled to have such street, or highway, remain in its former state. He has nothing to do with the question of negligence, or unskillfulness, in respect to a change of its banks, or channel. The question for him, in respect to his rights, is simply and solely, is he damaged by the change, or alteration, made? If so, he is entitled to be compensated to the extent of such damage. A man owning both sides of a private stream, has a right to erect a dam upon his own land, and use the water thereon; but he has no right to flow his neighbor's land, or do him any injury by the erection of such dam. Such neighbor has nothing to do with the question, whether the dam is, or is not, negligently or unskillfully constructed. He is not bound to submit to injury from a dam skillfully constructed, and in respect to which, no allegation of negligence could be maintained. The question for him is simply, is he injured or not by the construction of such dam? (5 Cowen 165.)

There is, it is true, a large class of cases where the rule of liability would be that claimed by the defendants in this case, where no action can be sustained for injuries received not resulting from negligence, or unskillfulness, or some omission of duty. These cases rest upon the rule—*sic utere tuum ut alienum non laedas*, and embrace a large class of injuries to the relative rights of the citizens, redress for which, can be based upon no other rule than this broad principle of equity, and nat-

ural justice. But the plaintiff's right of action does not rest upon this principle. It is based upon the fundamental right of property, the right in and to the soil, and to the things on, and pertaining to, the earth's surface. The cardinal maxim, *aqua curret et debet currere*, &c., implies that no one has the right to change, or divert, the course, direction, or flow, of a natural stream to the injury of another. All men have a right to base their claims to property, so far as such claims relate to the earth's surface, upon nature's law, upon the assumption that the earth's surface is to remain substantially unchanged. Every change, or alteration, of such surface, where such alteration involves an injury to others, is, therefore, a violation of natural right, and it is upon this violation that the plaintiff is entitled to maintain this action, independently of the questions of negligence, or unskilfulness, of the defendants. This action might have been sustainable, perhaps, on the ground of the insufficiency of the water-way provided by the defendants, or, for their neglect to keep it open, and clear, for the flow of the water. But the plaintiff is not driven to these grounds. The excavation, and removal, of the banks of the stream, left the water to flow out of the natural channel of the creek, and to overflow the plaintiff's premises; and this overflow, the jury have found, would not have happened but for such alteration, and excavation, of the natural banks of the stream.

For the damages resulting from such alteration, and excavation, I think this action clearly maintainable.

Car Wheel Boring Machine FOR \$400.

ONE of Wheeler's best vertical Machines, with over-head pulleys and shafting,—cost \$700. Has been used a short time and is in perfect order, ready for use.

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WILLIAMS & PAGE,
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HOYT, BADGER & DILLON,
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MANUFACTURERS AND IMPORTERS OF
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GOLD PENS.

HENRY A. BROWN & CO.,
SUCCESSORS TO LEVI BROWN,
MANUFACTURERS,
181 BROADWAY,
NEW YORK.

NOTICE to RAILROAD CONTRACTORS.

OFFICE OF THE RICHMOND & YORK RIVER R. R.,
Richmond, June 25, 1859.

THE undersigned is authorized to receive Proposals for the unfinished Grading, Bridging, Delivery of Cross Ties, Laying the Track, Depots, and all other work necessary to complete the 2nd Division of the Richmond and York River Railroad to West Point (15.3 miles), including Pamunkey River Bridge, Wharfing at Pamunkey River and at West Point.

Proposals sealed, will be received at this office in Rock-etta in this city, until the 20th day of July next, at 12 M., where Plans, Specifications and all information necessary for bidders, will be furnished on and after the 10th of July.

Two separate bids to be made by each bidder:—One to state the price in cash for each item; the other to state the price in 8 per cent. 1st Mortgage Bonds of Company at their par value, and 20 per cent. reserved from monthly estimates until contracts are completed.

3127

D. S. WALTON, Chief Engr.

To Locomotive Builders.

WANTED a situation by a Draughtsman well acquainted with the practical construction of Steam Engines, particularly Locomotive Work.
Address Box 492 Paterson, N. J. 25

PARK'S IMPROVED TRACING LINEN, DRAWING MATERIALS, FOREIGN AND DOMESTIC STATIONERY, PRINTING & LITHOGRAPHING.

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STEEL, FILES, ETC.

R. GROVES & SONS,
SHEFFIELD, ENGLAND,
MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files, of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.
A stock of the above goods constantly on hand.

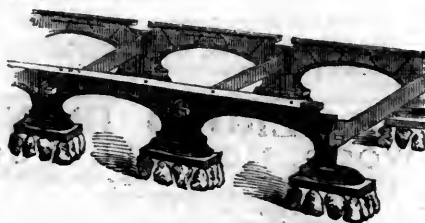
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CHAS. CONGREGVE & SON, Agents,
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BEERS' CAST-IRON ENDLESS RAIL, FOR CITY RAILROAD;

Now being laid in Philadelphia and elsewhere;
THIS road is exclusively of cast iron, without tie, string-piece, or chair; Rail 85 to 100 lbs. per yard; Durability four fold over the present road, with 65 lbs. groove rail: And with a saving on first cost; effecting a reduction in current yearly repairs, and relays, of at least \$1,000 per mile.
Also,—



BEERS' ELASTIC IRON RAILWAY, FOR LOCOMOTIVE USE;

This road can be built and equipped, without additional cost over a road with 65 lbs. T. rail; saving not less than 60 per cent. on motive power, 50 per cent. on dead weight, and 80 per cent. on repairs of way; thus reducing the yearly expenses from \$1,500, to \$2,000, per mile. For full particulars, with drawings, relating to both roads, see a recent Treatise, entitled Railroads, their construction and management, with the remarks from twenty-five years experience, by S. A. BEERS, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

S. A. BEERS.

ROLLING MILL FOR SALE.

A MERCHANT IRON AND WIRE ROD ROLLING MILL, situated in the City of Wheeling, Va., with Coal banks in rear of the mill containing an abundance of good bituminous coal.

The cost of the fuel delivered to the furnaces is but two and a-half cents per bushel.

Attached to the mill is a WIRE FACTORY and its appendages. Also a KIRK STEAM HAMMER for Forging Car Axles, etc. There is extra shafting and surplus of power for other work if required.

The extraordinary cheapness of the fuel, and the facilities for obtaining metals, and for shipping, both by water and rail, to all parts, particularly west and south, makes the locality a desirable one for the manufacture of IRON in any or all its branches.

For particulars address either of the subscribers.

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P. C. HILDRETH, Wheeling, Va. 8120

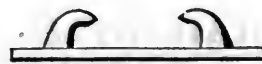
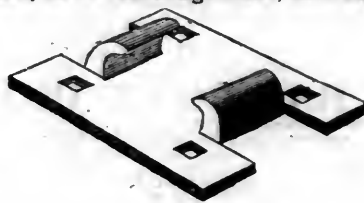
NEW YORK

RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.
Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "New York Wrought Iron Railroad Chair Company," and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned ACROSS the fibre of the iron; while the lips of a rolled Chair are turned with the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

North Carolina Railroad Company,
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Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R.R. Co., etc., etc.

Messrs. M. K. JESUP & CO., 44 Exchange Place, NEW YORK, are the only parties authorized to act as our Agents.

Mr. Jacob Rowe, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

FREIGHT CARS for SALE.

11 CARS—Have been run about one year,—viz:—
2 long 8-wheel Box Cars,
9 " " Platform Cars.

These Cars are made in the best manner, with large axles, brakes, Lighter boxes, etc., and will be sold low for cash.

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2 FIRST CLASS LOCOMOTIVES, warranted to be superior in every respect. Weight 24 tons. Gauge 4 feet 8½ inches. Cylinder 15x24 inches. Outside connection. Boiler 44 inches diameter. 130 Copper Flues, each 10 feet 6 inches long, 2 inches diameter. 800 sq. feet Fire Surface. Tender 1,200 gallons. 5 feet Drivers. Are entirely new, never having been used. For terms apply to

GEO. T. M. DAVIS,
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New York, June 22, 1859.

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RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 TONS English Rails same size and weight.

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THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the **ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG.,** are prepared to contract for the sale of **RAILROAD IRON** of a superior quality and on the most advantageous terms.

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RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COMPY,
44 Exchange Place.
New York, 1st June, 1859.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in **STAFFORDSHIRE AND WALES,** are prepared to contract for delivery on board ship at **LIVERPOOL, or WELSH port.**

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CONTRACTS FOR RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
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500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

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THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

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THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the **Dowlais Iron Works,** near Cardiff, South Wales, are duly authorized to contract for the sale of their **G. I. Railroad Iron, and Common Bars,** on most advantageous terms.

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THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY,** and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.
New York, Aug. 1, 1858.

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO,

MANUFACTURERS EXCLUSIVELY OF

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THIS is a new **ROLLING MILL,** having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

from Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

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February, 1854.

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THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

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Erie Rails, 57 to 58 lbs. per yard, on hand in **NEW YORK AND NEW ORLEANS.**

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL,
Far superior to the ordinary kind.
FROG PLATES, POINTS.

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IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

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Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of **IRON** can be executed.
August 16, 1854.

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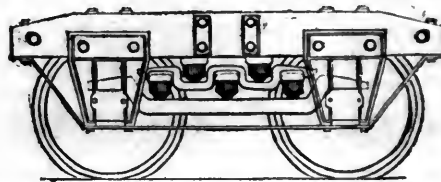
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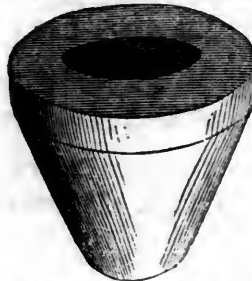
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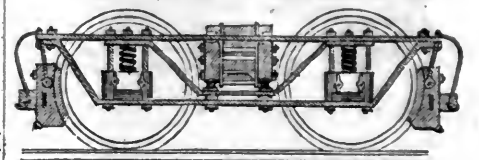
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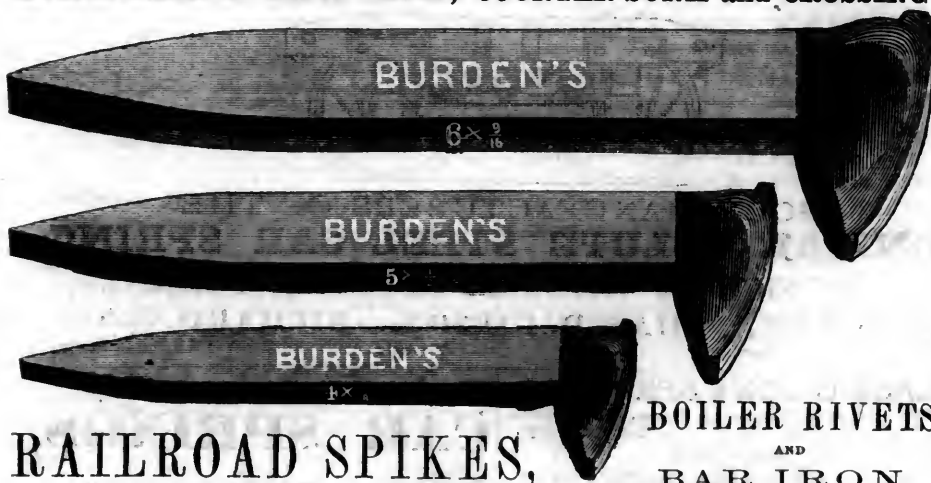
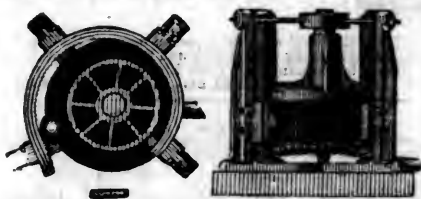
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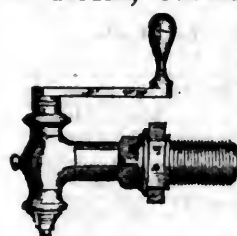
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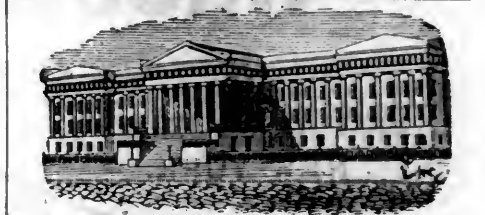
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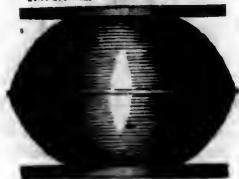
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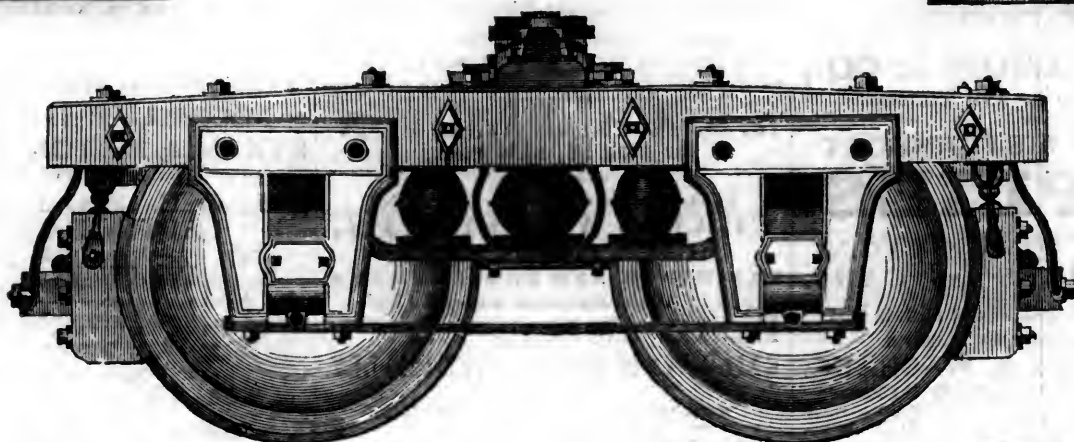
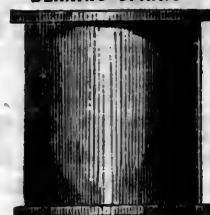


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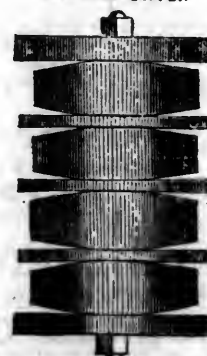


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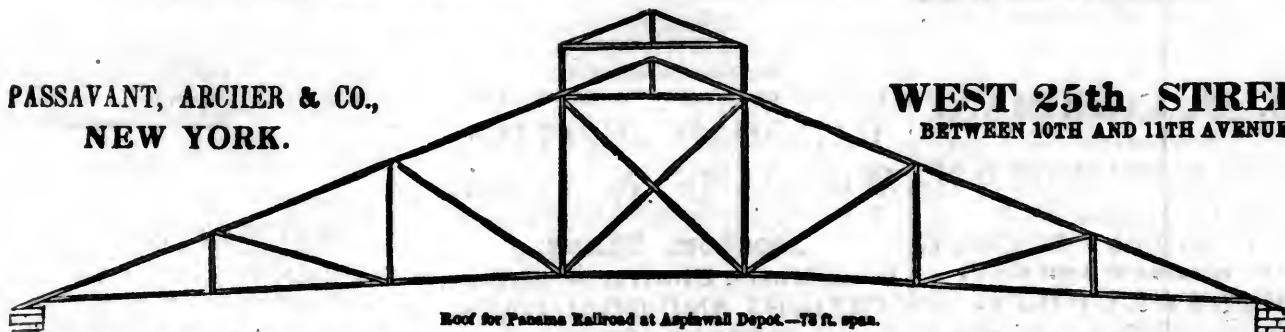


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STEAM NAVIGATION, COMMERCE, FINANCE,
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HENRY V. POOR, *Editor.*

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American Railroad Journal.

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New York, Saturday, July 9, 1859.

Lake Superior Mines.

Among the many interests which the activity and enterprise of the past few years have developed and which promise to attain an elevated position in the industrial economy of the Union, none is more conspicuous than that of copper-mining in the Lake Superior region. But a few years have passed since the first miners commenced operations on the then unsurveyed lands, and yet what a vast interest it has already become. Probably not less than \$10,000,000 are embarked in the aggregate enterprise, and though much of this may have become through ignorance and folly a loss to the experimentalist, yet taking the whole returns into consideration, their value has been commensurate, and the promise of the future is full of hope.

The celebrated region under discussion is known as the northern peninsula of Michigan and occupies a land area of about 18,000 square miles. On the one side is Lake Superior and the other Lake Michigan—its extremities being bounded on the east by the river St. Mary and on the west and south-west by the Menomonee and Montreal rivers.

The basin of Lake Superior occupies for the most part a great synclinal trough. From each side of the lake the dip of the sand stone which appears to form its bed is towards the centre. The opposite shores, sometimes 160 miles apart, however, are very different in character and appearance: the northern with cliffs almost perpendicular and sometimes more than 1,000 feet high, presenting scenes of unrivalled grandeur—the southern or Michigan shores comparatively low, only occasionally rising to a height exceeding 200 feet above the lake.

This difference in aspect is easily accounted for. On the east and north the sandstone has been worn away, leaving only the enduring granite and trappean rocks which present an effectual barrier against the further encroachment of the lake. Only here and there sedimentary rocks remain, where they are sheltered from the action of the waters, standing as outliers on the small islands, and along the coast and behind Isle Royale.

The sandstone, however, appears along the entire southern shore, from Sault Ste. Marie to Fond du Lac, its continuity being interrupted in only a few points where the older rocks have been denuded. The trend of this shore is east and west; but at mid-distance from its extremities its outline is broken by a projecting point of land which extends in a north-east direction for 60 or 70 miles. This is Keweenaw Point.

From any point between the Sault Ste. Marie and the Pictured Rocks, the upper members of the silurian system of rocks crop out in succession with a slight southerly dip. Along this portion of the Lake shore the sandstone lies nearly horizontal and has but little coherence. Its thickness is from 300 to 400 feet. When it comes in contact with the azoic rocks as near the Carp and Chocolate rivers, it rests unconformably upon them. On Keweenaw Point, however, its disposition is entirely changed: it is thicker, tilted up, and associated with heavy beds of conglomerate and trap. On tracing the interior ranges which approach the lake at the extremity of the Point, they are found to extend south-westerly a few miles distant from the shore gradually diminishing towards Wisconsin and finally disappearing before reaching the Mississippi. These ranges form

usually two, but sometimes three or more parallel ridges, steep toward the south and of moderate dip northward, averaging not more than 500 feet elevation above the lake. Along the line of elevation locally known as the "Trap Range" the copper mines of the southern shore are situated, the metalliferous belt occupying in Michigan a length of more than 120 miles and a breadth varying from two to six miles. In the more elevated and central portions of the range the rocks are mostly of the igneous class, intercalated with beds of conglomerate. Receding in either direction from the line of igneous action, the belts of trap become thinner and the conglomerate predominant, and again the latter is succeeded by sandstone with its normal characteristics.

There are certain varieties of trap which are universally recognized in this region and which have a marked influence on the character of the veins as they pass through them. These changes of character are most distinctly perceived in Isle Royale, and Keweenaw Point. The two species found in Michigan are the amygdaloid and greenstone, only the first of which is productive of copper.

The Lake Superior mineral region naturally divides itself into four districts, each characterized by its geographical position and by the mode of occurrence of its minerals. These are Keweenaw Point District, Portage Lake District, Ontonagon District and Isle Royale. The last named is a large island opposite the northern shore and included within the limits of the United States. It is not intended to dilate on the geology of these severally; and with the chief intention of these remarks we now proceed to exhibit the development of each year by year since the commencement of mining operations.

Keweenaw Point is the most easterly of the mining districts of the region and extends westward towards Portage Lake. The most productive mine is that called the "Cliff Mine," owned by the Pittsburg and Boston Company. From this on the average year by year have been taken two-thirds of the whole products of the Point, and in the aggregate between 1845 and 1858, both years inclusive, 8,167½ tons of pure copper. The next most productive mines are those belonging to the Copper Falls, North American and North-

west companies. The total production of the the Cliff and all the mines has been as follows:—

Years.	Cliff.	Total.
1845.....	9.9 tons.	11.3 tons.
1846.....	18.9 "	25.3 "
1847.....	206.3 "	236.7 "
1848.....	500.4 "	512.3 "
1849.....	643.6 "	697.8 "
1850.....	358.8 "	544.4 "
1851.....	425.1 "	661.9 "
1852.....	416.6 "	598.9 "
1853.....	536.8 "	863.6 "
1854.....	657.6 "	1,027.5 "
1855.....	937.1 "	1,411.2 "
1856.....	1,110.8 "	1,487.3 "
1857.....	1,088.9 "	1,787.4 "
1858.....	1,256.7 "	1,802.4 "

and for the 14 years embraced 11,668 tons, made up of the products of the first seven years 2,689.7 tons and of the second seven years 8,978.3 tons. The value of this amount at \$500 a ton is \$5,834,000.

The Portage Lake District surrounds the lake so called. It is next in geographical order to Keweenaw Point. Though mined as early as 1846, there was little accomplished before 1852, and no record is extant previous to 1853. Since then and including that year the production has been as follows—

Years.	Pure Copper.	Years.	Pure Copper.
1853.....	12.7 tons.	1856.....	308.2 tons.
1854.....	24.2 "	1857.....	496.6 "
1855.....	226.9 "	1858.....	754.6 "

—making a total for the six years of 1822.2 tons, valued at \$911,100. The principal mines of this district are those of the Isle Royale Company which in 1858 yielded 235, of the Pewabic 226, and of the Quincy 198 tons.

The Ontonagon District borders on the river of the same name. It contains a larger number of mines than any other of the districts and has produced a large amount of copper. The principal mine is the Minnesota which is rich in native copper and which since 1848 has yielded nearly three-fourths of the whole amount produced. The results year by year of this mine and the total of the district are given herewith:

Years.	Minnesota.	Total.
1848.....	4.8 tons.	4.8 tons.
1849.....	39.2 "	39.2 "
1850.....	77.3 "	80.7 "
1851.....	230.6 "	240.7 "
1852.....	390.1 "	416.9 "
1853.....	392.3 "	499.7 "
1854.....	572.2 "	1,018.4 "
1855.....	1,075.5 "	1,631.9 "
1856.....	1,392.8 "	1,879.9 "
1857.....	1,514.7 "	2,126.7 "
1858.....	1,505.7 "	2,078.7 "
Total.....	7,195.2 "	10,012.6 "
Value.....	\$3,597,600	\$5,006,300.

Isle Royale is not at present worked and never has been to that extent that it might have been and with profit. The only two companies of which we have records are the Siskawit and the Pittsburg, which quit mining in 1854. The yield of these two mines from 1849 to 1853 was as follows:—

Years.	Siskawit.	Pittsburg.	Total.
1849.....	15.8 tons.	1.7 tons.	17.5 tons.
1850.....	15.6 "	4.5 "	20.1 "
1851.....	18.7 "	" "	18.7 "
1852.....	31.2 "	" "	31.2 "
1853.....	14.4 "	6.2 "	20.6 "
Total.....	97.7 "	12.4 "	108.1 "

—the whole being valued at \$54,050.

Collecting the yield of the four regions the results are shown in the following table:—

Districts.	Pure Copper, tons.	Value.
Keweenaw.....	11,668	\$5,834,000
Portage.....	1,822	911,100
Ontonagon.....	10,012	5,006,300
Isle Royale.....	108	54,050
Grand Total.....	23,610	\$11,805,450
Cliff and Minnesota Mines.....	15,363	7,681,500
All other mines.....	8,247	\$4,123,950

From the above it will be seen that the really successful part of the enterprise has been confined to two companies, and about half a dozen others have probably covered expenses—all besides these have lost or are depending on future developments for remuneration for the capital and labor expended.

The metalliferous range extends into Wisconsin and has at various times been examined. The results of these examinations, however, have not been favorable and, indeed, there are few veins of copper beyond the borders of Michigan which promise to become of value. One or two companies have, however, commenced operations, but of their doings we have no information. No copper has been shipped from Superior City, the only port accessible from the mines.

On the north shore of Lake Superior and Lake Huron within the territorial limit of Canada and the islands adjacent thereto, mining has at various times been carried on. The mines are undoubtedly rich but only the Bruce mine on the north shore of Huron has attained to eminent success.

The ores produced in the Canada mines are all or nearly all sent via Montreal to Swansea in Wales for reduction. The total amount of copper shipped from Canada since 1850 (probably all or nearly all the produce of the Bruce mine has been as follows:—

	Copper Ores, tons.	Copper, tons.	Official Value.
1850.....	272.16	62.44	\$36,583
1851.....	1,349.82	122.80	86,756
1852.....	598.08	24.92	32,420
1853.....	1,639.68	61.60	94,325
1854.....	1,731.52	....	103,328
1855.....	1,708.00	1.96	91,627
1856.....	1,106.51	....	82,834
1857.....	2,869.44	3.36	240,942
1858.....	2,158.24	2.24	191,949

making totals for the nine years inclusive of—ores 13,433.45 and copper 279.32 tons of 2,000 lbs. valued together at \$960,764.

The American ores are shipped from the various ports of the south shore and find their way via the Sault Canal to the smelting establishments at Detroit, Cleveland and Pittsburg and in less amounts to these at Bergen Port in the Lower Bay of New York, at New Haven and at Boston, and also to those at Baltimore. The four last named, however, are chiefly supplied with ores from the Appalachian and Atlantic mines of Tennessee, Virginia, etc., and from foreign countries.

In the JOURNAL of July 2nd will be found a tabular statement of the commerce of copper between the United States and foreign countries.

Lackawanna and Bloomsburg Extension.

The rails on the Lackawanna and Bloomsburg Extension, between Rupert and Catawissa (says the *Montour Herald*), are laid down for a distance of near a mile, and the work is rapidly progressing.

Milwaukee and Mississippi Railroad.

The following semi-official intimation has been given out from the Milwaukee and Mississippi Company respecting their overdue and somewhat embarrassing, but, as in the present shape, non-mortgage debt:

"The Milwaukee and Mississippi Railroad Company have concluded to issue their third mortgage 7 per cent. bonds at par, in exchange for the present floating indebtedness, including their issue of \$448,000 7 per cent. bonds, which matured in April last. But the company have deemed it expedient, in view of the present dull state of business at the West, to require their creditors to surrender two years' coupons or interest on these 3d mortgage bonds—that is, the bonds will not commence to draw interest until 15th March, 1861. The company hope, by that time, to be enabled to resume payment of interest on this indebtedness. As there have been some law suits commenced against the company, the holders of such floating debt, who make the exchange before the judgment is obtained, will have preferences under the mortgage as against such judgment creditors. The residue of such 3d mortgage bonds is to be applied to the liquidation and payment of their issue of \$234,000 city of Milwaukee 10 per cent. bonds, and of some \$750,000 of farm mortgage bonds, and will give to the holders of these last mentioned securities about 66 per cent. of their par value."

Railroads of New York.

We have been favored with advance sheets of the report of the Chamber of Commerce, of the city of New York, in which especial reference is made to its system of railroads—a subject which has heretofore received very little attention, either from that body, or from the merchants, or capitalists, of this city. That kind of public opinion which distinguishes so honorably our other leading Atlantic cities, is hardly known here. Our railroads owe very little to that motive which has led other cities to extend so largely their money and credits for their construction—the enlargement of the area of their trade. With them, the railroad was regarded as the means, to a considerable extent, of self-preservation; and they were consequently ever present to the public mind, and intimately associated with municipal legislation, and with whatever that was undertaken for the advancement of their trade and commerce. Notwithstanding all this, New York finds herself the centre of a magnificent system of roads, corresponding fully to the extent of her population and commercial importance. For the first time in her history, are these works, which may peculiarly be said to be New York roads, made a leading subject in the report of its Board of Trade. As this portion of the report has been prepared with great labor and care, and presents, in a condensed form, much valuable and interesting information, we make the following copious extracts from it:—

Vast as is the traffic on our canals, and much as New York is indebted to them for its commercial ascendancy, the result of their operations does not bear a comparison with that upon our railroads, which are the expression, and the instrument, of an advanced civilization. Canals have been in use thousands of years; railroads not a third of a century. The former are rendered useless, in our latitude, during several months of each year; the latter are independent alike of the frosts of winter, and the droughts of summer.

As New York was among the first to appreciate and acquire the means of canal communication, the best which the ingenuity of man had then devised, so also she was foremost in adopting the railroad; one of the earliest in the United States

—the Mohawk and Hudson—being within her borders; as was also the first which connected the Atlantic seaboard with the Great Lakes, and the productive West. The Mohawk and Hudson Railroad was chartered by the Legislature of this State in 1826; the Committee to whom the subject was referred, saying in their report:

"There is not a single instance of a railroad of any extent in this country known to the Committee, and it remains an experiment yet to be tried. It is under these circumstances that the petitioners are willing to make the first experiment of the kind, with their own private resources. The present occasion offers a fair opportunity for trying the experiment, without expense to the State, how far the contemplated improvement is applicable to our soil and State."

Leave was granted to try this "experiment." The construction of the road was commenced in August, 1830, and it was completed and opened for business, 16 miles in length, on the 24th of September, 1831. The ascending grades from Albany and Schenectady, respectively, were overcome by inclined planes, worked by stationary engines. At the opening of the road, three cars, containing twenty passengers each, were taken from the head of the plane in Albany, to the head of the plane in Schenectady, 15 miles, by an American locomotive, weighing $3\frac{1}{2}$ tons, in forty minutes. The company had, at that time, in their possession, an English locomotive, weighing 12 tons, but it was found that its great weight seriously injured the superstructure of the works. The wheels of the engine were of wood, with wrought iron tires.

The line composing what is now the New York Central Railroad, from Albany to Buffalo, was completed, and the road opened through its entire length, in December, 1842, at a cost, for 347 miles, of \$8,353,261, a fraction over \$24,000 per mile.

The receipts since that time have been as follows:

Year.	Passengers.	Freight, &c.	Total.
1843.....	\$1,008,026	\$103,093	\$1,211,119
1844.....	1,048,066	164,158	1,212,224
1845.....	1,091,698	185,003	1,276,701
1846.....	1,234,047	155,254	1,489,291
1847.....	1,657,567	466,938	2,124,505
1848.....	1,682,355	732,077	2,414,432
1849.....	1,893,280	762,851	2,656,131
1850.....	2,242,131	881,378	3,123,509
1851.....	2,184,202	908,268	3,192,470
1852.....	2,359,513	1,263,560	3,622,073
1853.....	2,777,313	1,839,709	4,617,022
1854.....	3,157,574	2,766,820	5,918,334
1855.....	3,242,229	3,321,352	6,563,581
1856.....	3,207,378	4,499,970	7,707,348
1857.....	3,147,637	4,879,614	8,027,251
1858.....	2,532,647	3,995,766	6,528,413

Total
(16 yrs.) \$33,459,457 \$28,072,837 \$61,532,294

As the nature of the country precluded the building of a canal from the Lakes directly to New York city, the project was early conceived of constructing a great highway between the two regions; and in 1825, the Legislature ordered the survey of a route through the southern counties. Public attention having already been drawn to the subject of railroads, on the 24th of April, 1832, the New York and Erie Railroad Company was chartered, with a capital of \$10,000,000. In 1834 the Legislature granted the sum of \$15,000 for a survey of the route; and in 1836 the credit of the State, to the amount of \$3,000,000, was loaned to the company. After serious delays, and embarrassments, the road was formally opened to Dunkirk, 464 miles in length, May 14th, 1851. By the terms of the State loan, the company were compelled to locate their entire line within the State of New York, and Piermont was selected as the Hudson river terminus. In November, 1853, this restriction having meantime been removed, the line was opened to Jersey City.

The receipts since its completion have been as follows:

Year.	Passengers.	Freight, &c.	Total.
1851.....	\$1,163,536	\$1,198,337	\$2,359,876
1852.....	1,299,797	2,018,929	3,318,721
1853.....	1,601,210	2,717,752	4,318,962
1854.....	1,779,722	3,580,237	5,359,959
1855.....	1,698,070	3,790,323	5,488,993
1856.....	1,656,675	4,692,315	6,348,990
1857.....	1,495,361	4,247,245	5,742,606
1858.....	1,182,358	3,969,358	5,151,616

Tot. (8 yrs.) \$11,877,299 \$26,208,493 \$38,085,722

These are the two lines of railroad over which the larger part of the business between New York and the West is transacted. A new route, however, more direct than either of these, has just been opened. The Central Railroad of New Jersey, by means of various Western connections recently made, is united with the Pennsylvania Railroad at Harrisburg, affording an additional channel of commerce, and one which promises to become an immense value to the carrying trade between New York and the West.

These railroads are connected with all the principal lines throughout the United States. At Suspension Bridge, the New York Central joins the Great Western Railway of Canada, which, after traversing the fertile and thriving region north of Lake Erie, connects at Detroit with the Michigan Railroads for Chicago and all that vast system in the Mississippi valley, and with the Detroit and Milwaukee for Grand Haven, and the lines from Milwaukee to the North and West. At Buffalo, it divides the Lake trade with the Canal, as well as joins the Buffalo and State Line Railroad, which runs along the Southern shore of Lake Erie, and unites with the lines connecting at Cleveland, with all those roads which take the direction of Cincinnati and Ohio Valley.

The New York and Erie Railroad also connects with the Buffalo and State Line Railroad, and thus is brought into union with the same system as the New York Central; besides having a lake terminus at Dunkirk, by which it obtains its share of the commerce of the Lakes.

The following statement shows the number of tons of freight carried over the New York Central and New York and Erie Railroads, since the opening of the latter, in 1851:

Year.	N. Y. & ERIE. Through.	Total.	N. Y. CENTRAL. Through.	Total.
1851.....	25,000	250,096	20,000	123,019
1852.....	46,847	456,460	31,287	193,465
1853.....	140,230	631,039	91,941	438,840
1854.....	147,850	743,250	123,991	549,805
1855.....	155,469	842,055	156,194	670,073
1856.....	240,733	933,220	253,288	777,102
1857.....	238,099	978,069	292,877	838,791
1858.....	285,955	816,964	312,408	765,407

Tot. ton'ge. 1,280,183 5,651,153 1,281,986 4,355,512

In 1854 Mr. W. J. McAlpine, State Railroad Commissioner, estimated the value of freight moved on the New York Central Railroad, between the years 1848-'51, at \$227.41 per ton. Recently one of the largest forwarders of this city estimated its value at above \$212 per ton. Assuming \$225 per ton as the value, the sum total of the freight carried over the entire length of these two roads in the last eight years, amounts to \$576,487,025, or considerably more than the present valuation of the real and personal property in New York city. By the same estimate, the value of all the freight moved upon these two roads, since 1850, amounts to \$2,251,499,625—an amount greater by \$30,000,000 than the value of all the foreign imports into the United States for the same period.

Besides the three lines already mentioned, there are other important railroads radiating from New York.

The New York and Harlem Railroad was opened in 1852, 131 miles, to Chatham Four Corners, where it connects with the Western Railroad line between Boston and Albany. It traverses one of the finest regions in the vicinity of New York.

The Hudson River Railroad was opened October 1, 1851, 144 miles, to Albany, where it connects with the New York Central, and other railroads

terminating at that place. In connection with other roads, it forms an almost straight line between this city and Montreal. It is built upon the bank of the finest navigable river in the world, and is, perhaps, the greatest passenger railroad in the country.

The New York and New Haven Railroad was opened to New Haven, 63 miles, in January, 1849. It forms the only direct land channel of communication between the heart of New England and New York city.

The Long Island Railroad was opened to Greenport, 95 miles, in 1844. It was built mainly with a view of forming a more expeditious line of communication between Boston and New York, by shortening the route for steamers. Although it has hardly fulfilled its original intention, it has done much to develop the industry and resources of Long Island.

The New Jersey Railroad, 34 miles in length, occupies one of the best routes in the United States, being on the direct line between the two most populous cities in the Union. Its receipts are chiefly derived from passengers. The first train ran over its line to Philadelphia, January 1, 1839.

The following statement shows the amount of business transacted on these five railroads for the years named:

Year.	Tons Freight.	Receipts.
1850.....	236,486	\$3,146,566
1851.....	468,440	4,978,234
1852.....	789,022	8,902,973
1853.....	982,969	8,835,974
1854.....	1,281,182	10,676,449
1855.....	1,397,715	10,977,514
1856.....	1,673,661*	12,135,736
1857.....	1,847,438*	11,750,031
1858.....	2,000,000*	9,849,102

Total..... 10,676,913 \$79,252,669

* Including coal over the New Jersey Central.

Taking the estimate already alluded to, and valuing the coal at \$5 per ton, the sum total of the freight above amounts to \$2,678,205,425, showing that the value of freight brought over all the roads radiating from this city since 1850, except the Erie, is \$400,000,000 more than the amount carried on the New York Central for the same period.

The following table shows the length and cost of the various railroads having their termini at New York, January 1, 1859:

	Length.	Cost.
Hudson River.....	144	\$11,328,989
Long Island.....	95	2,566,270
New York and Erie.....	465	34,528,108
New York and Harlem.....	131	7,948,116
New York and New Haven.....	63	5,325,527
New Jersey.....	34	3,665,918
New Jersey Central.....	64	5,193,797
	996	\$70,556,725
Add New York Central.....	555	30,732,518
Total.....	1,551	\$101,289,243

It will be seen from this, that the cost of construction of the railroads terminating at New York city is more than one-tenth of the cost of all the railroads in the United States. This sum, however, represents but a very slight proportion of the amount which New York has expended in the construction of railroads. Almost the whole railroad system of the West owes its existence to the means furnished by this city.

The construction of the eight lines of railroad above enumerated permanently secures to New York its pre-eminence among the cities of the continent. The readiness with which the building of canals has been laid aside, and the new and improved mode of communication by railroads substituted, shows that we are also prepared to give up the railroad, should any other more advanced method of commerce present itself. It is only by a constant adoption of whatever improvement the inventive genius of man may create, that this pre-eminence can be maintained.

These statements sufficiently indicate the part which railroads have performed in developing the wealth and resources, not of New York merely, but of the whole country. Indeed, without such channels of communication, the settlement of the United States, with anything like the celerity which has distinguished it, would have been impossible; and the financial centre of the country, instead of being as now, at New York, in all human probability would have been located near the outlet of some one of the great natural channels of communication between the seaboard and the interior. Dr. Lardner, in one of a series of essays published in the *London Times*, in 1851, says: "The Mississippi and its tributaries have served the purposes of commerce and intercommunication to the comparatively thinly-scattered population of the Western States so efficiently that many years will probably elapse, notwithstanding the extraordinary enterprise of the people, before any considerable extent of railway communication will be established in this part of the States." At the time he wrote, there were in the States to which he alludes 1,835 miles of railroad, costing perhaps \$10,000,000. There are now in those States 13,000 miles of railroad in actual operation at a cost, for construction, of \$325,000,900, and some 5,000 miles more in process of building.

On account of the greater magnitude of her other commercial interests, New York is apt to have injustice done to the extent of her railroad interest. While Boston and Chicago have each achieved a certain reputation as railroad centres, New York has been too often considered as occupying a secondary place in that category. A comparison, however, will at once remove this erroneous impression.

Boston is the terminus of 545 miles (including the Western) of railroad, costing \$37,470,329, showing an amount of cost about one-third of that on railroads terminating at New York. Chicago is the centre, including the whole length of the Illinois Central, of 2,289 miles of railroad, costing \$107,841,848. Deducting the length of that portion of the Illinois Central which does not properly belong to the Chicago system, and the city of New York stands very nearly by its side among the railroad centres of the country. Philadelphia is the terminus of 705 miles of railroad, costing \$71,254,300.

If we look to the traffic carried on over the railroads terminating at New York, the comparison is still more in our favor. The following table shows the receipts for a series of years upon the eight railroads, including the Western, terminating at Boston:

Year.	Tons Freight.	Total Rec'ts.
1850.....	1,480,580	\$1,886,474
1851.....	1,505,050	4,913,600
1852.....	1,696,196	4,963,465
1853.....	2,072,045	5,780,737
1854.....	2,373,233	6,120,658
1855.....	2,081,840	6,752,476
1856.....	2,210,467	7,340,279
1857.....	1,977,420	6,733,314
1858.....	2,041,037	6,064,623
Total.....	17,437,868*	\$53,505,626

The following is a corresponding statement for Chicago:

Year.	Tons Freight.	Total Rec'ts.
1850.....	20,000	\$48,332
1851.....	52,119	127,686
1852.....	71,052	211,311
1853.....	502,908	1,894,192
1854.....	2,009,632	7,595,676
1855.....	4,522,172	13,298,201
1856.....	5,526,948	17,343,243
1857.....	5,816,950	18,590,520
1858.....	4,300,000	15,197,156
Total.....	22,821,781	\$74,306,317

The freight carried over the railroads radiating

* From this should be deducted the freight carried over the Western Railroad, amounting to 3,092,096 tons, which would leave 14,349,772.

from Boston is probably about equal in value per ton to that carried over the New York railroads; but as the great bulk of freight on the railroads terminating at Chicago, is wheat, the basis of computation we have before assumed would not be applicable to that city.

These statements show that the business, not of New York only, but of the whole United States, has steadily and constantly increased at a rate unprecedented in the annals of commerce. The momentary check which it received in 1857, and the slight diminution to its volume consequent on the revulsion of that year, are already more than overcome. The return of immigration prove that the surplus population of other nations is again seeking, and in enlarged numbers, our fresher and broader fields. Though the receipts of some of our leading railroads show a falling off as compared with previous years, and seem not to indicate that steady enlargement of business which every other branch of industry exhibits, we must not be misled by this appearance. The decrease in receipts is owing not to a decrease in business but to the low rates which it is carried on; and which, however, it may militate against the welfare of the stockholders, is not at all to be regarded in considering the general business of the country.

The railroads running by the side of the Erie Canal were at first prohibited by their charters from carrying freight; and later, canal tolls were imposed upon all railroad freight, in addition to the established tariff. It was not until 1853 that these restrictions were removed, and commerce left free to choose its own channel, unfettered by legislative interference. The amount of freight transported on railroads during the early years of their operation was so slight that no record of it was kept.

All the railroads in the Union are connected, more or less directly, through the great leading trunk lines, with this city, which may fairly be regarded as the railroad centre of the United States. A small number of railroads, perhaps 3,000 miles in all, may form an exception to this statement, Boston being their natural centre. The cities of Portland, Philadelphia, Baltimore, and Charleston, on the seaboard, and Milwaukee, Chicago, St. Louis, Cincinnati, and Memphis, in the interior, are also important centres. But they sustain very different relations to the railroad interest of the country from that which characterizes New York, which is as truly the railroad, as it is the financial, centre of the United States. A glance, therefore, at the railroads of the whole country is essential to a fair view of the commerce of New York.

The following table shows the extent and increase of railroads in the United States on the first of January in each year since 1850:

Year.	Miles.	Increase.
1850.....	7,350	.....
1851.....	8,856	1,506
1852.....	10,878	2,022
1853.....	13,315	2,437
1854.....	15,511	2,196
1855.....	19,438	3,927
1856.....	21,440	2,011
1857.....	24,290	2,841
1858.....	26,210	1,920
1859.....	28,454	2,244

There are also more than 6,000 miles of railroad in actual progress in the United States at the present time. In the absence of official statements, it is impossible to give the exact cost of these railroads, but the amount will exceed \$1,000,000,000, the greater part of which has been expended in the last ten years.

The receipts from traffic on them during the present year, will reach \$100,000,000, and the expenses of transportation will amount to \$60,000,000, making the net receipts \$40,000,000.

The number of persons employed on these railroads is 100,000 men, representing a population of half a million souls, or one-sixtieth of the whole population of the United States. Their yearly wages equal \$45,000,000.

There are 6,000 locomotive engines in use on the railroads of the United States, running annually more than 100,000,000 miles, and requiring 2,500,000 cords of wood, sufficient to clear a forest of 62,500 acres every year.

There is now in operation, in the United States, a mile of railroad to every thousand inhabitants. In England the proportion is one mile to every 2,500 inhabitants, and in all Great Britain one mile to every 3,000 inhabitants.

The number of square miles of territory to a mile of railroad in the United States is 56; in Great Britain, 14.

The amount annually expended in the construction of railroads in the United States, since 1850, has averaged \$88,000,000, or very nearly double the expenses of the national government for the same period. The gross annual receipts on our railroads have surpassed the amount of revenue derived from customs in that time.

Financial Condition of the Chief European Powers.

(From the *Augsbourg Ausland*, April 30.)

Notwithstanding her enormous and unparalleled debt, the financial burden of Great Britain is actually the easiest to bear of any of the great European Powers. In 1816 the national debt amounted to £816,330,000 (\$4,081,650,000), the interest and expenses on which amounted to the annual sum of £30,462,023 (\$152,310,115). In 1830 the national debt had been reduced to \$771,250,000. By the year 1857 it was further reduced to £769,250,000; but by the 31st of March of the succeeding financial year it had been increased again to £779,250,000, in consequence of the Crimean war, which involved an annual expense of £27,495,853. Commerce, agriculture, and industrial pursuits, have been so prospered, and developed, since 1816, that no one will doubt that Great Britain could in the present year, 1859, raise a revenue of £60,000,000 without burdening the nation more than it was burdened in 1816 to raise a revenue of half that sum. But with her growing prosperity the national debt, instead of being permitted a proportionate increase, has been lessened by as much as 10 per cent. In 1816 the population of Great Britain was reckoned at 19,500,000; in 1858 it was 28½ millions. In 1816 the payment of the interest on the national debt necessitated a tax averaging one and a half pounds sterling for each person of the population. In 1858 the tax for this purpose averaged less than one pound per head. Taking into consideration the present great prosperity of the British empire, it is not too much to say, therefore, that since 1816 the burden of the British national debt has been in reality lessened by one-half.

In France, the first Napoleon left the State the burden of a debt represented by the annual sum, in rente or interest, of 63,610,000 francs (\$12,722,000). The double invasion of the Allies, the war, levies following upon the peace of Paris, the vast sums paid the returned emigres, all resulting from the fall of Napoleon, at once raised the rente to 195,000,000 of francs. Counting this as the financial condition of France at the restoration of the Bourbons, it appears that they bettered it during twenty-five years at the rate of a million francs rente a year, lowering the rente from 195,000,000 to 170,000,000. In 1830 the French national debt was nominally 3,949,000,000 francs. Louis Philippe was less fortunate than his predecessors. In his reign the national debt was increased to 5,200,000,000 francs, and the expenses on this averaged during his reign 2,500,000 higher than during his predecessors. In 1816 the population of France was stated at 30,000,000; in 1848 it was 35,000,000. In 1816 the expenses of the national debt represented an average tax per capita of six and a half francs. In 1848 this per capita was a trifle over six francs. The burden was, therefore, lighter, even without reckoning on the greater development of industrial pursuits, and increase in national prosperity. Since the beginning of the new empire this is the condition of the French national debt:—

1851.....	5,345,637,000	francs.
1852.....	5,516,195,000	"
1853.....	5,577,505,000	"
1854.....	5,669,655,000	"
1855.....	6,082,878,000	"
1856.....	7,538,041,000	"
1857.....	8,031,992,000	"
1858.....	8,422,097,000	" or \$1,684,415,400

In 1858 the annual expenses on the national debt amounted to the sum of 308,500,000 francs, against the sum of 215,000,000 francs in 1848; and as France has, at present, a population of 36,400,000, it follows that the expenses of the national debt represent an annual tax of nearly $8\frac{1}{2}$ francs per head. With this it must be borne in mind that the other taxes have been materially raised during the last ten years, especially in the larger cities of France, to pay for the numerous internal improvements instituted by the Emperor.

England had last year 268,995 creditors, of whom only 89,205 represented an interest of less than £10 per annum, and 43,287 an interest of between £10 and £20. It follows that of every 100 creditors of the British government over 90 possessed a rental in it of over £20. The British national debt, equally divided among all its holders, would average to each person the sum of £2,900. In France the number of State creditors, before the Crimean war, was 725,190. Since then, however, the national debt has been "popularized," and at the beginning of this year it was divided among 1,008,682 holders, and averaged to each 8,350 francs, or £334, but a little over one-ninth of the British average. Supposing, for the moment, that but one person in any one family was a holder of the national stock—as France may be reckoned to contain nine million families—it would follow that every ninth family draws interest on the national debt.

But badly as the figures show for France, it must be owned that Austria's financial condition is far worse. The different stocks stood thus on January 1 of the present year:—

British 3 per cent. consols.	96, or $3\frac{1}{2}$ per cent.
French rentes	70, or 4.2-7 "
Austrian 5 per cent. nat'l loan. 80, or 6 $\frac{1}{2}$ "	

The Austrian credit is, therefore, twice as weak as the British, and the credit of France is nearly one-half stronger than that of Austria. That this is a natural result, appears from this statement of the annual interest and expenses of the Austrian national debt for nine years:

	Florins.
1848.....	43,369,312
1849.....	49,797,940
1850.....	49,612,562
1851.....	60,481,031
1852.....	62,608,375
1853.....	66,819,173
1854.....	72,148,316
1855.....	77,407,532
1856.....	88,032,650
—at 48 $\frac{1}{2}$ cents to the florin, equal to \$41,695,835.	

Between 1845 and 1856 the Austrian national debt has been increased 1,571 million gulden; and in nine years, since 1848, there has been an increase of 1,500 million gulden. There has been, therefore, an average yearly deficit in the State revenue of 166 million gulden, and this though the revenues have been raised since 1847, from 161 $\frac{1}{2}$ to 268 $\frac{1}{2}$ millions. (The gulden is valued at 39 $\frac{1}{2}$ cents.) Since 1856 various loans have so increased the State debt, that, at the beginning of the present year, the interest and expenses were calculated at the sum of ninety-six million gulden per annum. It is easy to say, "that is about 2 $\frac{3}{4}$ florins, or 6 $\frac{1}{2}$ francs to each person, and thus the French are still two francs worse off than us." But the difference in national prosperity and development makes such a comparison false. The British, who in 1816, paid 1 $\frac{1}{2}$ pounds sterling, or 37 $\frac{1}{2}$ francs, per head tax on their national debt, were yet far less burdened than the French, who paid but 6 $\frac{1}{2}$ francs then. The average wealth and prosperity of upper Italy, and the Austrian crown lands, may rival that of France; but the condition

of Galicia, Hungary, Siebenburgen, Austrian Servia, Croatia, and other provinces, forming at least half of the empire, is greatly lower, though materially improved, since 1849.

Nevertheless we are of opinion that the present war may possibly better the finances of Austria, which could not much longer move downward on the present inclined plane. The gross revenues of the State summed up in 1856 were 268 2-5th million florins. I suppose that for the year 1858 they were increased to 280 millions gross, or 250 millions net, and we may reckon that the interest and expenses on the national debt amounted to eighty-seven millions of this sum. The army, on the other hand, cost as follows in ten years:

Ordinary Outlay. So-called extra'y Outlay	
1847... florins	62,968,096
1848	72,290,459
1849	165,081,884
1850	126,162,936
1851	107,299,292
1852	110,843,321
1853	111,967,916
1854	117,401,192
1855	114,320,715
1856	109,695,558

The separation of the ordinary and extraordinary expenses is so weak a device of the government, and forms so poor a blind to the financial public, that it is to be hoped, for the credit of the administration of Finance, it will be discontinued. Though this system of separation we are prevented, however, from knowing more than that the ordinary expenses for the army have swollen from 52 $\frac{1}{2}$ millions in 1855, to 109 $\frac{3}{4}$ millions in 1856. What an Austrian peace budget may be it is impossible to tell; but we will take, as a sample, the favorable year 1852, when the wars cost a total of only 115 4-5th million florins. Counting the revenue (net) at 250 millions florins, and deducting for army expenses, and interest on the national debt, the total of 202 4 5 millions, there remains for other departments of expense 47 1-5 millions. The interior administration, including only the police and crown lands expenses, have risen from 12 $\frac{1}{2}$ millions in 1852, to 39 $\frac{1}{4}$ millions in 1856. There results this picture: When Austria has paid for her army (to maintain her national integrity), her creditors their interest, and her internal police, there remain to her 8,000,000 florins of annual revenue with which to support the court, and the expenses of the foreign bureau (ambassadors, &c.), to which these 8,000,000 are not adequate, though the imperial court is managed with extraordinary frugality. But there remains nothing at all to support the most important departments of public justice (estimated at 15 2-5 millions), commerce and navigation (22 $\frac{1}{2}$ millions), and "cultus" (5 $\frac{1}{4}$ millions). A clear annual deficit in these three departments alone of 43,000,000 florins. We ask, can this continue?

It is possible to make up a deficit either by lessening the expenses, or by increasing the revenues. The last has been accomplished on a vast scale; for we have seen that in nine years the revenues were increased to the amount of 100 millions per annum. But taxation has necessarily its limits, and it is plainly possible to make up this Austrian deficit only by retrenchment in the expenditures, and this retrenchment to any appreciable amount, is possible only in the departments of the army and the police. But to make this possible it needs a successful war—a war which shall set Austria firmly upon her feet by establishing in Italy actual peace instead of the armed truce which has hitherto prevailed there.

If we cannot be accused of presenting Austria's financial condition *cœur de rose*; if we have shown on the contrary that she has been since 1848 hastening towards an entire destruction of her credit, we shall be the better believed when we assert that, notwithstanding her embarrassments, her military power is by no means lamed. Austria was able, two years after a terrible bankruptcy, to destroy Napoleon's power at Leipzig, and to push to Paris in 1814 and 1815. Austria's financial condition to-day, is not yet that of 1811, of

1809, or of 1805. It is, perhaps, of 1803. The financial condition of England is brilliant; the finances of France have been seriously injured and encumbered by its present ruler; and the finances of Austria are still worse off. Paradoxical as it may sound—if anything can help Austria it is a war—but it must be a successful one.

Journal of Railroad Law.

ACTIONS FOR INJURIES.—PLAINTIFF'S NEGLIGENCE.

In the JOURNAL of Saturday, June 25th, we gave the particulars of the action brought by one Dascomb against the Buffalo and State Line Railroad Company; a case strikingly illustrative of the principle that to recover for injuries caused by negligent management of a railroad, the plaintiff must himself have been free from negligence contributing to the injury.

The following case will be read with interest, it being one which arose out of the same accident, though tried before a different court.

To relate briefly the circumstances under which the accident happened, they were as follows.

The railroad of the Buffalo and State Line Railroad Company crosses a public highway in the town of Hamburg, known as the Camp road, at grade and nearly at right angles. On the afternoon of June 5th, 1855, William Dascomb, his son, a mere lad, and J. G. Brendell, a hired man in Dascomb's employ, drove down the highway to cross the railroad track. They were in a lumber wagon drawn by a single horse. At the crossing the view of the track either way is to a great extent intercepted by trees, an embankment, a tank house, etc. There was no train due at the time these parties drove down, and they drove directly down upon the track without looking to see whether any train was approaching. It so happened that a train behind time was at that moment coming. Just as the horse crossed the first rail, the boy saw the train, and cried out: "Father, the cars are coming." Dascomb, who was driving, struck the horse to hasten him across; but there was not time. The engine struck the wagon: the boy was killed, and Dascomb and Brendell were much injured.

In the action brought by Brendell, upon proof of these facts, the defendants' counsel moved for a non-suit, on the ground that plaintiff himself, it appeared, had been guilty of negligence, and, therefore, could not recover. The court held that the motion must be granted, for the following reasons.

MARTIN, J.—In disposing of this motion, the acts of Dascomb must be considered, as well as those of the plaintiff himself. The question of negligence on the part of the plaintiff, is not to be solved solely by those considerations which obtain between individuals; it stands affected by considerations of public right and public safety. Upon the undisputed facts of this case, I cannot doubt that the plaintiff was guilty of negligence, and that with reasonable prudence on his part and on the part of those who were with him this sad accident would have been prevented.

Justice Johnson, in the Court of Appeals, in *Brooks vs. the Buffalo and Niagara Falls Railroad Company*, said: "To attempt to cross a railroad track without looking up and down to see if any train is approaching, seems to me to be such an act as a man of ordinary prudence would hardly be guilty of." To the soundness of this remark I fully subscribe. Railroads are among the best

improvements of this age of progress. Public accommodation, convenience, trade, commerce and the intercourse between one section of the country and the other, carried on upon railroads, demand that the greatest facilities should be given to this mode of conveyance, and the highest attainable rate of speed licensed. A railroad is a public affair, and none the less so because it is constructed and operated by private capital and enterprise; and the permanent affairs of the public are not to be postponed to the concerns of individuals.

In view of the great rate of speed demanded upon railroads by the spirit of the age, and constituting one of the great advantages of railroad traveling and in view of the imminent danger from collisions to the lives and limbs of the thousands of persons adopting this method, I hold that no one has a right to cross a railroad track, without first taking every precaution to safety. The same reason that holds railroad companies to the strictest responsibility to the passengers, imposes upon every one who crosses the track of these public thoroughfares, more than ordinary care not to jeopardize the lives of those who are availing themselves of the benefit of this great modern improvement in the mode of traveling. It seems to me that he who without pausing or even looking, will drive upon a railroad track is guilty of more than carelessness. The maxim, *salus populi, suprema lex*, seems to me to be peculiarly applicable to the question under consideration. In this case the train was behind time, an occurrence which everybody knows occasionally happens, and from the imperfection of everything human *must sometimes* happen. It is also claimed that the train was upon an unusually high rate of speed. A train must take the time necessary to fulfill its engagements with the public. The fact that the train was behind time, or upon a higher rate of speed than usual, did not absolve the plaintiff from the duty he owed to himself, to the railroad company and to the innocent passengers with which the train was freighted. That the plaintiff must be without fault, in order to sustain this action, is a well settled rule of law. His negligence having contributed to the accident, he must be non suited.

The case of Brooks vs. the Buffalo and Niagara Railroad Company, to which His Honor Justice Martin refers in the above opinion, was a case quite similar to the foregoing. The plaintiff was a teamster and had occasion to drive his team across a railroad crossing. He drove over without looking to see whether any train was coming. There was a train approaching which struck the team; and thus occasioned the injury for which the plaintiff brought suit. Some of the witnesses testified that plaintiff stopped his team upon the track; but this was denied.

The Court of Appeals of New York held that no action could be maintained against the company on these facts.

CRIPPEN, J., said, the undisputed testimony very clearly established that the plaintiff was guilty of negligence on his part which at least contributed to, if it did not wholly cause the collision complained of.

It seems to me that no one carefully reading the testimony, can doubt but that the plaintiff was guilty of gross carelessness in driving his team on the railroad track. Allowing that he did not

stop his team on the track as some of his witnesses say he did, yet he knew the time the afternoon train would pass along the track. It was the regular train from Buffalo to the Falls, and passed the same time every afternoon. The plaintiff lived within a few rods of the road, and must have known of the afternoon train and also the regular time for its passing along the track: it was incumbent upon him to keep a lookout or keep away from the road. He could see the railroad several rods before reaching the crossing, and if due care had been observed by him, he could not have failed of discovering the approaching train to avoid the collision.

In my opinion the judge should have granted the non-suit, after the testimony was closed, or should have instructed the jury to render a verdict in favor of the defendant. It was sufficient for the defense that the plaintiff resided near the railroad where the collision occurred, and knew the time of the afternoon train passing down the road. He, therefore, was warned to keep his team out of reach of the cars. It is clear to my mind that the plaintiff was guilty of negligence on his part which contributed to the injury that he received by the collision.

If this is a correct view of the case, then the law is well settled that the plaintiff could not recover in the action.

JOHNSON, J., also rendered an opinion to the same effect.

The Blue Ridge Railroad.

We are informed by good authority that the progress of the work on the Blue Ridge road is very satisfactory. In consequence of the limited amount of funds at the disposal of the company, after the adjournment of the last session of the Legislature, the grading of the road in South Carolina and Tennessee was suspended, except only on the embankments at Seneca River and the Whitmire Fill, and in two very deep cuts between Walhalla and the Stump House Tunnel. It was very important that the work on these embankments and cuts should be continued, so as to give time for the banks to settle, and for the cuts to be exposed, in order that if there should be any caving of the slopes of the cuts it might occur, and the road bed be cleared, before the time for laying the track.

The contractors for the bridge masonry over Seneca River and Twenty-six Mile Creek were not required to suspend work, but the work at Seneca was restricted within the means of the company. The bridge or viaduct across the valley of Twenty-six Mile Creek is the heaviest and most costly structure on the road. Of five piers which are required, three are finished, the fourth is partly done, and the foundations of the fifth are nearly completed. The contractor has a large quantity of rock dressed and prepared to work into these piers as soon as the foundation of the fifth is completed. Two abutments and five piers are required for the Seneca Bridge—one abutment (a very heavy work) and two piers are finished—the other three piers are partly constructed. The progress of the work will appear from the statement that of the masonry required more than three thousand six hundred cubic yards are finished, and only about nine hundred cubic yards remain to be done.

The failure of the Legislature, at its last session to give additional aid to the company, made it necessary also to suspend work on all the tunnels except the Stump House Tunnel. This is by far the greatest and most expensive work to be done in the construction of the road. It has been the "lion in the path," the bugbear with which the adversaries of the road have sought to avert the sympathies of the people of the State from the enterprise. It was constantly objected that the ex-

cavation of this tunnel was physically impracticable, or at least that it could only be finished at enormously indefinite cost and time. The progress of the work has triumphantly repelled this objection. During the month of May, two hundred and thirty-five feet of heading was driven in the tunnel. By the requirement of the Company the force of the contractors was then reduced by the dismissal of nearly two-fifths of the workmen. Two hundred and seventeen feet were driven in the month of April. If Messrs. Ilmbird, Hitchcock & Co., the contractors, had been permitted to work a full force, they would have made good their confident assertion to the Committee of the Legislature at the last session, that in sixteen months from that time they could complete the Stump House Tunnel. On the first of this month three thousand seven hundred feet of heading had been excavated, leaving two thousand one hundred feet to be done. The engineer in charge computes that even with the force, recently more reduced, four thousand five hundred and fifty feet will be excavated by the first of November next, leaving only thirteen hundred feet more of heading to be done.

The company has acted judiciously in applying the limited means which they possess, to the more difficult and toilsome parts of the road. There is no difficulty in obtaining contractors for grading, and that part of the construction can be rapidly done.

The progress which has been made in the most costly and difficult obstacle to the completion of the road must be very gratifying to its advocates, and should temper the opposition of those who, from misapprehension of difficulties and expense, are indisposed to continuing the enterprise. —*South Carolinian*.

French Agriculture.

The following figures exhibit in brief, a somewhat curious picture of French agriculture:

	In 1789.	In 1858.
	Hectares.*	Hectares.*
Ploughed land	26,500,000	28,000,000
Vineyard	1,500,000	2,000,000
Wood	9,000,000	8,000,000
Pasture land	3,000,000	4,000,000
Heath waste	10,000,000	8,000,000
Total	50,000,000	50,000,000

* A hectare is equal to 2.47 acres.

In sixty years we find, therefore, that the extent of waste land is reduced by four millions nine hundred and forty thousand acres, and the forest two millions four hundred and seventy thousand acres, while cultivated or ploughed land (*terres de labour*) is increased by three millions seven hundred and forty thousand acres; pastures two millions four hundred and seventy thousand, and vineyards by one million two hundred and thirty-five thousand.—*Port. Adv.*

Chicago and North-Western Railroad.

This new organization which bought in the old road (known as the C., St. P. & F. du L. R. R.) under the mortgage bonds, has now for its President Wm. B. Ogden, and the road when finished will cross every road in the State. The Chicago Times says that at Milton Junction, the Chicago and North-western Railroad will connect, as now, with trains for Madison, Prairie du Chien, and all points in Iowa and St. Paul, without change of cars. Leaving Milton Junction, the road passes through Watertown, Jefferson and Fort Atkinson. From the La Crosse Junction the road is completed through Fond du Lac to Oshkosh, and the unfinished gap between Milton Junction and La Crosse Junction is now being rapidly finished. We are told that some 2,000 men will be at work in the course of a week on this line, and the contractors have agreed to complete it by the first of October next. This done, passengers can take the Chicago and North-western Railroad for almost every point north and west of Chicago. Arrangements are making to run cars through on all the important connections without change.

Florida Railroad.

According to a statement in the Tallahassee *Sentinel*, within three years nearly two hundred miles of first class railroads have been built within the limits of Florida, and are now in operation—besides two hundred miles more ready for the superstructure; and considering the wonderfully small amount of cash capital expended, and the cheap rates at which the work has been done, such results are unprecedented. It may well be remarked of the progress made on public works, to the East of Tallahassee, that it is unparalleled.

In West Florida, too, something has been done. Beginning at Pensacola, they have a road actually graded, all the way, forty-five miles up to the State line, the cross-ties supplied, thirteen miles of their track laid, and the locomotive with the iron train proceeding out from Pensacola daily, and the track steadily advancing in the direction of Montgomery; while, at the same time, with more than fifty miles out from Montgomery, in operation, in Alabama, they are progressing rapidly towards Pensacola, and it seems to be confidently expected that the train will pass through within the coming year. But the road from Selma, in Alabama, is to form a connection within the time; and in less than two years these roads will be delivering upon the wharves at Pensacola, and to the warehouses, the marbles and the metal, and most important of all, *unlimited quantities of the very best of coal* from inexhaustible beds in Alabama.

Wabash and Erie Canal Leased.

We are informed that a party of prominent and influential gentlemen, residents of the Wabash Valley, have concluded an arrangement with the Trustees for the leasing of the canal for a period of four years. The details of the contract have not fully transpired, but we are advised that it is proposed to form a joint stock company, with a limited capital of \$50,000, for the operation and maintenance of the canal, with all powers in regard to tolls, water rents, &c., that now invests in the Trustees. It is understood that Hon. Mr. Edgerton, of Hicksville, Ohio, is to be the managing director, and Hon. J. L. Williams, of Fort Wayne, chief engineer. The stock of the company will soon be taken, and the canal is to be put into thorough navigable order for the approaching harvest. —*Lafayette Courier*.

The Western Maryland Railroad.

About three miles of the track of this road has been laid, and it is the intention of the company to open the road to Green Spring on the 1st of July. Messrs. Norris & Sons, Philadelphia, have constructed for the company an engine, to be called the "Green Spring." This will be the first locomotive used upon the road. The cars are being built in Troy, New York. The second cargo of iron has arrived, making the amount received 1,850 tons. The third cargo, on its way from Wales, will complete the laying of about 35 miles of the track. The cost of the entire road, equipped, will be above \$18,000 per mile. The road commences at the Relay House on the Northern Central Railroad. Its present terminus will be the Union Bridge, 40 miles from the Relay, running through Baltimore and Carroll counties. In time, the road may be made to connect with the Baltimore and Ohio Railroad. —*Balt. Sun*, June 18th.

Michigan Central Railroad.

The annual meeting of the shareholders of the Michigan Central Road was held in Detroit, on the 27th ult., when the following gentlemen were elected Directors for the ensuing year: J. W. Brooks, Boston, Mass.; Jno. M. Forbes, Boston, Mass.; D. D. Williamson, New York; Erasmus Corning, Albany, N. Y.; Edward Minter, New York; R. B. Forbes, Boston, Mass.; H. H. Huonewell, Boston, Mass.; Nathaniel Thayer, Boston, Mass.; Elon Farnsworth, Detroit, Mich. The present executive officers of the road were re-elected by the Board. No dividend was declared, the Board determining to pay none when the net profits of the road would not clearly justify it.

Payment of Interest on Canal Commissioners Drafts.

The Auditor yesterday commenced the payment of interest on the Canal Commissioners drafts. This is done under the law of last winter, which authorized the payment of all interest accrued on the first day of July.

The law requires that the original drafts shall be presented to the Auditor. Up to yesterday the gross amount presented was \$1,978,590. The gross amount of interest due on the drafts presented is \$116,000—something more than an average of twelve months, although upon some interest has not been paid in eighteen months.

As the drafts are brought in, and the interest is paid, they are stamped with the word "REGISTERED," on a scroll, and with the words "Interest paid to July 1st, 1859," on a shield. Each of these stamps are attested by the initials of the Auditor, "N. S. B."

These stamps will materially enhance the character of these drafts, as they present on their face evidence that the State recognizes them as State obligations, which will of course be fully paid. As an investment, they approximate more nearly in value the bonds of the State, than any other security, and will doubtless stand high in favor with capitalists seeking safe investments. —*Albany Statesman*, July 2nd.

Illinois River Railroad.

We are informed by R. S. Thomas, Esq., President of the above-named road, that the iron for the same is now coming forward rapidly. Six thousand five hundred tons have been shipped from England, of which 4,000 tons have arrived at New York, and been paid for thereby, and delivered to the company, and reshipped to Chicago. Some 2,000 tons have already arrived in Chicago, and this lot is now being forwarded to the line of the road. The chairs and spikes for the whole road have also been paid for, and are now in Chicago, and being forwarded to the road. The track-laying will be commenced at Pekin next week, and prosecuted vigorously. The road-bed north of Virginia (sixty miles in length) is so near ready for the ties that the track will be laid on the same by the 1st of November next at farthest. —*Springfield Journal*.

Vicksburg, Shreveport and Texas Railroad.

Notwithstanding the partial suspension of the work on this road by the late high water, its prospects are better than they ever have been. The delivery of iron sufficient to complete the road to Monroe on this end, and from Shreveport to the Texas line has been secured. It will be furnished to the contractors on the road so that these portions of the track will be completed before the first of January.

Even this partial work will have a favorable influence upon the country. It will open to market a considerable portion of Eastern Texas, and improve the value of lands now at a distance from the Mississippi River by bringing them nearer to navigable waters. —*N. O. Picayune*, June 19th.

Atlantic and Gulf Railroad.

Track-laying was resumed upon the Florida Railroad on the 9th inst., and is rapidly progressing. A large force is employed, and the iron will soon be laid as far as Deer Hammock, fourteen miles west of Gainesville. The difficulties under which the Florida Railroad has so long labored are fast giving way, thanks to the energy and perseverance of the company, and we may soon confidently expect to see the long-desired union between the waters of the Gulf and Atlantic effected. —*East Floridian*, June 16.

Shelbyville and Knightstown Railroad.

The Shelbyville Volunteer says "the bridge over the Big Blue river was completed last week, and is a strong and substantial structure. The work of grading and laying the track is being pushed forward with all possible dispatch, and hopes are entertained of having a good portion of the road in readiness for the fall business."

Debt of Indiana.

The entire debt of this State is \$7,358,361; of which \$5,312,000 is 5 per cents, and \$2,045,861 is 2½ per cents. This does not include about \$800,000 yet outstanding and unpaid, of what is called the Bank Loan. The Sinking Fund growing out of the State Stock in the late State Bank will pay off the balance of the debt with a surplus of about \$3,000,000, which goes to the School Fund of the State. The assessments for taxation in the States for this year amount to about \$650,000,000. Seven years ago the sum was about \$400,000,000. The annual State revenue will be about \$1,200,000. The expenses of the State Government, including interest on her debt, amount to \$530,000 per year, leaving a large surplus of revenue applicable to the annual reduction of the State debt, which by law has to be thus invested, the Auditor, Treasurer and Agent of the State constituting a Sinking Fund Commission for that purpose. The 2½ per cents are redeemable in 1867.

Broad River Railroad Bridge.

We learn from Mr. Raworth, the efficient Superintendent of the Greenville and Columbia Railroad, that this bridge is completed. The trains ran over it for the first time last Thursday. It is, perhaps, the finest bridge now in the State. The wood work is said to be very excellent, and built upon remarkably well constructed piers, will no doubt make the whole bridge unusually durable. There has been great need of such a crossing over this river for some time, so that the traveling public may be congratulated that there is no longer any reason to apprehend danger at this point.

Feeling the greatest interest in the road, it affords us pleasure to say we have seldom traveled over a more comfortable one than the Greenville road is at this time. It is in excellent condition. —*Newbury Conservatist*.

Lehigh Valley Railroad.

The business of this road has increased to such an extent that they are now engaged in laying a double track. They are also about to erect workshops at South Easton, for the manufacture of freight cars, and repairing their locomotives. There will be three buildings, sixty feet front and one hundred in depth, each. They will be of stone, with a slate roof, and built in the most substantial manner. When these structures are completed, we learn, the company contemplate manufacturing their engines there, and consequently will give employment to a large number of hands. —*Philad. Eve. Jour*.

Androscoggin and Kennebec Railroad.

The annual meeting of the stockholders of this company was held at Waterville June 29th.

From the report of the Directors, it appears that the whole earnings of the roads, viz: A. & K. and Penobscot and Kennebec, were \$281,929 86. The expenses on the same, \$124,839 81. Net earnings A. & K. road, (4-7ths), \$89,765 " " Penob. & Kennebec (3-7ths) 67,324

\$157,389

The choice of Directors then took place, and the following list were chosen:

John Ware, Jedediah Morrill, Waterville; Ira Crocker, Wm. Goodenow, Rufus Horton, Portland; Asher Hinds, Benton; S. P. Benson, Winthrop.

The coupons due this day on bonds and stock bonds, will be paid at the Casco Bank as usual. —*Portland Advertiser*, July 1.

Florida Railroad.

This company has ironed one hundred and eleven miles of its road—has graded and cross-tied the remaining forty three miles—has most of the iron in the State to finish it from the Atlantic to the Gulf—has a large number of hands employed who will become disbanded, and dispersed, if the work does not immediately proceed—has nearly a million of bonds already issued to it, and certified by the trustees, the interest on which the company is not bound to meet till the road is finished. —*Charleston Mercury*.

Cincinnati Stock Sales.

By KIRK & CHERVER.

For the week ending July 5, 1859

BONDS.		Per cent.
Little Miami, 1st Mort.	6s.	83 and int.
Covington and Lexington, 2d Mortgage	6s.	60
Do. do Income	10s.	12½ nat.
Ohio & Miss., E. D., Construction	7s.	22
Cinc., Ham. and Dayton, 2d Mortgage	7s.	85
Indianap. & Cincinnati, do.	7s.	85
STOCKS.		
Cincinnati, Hamilton & Dayton	63	
Columbus and Xenia	83	
Indianapolis & Cincinnati	55	
Little Miami	84	

Railroad Earnings.

The following were the earnings of the New Orleans, Jackson and Great Northern Railroad for the month of May last:

For freight	\$25,850
For passengers	25,754
For mails	3,467

Total.....\$54,561

This makes the earnings of the road from the 1st of September last, \$725,482.

The following is a statement of the receipts and expenses of the North Pennsylvania Railroad for the half-year ending May 31st, 1859:

Earnings in May, 1859	\$28,876 16
Rents and miscellaneous receipts to be added	2,339 60

Total for May 1859.....\$31,215 76

Gross earnings for half year, including rents, etc.	\$160,292 45
Gross earnings for same time last y'r.	134,364 89

Increase of gross earnings...\$25,927 56

Gross earnings for half year	\$160,292 45
Expenses for do.	77,441 13

Net earnings for half year	\$82,851 32
Do. in first half of last year	70,195 45

Increase of net earnings in six months,\$12,655 87

The amount of the increase of the construction account in the half year has been \$912 03.

The receipts of the Grand Trunk Railway of Canada for the week ending June 18,	
were.....	\$37,301 18
Week ending June 19, 1858.....	43,164 95

Decrease.....\$5,863 79

Total traffic from July 1st.	\$2,194,938 94
Same period last year	2,290,201 72

Decrease.....\$95,262 78

The traffic of the Great Western Railway of Canada for the week ending June 24, 1859, was as follows:

Passengers	\$22,130 64
Freight and live stock	9,909 86
Mails and sundries	1,376 88

Total.....\$33,425 88

Corresponding week of last year.....38,179 99

Decrease.....\$4,754 11

The following are the receipts of the New York and New Haven Railroad Company, for the month of June:—

Passengers	\$86,457 86
Freight	13,000 00

\$99,457 86

Due other roads.....25,849 68

\$73,608 18

For June, 1858.....62,396 50

Increase.....\$11,211 68

The earnings of the Buffalo, New York and Erie Railroad Company (main line, between Buffalo and Corning, 142 miles) for the month of June, 1859, are as follows:—

Passengers	\$12,536 96
Freight	26,346 53
Other sources	1,540 17

Total.....\$40,423 66

The receipts of the Hudson River Railroad, for June, compare with last year as follows:—

June, 1859.	\$115,444 23
June, 1858.	95,219 28

Increase.....\$20,224 95

American Railroad Journal.

Saturday, July 9, 1859.

New York and Erie Railroad.—Resignation of Mr. Headley.

Mr. HEADLEY, late Assistant President and acting manager of this road has resigned his place, and, we presume, leaves the road.

The presence of Mr. Headley on the road has been a cause of great dissatisfaction, and his continuance upon it, in spite of all opposition and remonstrance, tended greatly to weaken the confidence and respect felt toward Mr. Moran. Personally we know nothing as to Mr. Headley's qualifications. Mr. Moran, however, claimed to have found in him his *alter ego*. Notwithstanding, Mr. Headley became excessively unpopular, and many of the well-wishers of the road remonstrated with Mr. Moran at an early day against his continuance in office, but with the usual result of all attempts to advise with this gentleman. If Mr. Headley was, what Mr. Moran claimed to have found him, a *paragon*, then his resignation is a great damage to the company, and should not have been received. If, on the other hand, he left for good cause, the public will ask with some reason, why he was retained so long. His continuance in office betrays great weakness or great obstinacy, or a good deal of both. The last inference is probably the true solution of the matter.

It is not at all unlikely that the proposition to lease the road may have hastened Mr. Moran's decision. We take it that he has no intention of giving up his place. By this time he must have seen the necessity of taking some steps to conciliate popular favor. It is natural that he should desire to retain possession of the road, in hope of retrieving himself, in some degree. To give up the road at the present time would be the admission of a disastrous defeat. If he expects the future to be an improvement upon the past, many new changes of officers, and a complete change of policy in many particulars must yet take place.

Minnesota and Pacific Railroad.

At the meeting of the Directors of the Minnesota and Pacific Railroad Company, in St. Paul, the following gentlemen were elected to the respective offices named: President, Edmund Rice; Vice President, R. R. Nelson; Secretary, T. M. Metcalf; Treasurer, E. Caldwell; Executive Committee, R. R. Nelson, D. C. Shepard, W. B. Shute, T. M. Metcalf, E. Caldwell; Attorney, J. B. Brinbin; Engineer, D. C. Shepard. Gov. Ramsay resigned his place as a member of the Board of Di-

rectors. The vacancy occasioned by this resignation is not yet filled.

Michigan Southern Railroad Disaster.

This accident is another of those terrible slaughters, so common in this country, by which a whole train-load is instantly precipitated to destruction. In loss of life it was a terrible affair. In a pecuniary point of view, it is an equally great disaster to the company, as we presume it must make good to the relations of the deceased, the *statute* value of their lives.

The cause of the accident was the washing away of an embankment crossing a ravine. Whether the culvert was inadequate to the volume of water collected, or whether the same became piled up by driftwood matters little. The accident fixes a legal, and to a certain degree the moral, accountability of the company.

With regard to this, as to all other roads we have always objected to *absentee* Presidents. It has been the misfortune of this road never to have had any other. The President at the present time resides in Springfield, Mass., we believe. Whether this be the case or not, we regarded his appointment a year or two since, with a good deal of surprise, as we looked upon him, from his age and feeble constitution, as entirely unable to perform duties so arduous as those devolving upon a president of 525 miles of railroad, and a greatly disorganized company. We looked upon his appointment as a virtual giving up of this once magnificent property. The result has mainly justified our fears. What was wanted for the President of this road was a person of iron frame as well as will, uniting to these qualities, great experience, great watchfulness, and entire devotion to the interest of the company. The place for such a person to reside in, is upon the line of the road. But the stockholders in this road have become so bewildered by their losses, as to appear to have lost their senses. The calamity that has just happened will tend to destroy what little hope they may have retained of receiving something, at some distant day, upon their investment.

Explorations in the North-West.

A steamer has been constructed during the present season, and is now running upon the Red river of the North. This river is navigable from the mouth of the Sioux Wood to Lake Winnipeg, a distance of about 450 miles. It is the intention of the boat to ascend the Rapids at the mouth of Saskatchewan. If successful, there will probably be no difficulty in taking it to the very base of the Rocky Mountains. If the mountain passes be found practicable, an emigrant route over the Continent, following the valley of this river, will immediately be opened.

In the month just closed, a Government steamer has ascended the Minnesota river, 446 miles. With a slight improvement of the channel, we presume, it might have ascended to Big Stone Lake, the source of the river. At any rate, the explorations that have been made of the Minnesota and Red rivers, indicate that in their valleys must be the great commercial avenue between the hydrographic basin of Lake Winnipeg and Hudson's Bay and the United States. The necessary improvement of the rivers can be easily effected by a series of locks and draws. Minnesota river falls at a rate not exceeding six inches to the mile—the Red river still

less. They take their rise in lakes that lie contiguous, and can be easily connected, and that can be made to hold an abundant supply of water for any artificial improvement. The realization of a work so grand in itself, and so beneficent in its influences, as opening up the interior of a vast Continent, cannot be postponed to a very distant day.

Mississippi Central Railroad.

The Grenada (Miss.) *Republican*, of the 21st ult., has the following favorable notice of the progress of the work on the Mississippi Central Railroad:

The Mississippi Central Railroad is approaching near enough to this place to have the whistle of its locomotive distinctly heard. Work upon the bridge across the Yalabusha river is progressing, as are, also, preparations for the depot buildings. The iron for the bridges is at Grand Junction awaiting transit.

We are informed that the people interested in a branch road from the Mississippi and Tennessee Railroad, to run through the valley and terminate at Canton, are waking up to its importance, and that a movement will very soon be made toward its construction. This road will run fourteen miles west of Grenada, and through the heart of a splendid cotton region.

Pittsburg, Fort Wayne and Chicago R. R.

The directors of this company have issued a circular addressed to the bondholders of each of the companies originally composing this line, asking them to fund the coupons falling due for 18 months, commencing with July 1st, 1859, in a two per cent. sinking fund bond, payable in five years, viz:—

Coupons due July 1, 1859, and January 1, and July 1, 1860, of Mortgage Bonds of Ohio and Pennsylvania, and Fort Wayne and Chicago Railroad Companies;

Coupons due Aug. 1, 1859, and Feb. 1, and Aug. 1, 1860, of First Mortgage Bonds of Ohio and Indiana Railroad Company;

Coupons due Sept. 1, 1859, and March 1, and September 1, 1860, of Third Mortgage Bonds of Ohio and Indiana Railroad Company;

Coupons due Oct. 1, 1859, and April 1, and Oct. 1, 1860, of Income or Second Mortgage Bonds of Ohio and Pennsylvania Railroad Company, of Second Mortgage Bonds of Ohio and Indiana Railroad Company, and Real Estate Mortgage Bonds of Fort Wayne and Chicago Railroad Company. The aggregate amount proposed to be funded being \$722,925.

The bondholders are to retain all the security they now have under their several mortgages, will get 10 per cent. for the money thus loaned to the Company, while the benefit conferred by the extension of time on the coupons for a year and a half will be a full equivalent to the company for the interest they pay. The Directors have resolved to pay promptly, so far as the resources of the company will admit, all interest and Sinking Fund, maturing July 1st, and thereafter on the ten per cent. Sinking Fund Bonds, and on the General Mortgage Construction Bonds of the issue dated January 1st, 1857.

The great decrease in the business of the past year, and other operating causes, are mentioned as the reason why the interest cannot now be met. In reference to these matters, the President says:

It has heretofore been estimated that the net income of the road for 1859 would be \$920,000. Thus far the business of the year gives no promise of that result. A net revenue for the year of from \$700,000 to \$800,000 will be the utmost that can be hoped for, from the present prospects of trade. Of that income, at least \$300,000 have already been expended, or anticipated, and it will require about \$45,000 more of it be an-

ticipated to pay what of the interest and Sinking Fund due on 1st July it is proposed to pay.

It is believed that a net income of at least \$1,000,000 in 1860 may be relied on.

The entire funded debt of the company on 1st January, 1859, was \$9,029,765, including \$576,765 of 10 per cent. Sinking Fund Bonds, issued to fund Coupons. The present funded debt may be stated at \$9,200,000, entailing an annual charge of interest and Sinking Fund for 1859 of about \$800,000, to be increased in 1860, with the increase of funded debt and obligations for Sinking Fund, to probably \$900,000, and to a larger amount if a majority of the floating debt is funded.

The entire floating debt, as shown by the Auditor on 1st June inst., is \$2,039,997 39
Against which are shown assets
amounting to 216,338 70

Leaving a balance of \$1,823,658 69
In this amount is included the debt of the Pennsylvania Railroad Company for iron furnished to complete the road to Chicago in 1858, and not before stated in the amount of floating debt, viz 483,731 02

Leaving of floating debt, beside the debt to Pennsylvania Railroad Company for iron \$1,339,927 67

Of the issue of \$3,500,000 of Construction Bonds, the company still owns \$2,270,000—there having been sold \$1,230,000. It also owns \$50,000 in amount of Real Estate Bonds.

Of the Bonds unsold, \$2,024,000 of Construction Bonds, and the \$50,000 of Real Estate Bonds, are held as collateral security out of the Company's possession, \$1,109,000 being in the possession of the Pennsylvania Railroad Company as security for the iron debt and cash advances.

In this \$2,270,000 of Construction Bonds and \$50,000 of Real Estate Bonds, rests the main hope of relief from the floating debt. The bonds, if disposed of at their value, are adequate to the purpose, and their protection for that purpose creates the inevitable necessity of using some part of the net income of the road, until the credit of the Company can be so restored as to make a market for the Bonds. The want of that market has hitherto prevented the funding of the floating debt.

By the funding of the Coupons, as proposed, the Company gains the use, during the next five years, of \$722,925, at the semi-annual interest at the rate of 10 per cent. per annum, and the monthly Sinking Fund to be paid.

As an equivalent for this loan from the bondholders, it is proposed to advance the price of the Construction Bonds, to all unsecured holders of the floating debt, to par.

With the cordial co-operation of the bondholders and other creditors in the plan now proposed, it is believed that before the close of 1860, the Company can be extricated from all its financial difficulties. It is to be regretted that the extension now asked for was not embraced in the funding arrangement of 1858. The necessity of it was then unforeseen.

St. Andrews and Quebec Railway.

The stoppage of the works on this line of railway is a matter of regret, not only to those more immediately interested, but to a large section of the people of the Province. About £400,000 have been expended on the road, sixty-five miles of which have been completed, which finish the line as far as Canterbury. To Eel River, a distance of ten miles, the road is half graded, and on this section, we are credibly informed, 150 men are still employed. The company appears to have acted with prudence in their operations, and it is to be regretted that they have not succeeded in obtaining the necessary funds to push forward the undertaking as far as Woodstock, which it was hoped would be reached at the close of the present season.—*Montreal Gazette*.

Interest and Dividends.

The Bank of the Republic pay dividends on North Carolina State Loans, Georgia State Loans, Nashville and Chattanooga Railroad Company, Orange and Alexandria Company, Manassa Gap Railroad Company, City of Memphis.

Messrs. Duncan, Sherman & Co. pay dividends on New York State Stock issued to Auburn and Rochester Railroad, Tonawanda Railroad, Schenectady and Troy Railroad Company, Hamilton and St. Joseph Railroad Company, Buffalo and Niagara Falls Railroad, Buffalo and State Line Railroad, Detroit and Pontiac Railroad, and Bonds of the cities of Chicago, Albany, Buffalo and Utica.

The Bank of Commerce will pay the coupons of the Chicago, Burlington and Quincy Railroad Company, and Guernsey County (Ohio) Bonds.

The coupons of the Virginia and Tennessee Railroad Company, due July 1, will be paid by Peters, Campbell & Co., No. 50 Wall street.

The coupons due 15th inst. on the bonds of the Wyoming Canal Company, will be paid on presentation to the Bank of North America, in Philadelphia, on and after that date.

The Second Avenue Railroad Company has declared a quarterly dividend of 2 per cent. payable 11th July.

The Terre Haute and Richmond Railroad, a semi-annual dividend of 5 per cent., payable to Eastern stockholders at the office of the Farmers' Loan and Trust Company in this city, on the 5th inst.

The Fairmount (Phila.) Passenger Railroad Company have declared a dividend of 7 per cent., payable July 15th. The Second and Third Streets Passenger Railway Company have declared a dividend of 7 per cent. on the first issue of stock, payable to the stockholders on and after the 11th inst.

The New Orleans Canal and Banking Company have declared a semi-annual dividend of 5 per cent., payable to stockholders registered in New York, at the office of M. Morgan & Sons, No. 37 William Street, on the 1st of August.

The Cayuga and Susquehanna Railroad Company has declared a dividend of four per cent., payable on the 15th inst. The New Bedford and Taunton Railroad, 3 per cent. payable on demand.

The Pittsburg, Fort Wayne and Chicago Railroad defaulted its interest, due July 1, as also the two or three Western Railroads which have heretofore been delinquent. The City of Covington, Ky., did not meet her interest. The County of Mason, Ky., paid, but gave notice that hereafter the \$1,000 bonds issued to the Maysville and Lexington Railroad will be cut down to 833 33, and interest paid on that sum, and the \$1,000 bonds issued to the Maysville and Big Sandy Railroad to \$650. The County also announces the intention to buy up the debt as fast as possible, and will be prepared soon to offer 75 per cent, for \$15,000 to \$20,000 of the bonds issued to the Maysville and Lexington Railroad.

The Board of Directors of the Norwich and Worcester Railroad have voted to appropriate \$50,000 to the purchase of the bonds of the Company, due in August, 1860, out of the income of the line, in place of resuming dividends upon the stock.

The Irving Bank has declared a semi-annual dividend of $3\frac{1}{2}$ per cent., payable on the 8th inst. The Merchants' Exchange Bank a dividend of $3\frac{1}{2}$ per cent., payable on the 9th. The Butchers' and Drovers' Bank will pay on the 15th inst., a dividend of 5 per cent., and the Importers' and Traders' one of 4 per cent., on the 12th inst. The Merchants' Exchange Bank, a semi-annual dividend of $3\frac{1}{2}$ per cent., payable on the 9th inst. The Park Bank, a semi-annual dividend of 4 per cent., payable on the 10th inst. The Importers' and Traders' Bank has declared a dividend, payable on the 12th inst., of 4 per cent., out of the earnings of the past 6 months. The Manufacturers' Bank of Brooklyn, 5 per cent., payable on demand. The New York Exchange Bank has declared a 4 per cent. dividend, payable July 10. The Planters' Bank of Tennessee has declared a dividend of 5 per cent., payable to Philadelphia stockholders at the Western Bank in that city, on and after the 7th inst. The Manhattan Company disburses to the New York stockholders, on the 12th inst., the 5 per cent. dividend of the Planters' Bank of Tennessee. The Bank of America will pay on demand 10 per cent. on the paid-in capital of the Merchants' Bank of St. Louis. The Union Bank of Tennessee has declared a dividend of 5 per cent. for the last six months, payable to the Eastern stockholders on demand, at the Philadelphia Bank.

The Hanover Fire Insurance Company has declared a semi-annual dividend of 6 per cent. The United States Fire Insurance Company, a semi-annual dividend of 7 per cent. The Empire City Fire Insurance Company, a semi-annual dividend of 7 per cent. The Aetna Insurance Company, a semi-annual dividend of 10 per cent. The Hope Fire Insurance Company, a semi-annual dividend of 5 per cent. The Market Fire Insurance Company, a semi-annual dividend of 7 per cent. The Security Fire Insurance Company, a surplus of dividend of 20 per cent. The National Insurance Company, a dividend of 12 per cent. The Nassau Fire Insurance Company of Brooklyn, a semi-annual dividend of 17 per cent. The Resolute Fire Insurance Company, a half-yearly dividend of 10 per cent. The La Fayette Company, 7 per cent. The Merchants' Company, 15 per cent. The Aetna of Hartford, 10 per cent. The National Fire Insurance Company, a dividend of 12 per cent. The Citizens', one of 15 per cent. The Williamsburg, one of 10 per cent. The Montauk, one of 7 per cent. The Security, one of 20 per cent. The United States, one of 7 per cent. The Gebhard Fire Insurance Company, a semi-annual dividend of 5 per cent., payable on demand. The Merchants' Insurance Company, a semi-annual dividend of \$7.50 per share, payable July 11—equal to 15 per cent., the same rate as the previous two semi-annual dividends.

Cleveland Copper Works.

The proprietors of this establishment, Messrs. J. C. Hussey & Co., report their operations for the years 1856, '7 and '8 as follows:—

	1856.	1857.	1858.
Crude copper received—			
Stamp and barrel..... bbls.	1,125	1,231	1,707
Masses..... No.	626	981	697
Weight of crude..... Tons.	956	1,036	1,127
Per cent. fine.....	62	70	71
Fine copper produced.. Tons.	593	725	800

The whole of the crude material was the product of the Lake Superior mines; and in its refined state nearly the whole was sold in New York by Messrs. Bacon & Hyde, Cliff st. The value of the copper at the average price of 25 cts. per pound would be \$1,059,000. These statistics show that about one-fifth of the whole amount mined in the lake region is smelted at Cleveland.

The Coast Survey.

To show the great extent of our coast line and the addition that has been made by our Pacific States, we give the following table:

Shore Line of the United States in statute miles.			
Main Shore including Bays, Sounds, etc.	Proportion of each part of Coast to Total.	Islands.	
Miles.	Per cent.	Miles.	
Atlantic Coast.....	6,821	54.41	6,328
Pacific Coast.....	2,281	18.09	702
Gulf Coast.....	3,467	27.50	2,217
Total.....	12,609	100.00	9,247

Ocean Line in Steps of Ten Miles.	Continenta Shore Line of States N. of Virginia.	Continenta Shore Line of States S. of Maryland.
Miles.	Miles.	Miles.
Atlantic Coast.....	2,059	907
Pacific Coast.....	1,405	...
Gulf Coast.....	1,643	...
Total.....	5,107	907

The main shore line of the Atlantic, including bays, etc., is twice that of the Gulf, three times that of the Pacific, and more than equal to that of the Pacific and Gulf combined. The southern States have three times as much sea-coast as the northern. We see from this table the great excess of coast line in the southern States, and, of course, the consequent greater cost to the Survey. —N. Y. Courier.

Statement of the Florida Railroad Company.

The estimated cost of the Florida Railroad is \$3,500,000 00. This sum includes all expenditures, and provides a fully equipped road, with depots, station houses, wharves, and everything necessary to a full business.

To pay this the company have of Internal Improvement Bonds.....	\$1,655,000 00
Of Land Bonds, well secured, and which are paid to contractors at par.....	1,500,000 00
	\$3,155,000 00
Leaving to be raised on the stock.....	345,000 00
	\$3,500,000 00

The stock is fixed for the present at 3,000,000 00. Should the whole be taken, an assessment of 12 per cent. would produce..... 360,000 00. Or more than the amount required; but the whole stock as yet taken is only a little over \$1,000,000, the present assessment on which (12 per cent.) produces..... 120,000 00. And should no more be taken, a further assessment of $12\frac{1}{2}$ per ct. will be required to produce..... 225,000 00. To make up the deficiency of..... 345,000 00. Taking the total payment on the stock, in any event, only $34\frac{1}{2}$ per cent., or \$34.50 on every \$100 subscribed. It is, however, presumed that there will be taken at least \$500,000 more of the stock, making the whole amount..... 1,500,000 00. On which 25 per cent. or \$25 on every \$100, will be the whole assessment,

While the road is in progress the interest on the internal improvement bonds is paid by the Internal Improvement Fund. After its completion, if the road earns six per cent. on its cost, the company pays the interest and one per cent. on the amount of the bonds as a sinking fund.—If the road does not earn six per cent., then the earnings are divided between the bonded debt and the stock paid in. The land bonds are secured by the town sites of Fernandina and Cedar Keys and seven hundred thousand acres of land, the sales of which will retire them without any cost to the company, leaving the earnings of the road to be divided between the stockholders (after paying the interest on the internal improvement bonds;) so that, if the road earns eight per cent. on the cost, there will be nearly \$150,000 to be divided annually among the subscribers, which, divided by \$345,000, (the amount of cash subscription required,) gives 43 cents annual income for every dollar paid in on the stock.

To facilitate subscription by the citizens of Florida, the Treasurer is authorized to receive the notes of all sums over \$200, and at five months for all sums over \$300, and at six months for all sums over \$400. These notes, to make them equal to cash, should bear an interest of eight per cent. from their dates and should be made payable to George W. Call, Treasurer Florida Railroad Company or order. Upon being forwarded to Fernandina, the proper certificates of stock will be issued.

GEO. W. CALL,
Sec'y & Treas. Fla. R. R. Co.

Marietta and Cincinnati Railroad.

The following is stated to be the substance of the agreement in relation to Marietta and Cincinnati Railroad bonds, as signed by foreign holders, of \$2,000,000 of first mortgage, and of about \$1,900,000 second mortgage bonds (the first mortgage covering \$2,500,000, and the second \$2,000,000), is as follows:

1. They appoint Ebenezer Waugh Fernie, Esq., of London, their agent and attorney in fact, to get possession of the Marietta and Cincinnati Railroad; amicably, if it can be done; if not, to obtain a foreclosure of the mortgages.

2. Wm. F. Roelofson, Esq., of Ohio, is made the alternate, to act in case Mr. Fernie should decline or die.

3. Mr. Fernie is authorized to purchase in the road under the mortgages, and to bid, in his discretion, a sum therefor which shall be equal to eighty per cent. for the first mortgage, and seventy per cent. for the second mortgage bonds. Should any one bid a sum beyond this, to let the same go, but to make the purchase at the lowest possible rate.

4. After the purchase is made, he, the said Fernie, is to hold, use and operate the road in trust for the use and benefit of the parties signing the agreement, or the modified one as hereinafter mentioned; such measures to be taken to put the same in order after the purchase, as the owners may then deem advisable and proper under the circumstances.

5. The terms of the agreement, as signed by the foreign holders, seem to contemplate that, after the purchase of the road by Mr. Fernie, the same shall be held by him for the use and benefit of the first and second mortgage holders equally, without priority. The one at 80, the other at 70 on the par. This seems to have been assented to by the first mortgage holders, because they are likewise holders of second mortgages in about equal amounts.

6. The contract now to be signed by the American holders is the same as that signed by the foreign, with this important modification, that after the road shall have been bought in by Mr. Fernie, the priority of the first mortgage holders is continued and retained as now, until they are paid and satisfied at the rate of 80.

7. Mr. Fernie undertakes to act under the power, pay all expenses, including counsel fees, Court costs, and all other charges, and to save the bondholders harmless therefrom; he to receive, in lieu

of all other compensation, a commission of 10 per cent. on the sum realized by the purchase of the road. His pay to be received in kind—that is to say, the same that the mortgage creditors shall receive.

8. The right is reserved on the part of American holders to appoint one or more fit persons to act with Mr. Fernie, as an advisory committee, representing their interests.

9. The American holders are requested to call and examine the contract, and sign the modified agreement, now in the hands of Messrs. Winslow, Lanier & Co., on or before the first day of July, and to deposit with them the bonds they hold.

Lake Ontario Steamers for the Atlantic Coast.

Since the two steamers, Canada and America, of the Great Western Railway, were taken over the rapids of the St. Lawrence to the Atlantic coast, several others have followed. This is in consequence of there not being sufficient business there for them. When once over they cannot be brought back, as the locks in the St. Lawrence canals are not large enough to admit them. The fine steamer Arabian, says the *Mail*, left Niagara on Saturday for St. John, N. B. The class of large passenger steamers that used to be the pride of Lake Ontario, will apparently, ere long, be extinct on its waters. The amount of steamboat property ruined by our railways is enormous. This Spring, no less than three or four of the finest boats on Lake Ontario have been sent down to the Atlantic coast. The American Line have two boats, the New York and Northerner; they are negotiating to dispose of them for the present.—*Buffalo Republican*, 16th.

HOYT, BADGER & DILLON,
Late S. HOYT & CO.,
MANUFACTURERS AND IMPORTERS OF
FINE
WATCHES, JEWELRY,
AND
SILVER WARE.
266 PEARL and 38 FULTON STS.,
U. S. HOTEL, NEW YORK.

GOLD PENS.
HENRY A. BROWN & CO.,
SUCCESSORS TO LEVI BROWN,
MANUFACTURERS,
181 BROADWAY,
NEW YORK.

RAILROAD IRON.
500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.
M. K. JESUP & COMPANY,
New York, June, 1859. 44 Exchange Place.

RAILROAD IRON.
WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.
NORRIS & BROTHER,
6m35 BALTIMORE,
And 17 Nassau St., NEW YORK.

NOTICE TO RAILROAD CONTRACTORS
OFFICE OF THE RICHMOND & YORK RIVER R. R.,
Richmond, June 25, 1859.

THE undersigned is authorized to receive Proposals for the unfinished Grading, Bridging, Delivery of Gravel, Laying the Track, Depots, and all other work necessary to complete the 2nd Division of the Richmond and York River Railroad to West Point (15.3 miles), including Pamunkey River Bridge, Wharfing at Pamunkey River and at West Point.

Proposal sealed, will be received at this office in Rock-its in this city, until the 20th day of July next, at 12 M., where Plans, Specifications and all information necessary for bidders, will be furnished on and after the 10th of July.

Two separate bids to be made by each bidder:—One to state the price in cash for each item; the other to state the price in 8 per cent. 1st Mortgage Bonds of Company at their par value, and 20 per cent. reserved from monthly estimates until contracts are completed.

327

D. S. WALTON, Chief Eng'r.

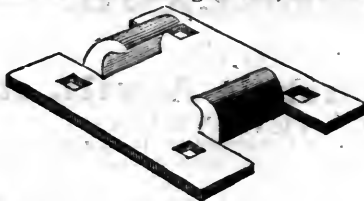
NEW YORK RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "NEW YORK WROUGHT IRON RAILROAD CHAIR COMPANY," and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST the ACROSS the fibre of the iron; while the lips of a rolled Chair are turned with the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing. Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R. R. Co., etc., etc.

Messrs. M. K. JESUP & CO., 44 Exchange Place, NEW YORK, are the only parties authorized to act as our Agents.

Mr. Jacob Rowe, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

**THE
ROUND OAK IRON WORKS,
STAFFORDSHIRE, ENGLAND.**

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS AND BARS, of every variety of pattern.

NORRIS & BROTHER,

Agents for the United States,

12 SOUTH CHARLES STREET,
BALTIMORE.

And 17 NASSAU STREET, NEW YORK.

**Car Wheel Boring Machine
FOR \$400.**

ONE of Wheeler's best vertical Machines, with over-head pulleys and shafting, cost \$700. Has been used a short time and is in perfect order, ready for use.

WILLIAMS & PAGE,
44 Water St., Boston.

FREIGHT CARS FOR SALE.

11 CARS—Have been run about one year, viz:—
2 long 8-wheel Box Cars,
9 " " Platform Cars.

These Cars are made in the best manner, with large axles, brakes, Lightner boxes, etc., and will be sold low for cash.

WILLIAMS & PAGE,
44 Water St., Boston.

FOR SALE.

2 FIRST CLASS LOCOMOTIVES, warranted to be superior in every respect. Weight 23 tons. Gauge 4 feet 8 1/2 inches. Cylinder 15x22 inches. Outside connection. Boiler 44 inches diameter. 130 Copper Flues, each 10 feet 6 inches long, 2 inches diameter. 800 sq. feet Fire Surface. Tender 1,700 gallons. 5 feet Drivers. Are entirely new, never having been used. For terms apply to

GEO. T. M. DAVIS,

47 Exchange Place,

426

New York, June 22, 1859.

**PARK'S IMPROVED
TRACING LINEN,
DRAWING MATERIALS,
FOREIGN AND DOMESTIC STATIONERY,
PRINTING & LITHOGRAPHING.**

DEVLIN & HAGAN,
No. 7 Nassau St., N. Y.

**LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.**

BY the completion of the DELAWARE, LACKAWANNA AND the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T. Rails, of the following weights per lineal yard viz—25, 30, 35, 40, 45, 50, 60, 62 and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.

**MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.**

**IRON AND STEEL
IN ALL THEIR VARIETIES.**

BOILER PLATE. CAR AXLES.
BOILER RIVETS. RAILROAD IRON.
CUT NAILS AND SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 26, 1854.

RAILROAD IRON.

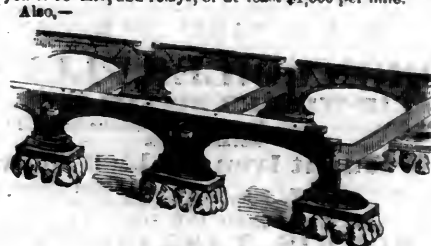
THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William St.

NEW YORK, Aug. 1, 1858.

**BEERS'
CAST-IRON ENDLESS RAIL,
FOR CITY RAILROAD;**

Now being laid in Philadelphia and elsewhere;
THIS road is exclusively of cast iron, without tie, string-piece, or chair; Rail 85 to 100 lbs. per yard; Durability four fold over the present roads, with 65 lbs. groove rail; And with a saving on first cost; effecting a reduction in current yearly repairs, and relays, of at least \$1,000 per mile.



**BEERS'
ELASTIC IRON RAILWAY,
FOR LOCOMOTIVE USE;**

This road can be built and equipped, without additional cost over a road with 56 lbs. T rail; saving not less than 60 per cent on motive power, 50 per cent on dead weight, and 80 per cent on repairs of way; thus reducing the yearly expenses from \$1,500, to \$2,000, per mile. For full particulars, with drawings, relating to both roads, see a recent Treatise entitled Railroads, their construction and management, with the remarks from twenty-five years experience, by S. A. BEERS, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

S. A. BEERS,

SANDERSON, BROTHERS & CO.,
MANUFACTURERS OF THE
CELEBRATED CAST STEEL,
FOR MAKING SUPERIOR TOOLS,
SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,
Armitage's Genuine Mousehole Anvils, etc.
16 CLIFF STREET, NEW YORK.

42 BATTERYMARCH ST. Boston.
24 BANK PLACE, New Orleans.

516 COMMERCE ST. Philadelphia.
TYLER, DAVIDSON & CO., Cincinnati, O.
HISS & COLE, Baltimore, Md.

CAST STEEL,
Of First Quality and Warranted.
BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.
Far superior to the ordinary kind.
FROG PLATES, POINTS.
Saw, File, Cutlery, Rake, Hoe, Axe and Plough
Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 Cliff st., New York.

STEEL, FILES, ETC.
R. GROVES & SONS,
SHEFFIELD, ENGLAND,

MANUFACTURERS of warranted Cast Steel, superior
quality, for Tools, Machinery, and Engineering purposes.
Single and Double Shear, Blister, German Spring and Sheet
Steel of every description—also, Cast Steel Files, of high
reputation, especially adapted for the use of Machinists, and
Saws and Edge Tools of all kinds.
A stock of the above goods constantly on hand.



CHAS. CONGREVE & SON, Agents,
13 Cliff street, N. Y.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are pre-
pared to contract for the delivery of **RAILROAD**
IRON at any port in the United States or Canada, or at a
shipping port in Wales.

WAINWRIGHT & TAPPAN,
BOSTON, June, 1851. 29 Central Wharf.

RAILROAD IRON
AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the
proprietors of the Downais Iron Works, near Cardiff, South
Wales, are duly authorized to contract for the sale of their G.I.
Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

IRON BOILER FLUES.
LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20
feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections,
T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for
Rails of any required pattern and weight, and to re-roll
old rails, on the most liberal terms. Address
N. WILKINSON, Sec'y,
WHEELING, VA.

RAILROAD IRON.

THE undersigned, having been appointed Agents for
Messrs. BOLCKOW & VAUGHAN, proprietors of the
ESTON, MIDDLESBRO', and WITTON PARK
IRON WORKS, YORKSHIRE, ENG.,
are prepared to contract for the sale of **RAILROAD**
IRON of a superior quality and on the most advantageous
terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are pre-
pared to make **CONTRACTS FOR RAILS** deliv-
ered free on board at ports in England, or ex ship at ports in the
United States.

M. K. JESUP & COMPY,
44 Exchange Place.
New York, 1st June, 1852.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in
STAFFORDSHIRE and WALES, are prepared to contract for
delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 Cliff st., N. Y.

RAILROAD IRON.

CONTRACTS for **RAILS**, at a fixed price or on commis-
sion, delivered at an English port, or at a port in the
United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

WOOD, MORRELL & CO.,
HAVING leased the extensive Works of the **CAMBRIA**
IRON COMPANY, situated at JOHNSTOWN, Cambria
Co., Penna., and purchased all their real estate, are now pre-
pared to execute, at short notice, orders for **RAILS** of any
required pattern or weight, on the most liberal terms.

PHILADELPHIA, NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.

THE
RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,
MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new **ROLLING MILL**, having been working
only eighteen months, and confined to work for roads on
this line between Buffalo and Chicago in re-rolling old Rails.
The capacity is Forty Tons per day. It is well situated for
receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will
be made with New Iron in the heads, if desired.

Apply to
ALBERT G. SMITH,
President of the Incorporation.
February, 1855.

RAILROAD IRON.

THE subscriber is prepared to enter into **CONTRACTS**
FOR **RAILS** delivered at an English port or at a port
in the United States.

JAMES TINKER,
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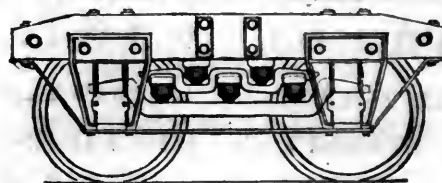
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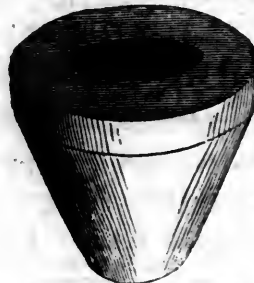
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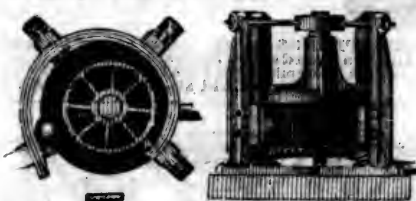
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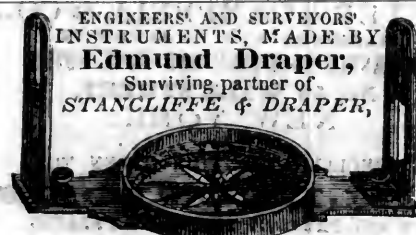
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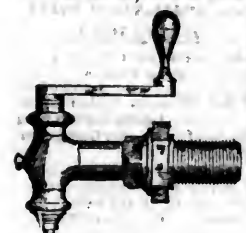
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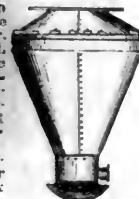
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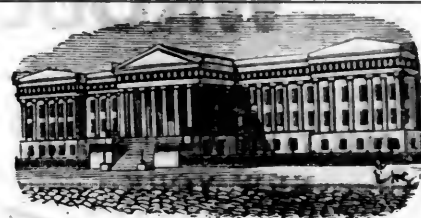
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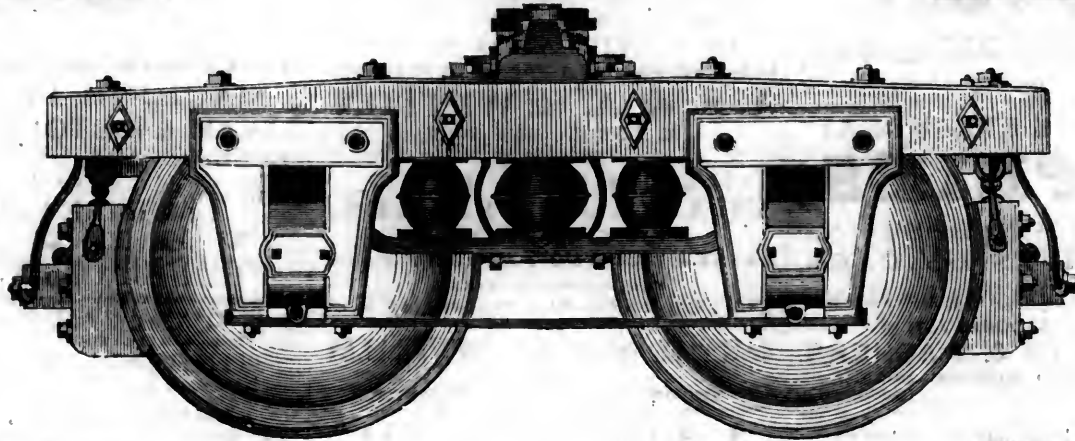
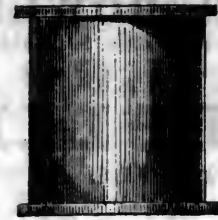


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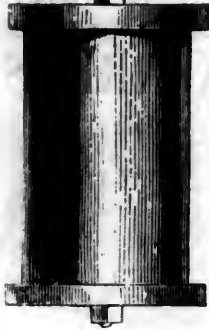
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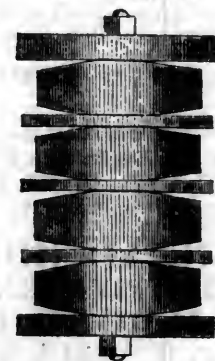


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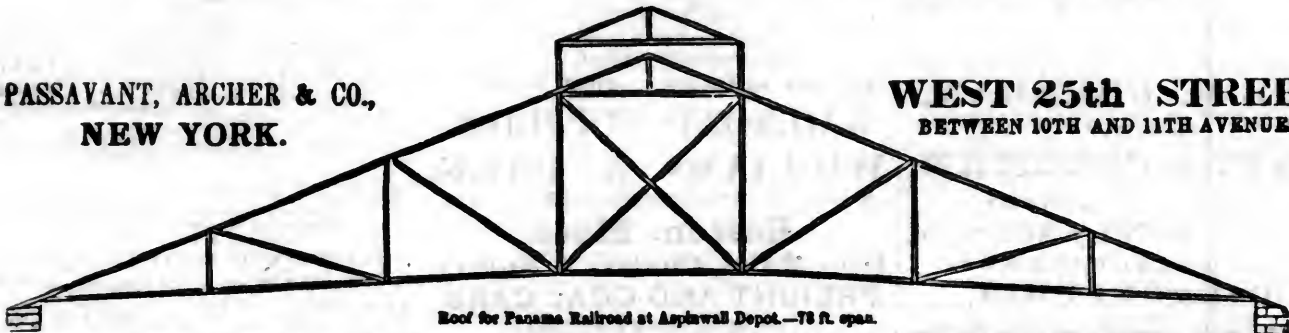


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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, July 16, 1859.

Railroads in British India.

A "Report on the Construction of Railways in India," has been laid before Parliament by a committee appointed to examine into the subject. From this document we learn that there are seven separate companies engaged in constructing lines in India, under the guarantee of the Indian government. These are as follows:

1. The *East India Company*, whose line extends from Calcutta *via* Rajmabel and Allahabad to Delhi, or Meerut, with a branch from Mirzapoor, to meet the line of the Peninsula Company at Jubbulpoor. The length of this line will be 1,400 miles, and it is already completed to Patna. The cost has hitherto been about £12,000 per mile.

2. The *Great Indian Peninsula Company's* road from Bombay in a north-easterly direction to Jubbulpoor, where it will form a junction with the East India line, and in a south-easterly direction *via* Poonah and Sholapoor, to meet the Madras line at Bellary. It is already completed to Poonah.

3. The *Madras Company* whose line from Madras *via* Cuddapah and Bellary (junction of the Great Indian Peninsula), will extend in a western direction to the Malabar coast at, or near, Bepoor.

4. The *Bombay, Baroda and Central India Company*, the line belonging to which extends from Bombay *via* Surat, to Baroda and Ahmedabad, and which, for several miles out from Bombay, uses a common line with the Peninsula Company.

5. The *Scinde and Punjab Company*, which is constructing a line from Kurrachee to Kotree on the Indus, and from Mooltan to Lahore, with a connection between Kotree and Mooltan by steam navigation.

6. The *Eastern Bengal Company*, with a line from Calcutta to Dacca, and a branch to Jessore.

7. The *Great Southern Company*, with a line from Salem *via* Trichinopoly to Negapatam, and southward to Madura and Tinnevely.

In all British India there are now 12,000 miles of line projected, and it is estimated that the construction of the whole will average £6,000 per mile, or £72,000,000; but the probability is, that it will cost, at least, 50 per cent. more.

The cost, as estimated for each of the several lines above enumerated, is stated at the following sums:

East India	£12,731,000
Great Indian Peninsula	11,000,000
Madras	6,000,000
Bombay, Baroda and Central India ..	2,000,000
Scinde and Punjab	2,500,000
Eastern Bengal	1,000,000
Great Southern	2,000,000

The chief objects sought to be attained in the construction of railroads in India are alike military, political, and commercial. The commercial element, however, has always been supreme in determining the locations. In calculating the extent of railroads necessary for India, comparison is made of that country with America and England. In America there was one mile of railroad to every 112 square miles of territory; in the United Kingdom, one mile to every 14 square miles; and in the manufacturing counties of Britain, one mile to every 5 square miles. But whilst in America there were only about 9 inhabitants to every square mile, in India there were 124 to the square mile. And thus it is obvious that the ratio of the importance of introducing railroads into India is fourteen to one as compared with America.

The first Indian railroad project was conceived in the latter part of 1844, by Mr. McDonald Ste-

phenson, who submitted to the Indian government a scheme for a line from Calcutta to the north-west of India; and almost simultaneously Mr. Chapman submitted a scheme for a railroad from Bombay towards the interior. In 1845 a company was formed for the construction of a line from Madras to Arcot. These several plans have now been matured, and the result is that the railroad is to be spread over the great central peninsula of Southern Asia like a net work, giving outlets to the interior, and facilities to communication between the governments in every direction, and, should it hereafter unhappily become necessary, to the rapid movement of troops and warlike stores. For the construction of all these lines, the Indian government has given ample guarantee, and is bound to see that the interest on the outlay is satisfied. In relation to this, the report states that the several companies have the power of surrendering the works at any time after the line is opened, upon giving six months' notice to the government, and the East India government undertake to repay the whole amount that has been expended by the railway company. The East India government have the power, within six months after the expiration of 25 or 50 years, of purchasing the railways at the mean market value, in London, of the shares during the three previous year. In case the railway companies fail to complete the lines, or to work them satisfactorily, the government is entitled to take possession, and repay within six months the sums expended—the companies to repay the guaranteed interests from the profits of the railway.

The supervision of the government over the proceedings of the companies is of two distinct kinds, viz: That exercised in the person of the official director over the railway boards in London, and that exercised by consulting engineers in India, to whom is committed the charge of superintending on behalf of government all railway operations in that country.

It is difficult to comprehend what a vast revolution these railroads will work in the commercial and industrial economy of the country; and this will affect, in a commensurate ratio, the whole commercial world. England will, of course, reap the lion's share of the profits; but next to that, country the United States should rank, and with

prudence on the part of our government, our share in the coming prosperity of India will be of no mean value.

Canals of New York.

We copy the following from the Report of the Chamber of Commerce of the City of New York, in reference to the canals of this State contrasted with those of other countries:

The Erie Canal was opened for navigation through its entire length on the 26th of October, 1855. Previous to that time, the cost of transportation was so excessive that there was scarcely any commerce between the city of New York and the great Lakes. The larger part of the merchandise and products exported from Western New York to the seaboard, was sent down the Susquehanna river to Baltimore, or by the Schuylkill to Philadelphia. Except along the coast, and with the region tributary to the Hudson river and Long Island Sound, New York had no domestic commerce. Her capacious harbor, and proximity to the sea, gave her advantages over any other city in the United States as an *entrepot* for foreign trade, and caused her to be largely used for that purpose.

It was, of course, impossible that a city so situated should long occupy a secondary or subsidiary position. Its facilities for the prosecution of foreign commerce compelled the adoption of means of internal communication. The fact that New York was the chief seaport of the United States, called into existence the requisite means for rendering her the greatest domestic mart. The noble Hudson river afforded the basis of operations. The trade arising from the increasing population and products of the vast region lying in the valley of the Ohio and Mississippi, was the prize to be contended for.

At the time when New York awoke to the necessity of adopting measures for bringing to her wharves this trade, which is now only in embryo, canals were the best media for internal commerce which the skill and genius of man had yet devised. To enable her, therefore, to appropriate the trade to which her position justly entitled her, the Erie Canal was conceived and executed. Its completion at once placed New York in direct communication with the greatest inland seas, and the finest grain-growing regions in the world.

The following statement shows the extent of water communication which was practically opened to New York by the construction of the Erie Canal:

	Length, miles	Breadth, miles	Area, sq. miles
Erie Canal—Alb'y to Buffalo.	363	...	...
Oswego and other lateral canals.	666	...	...
Welland Canal.	28	...	...
Lake Ontario.	190	40	7,300
" Erie.	250	45	9,300
" St. Clair.	25	18	300
River	60	...	...
Lake Huron.	270	145	18,740
" Michigan.	326	602	1,900
" Superior.	320	120	32,100

Thus the whole trade of the fertile region tributary to over 2,500 miles of navigable waters—embracing an area of nearly one million square miles—and the population of which, under the stimulus given by the Erie Canal, has increased from less than half a million to nine millions of inhabitants, was turned, by the completion of this work, from its natural channels, having their outlets far distant from us, into the most capacious harbor on the Western Continent. The slow raft and the toilsome flat-boat—destitute of all the conveniences and appliances of speed, comfort, and promptitude, and traversing, for the most part, uncultivated forests—gave place to the light and convenient canal-boat, whose way laid through a highly cultivated country, full of thriving towns and villages, at a rate of speed, and with a certainty in its time of arrival and departure, as much in advance of the ordinary means of conveyance as the railroad car of the present day is in advance of the stage-coach of half a century ago.

Canals are probably the oldest artificial medium

of what is now popularly called commerce. There is reason to suppose that, in Egypt, they were coeval with the building of the Pyramids; and that without their existence those mysterious structures could not have been reared. Pliny describes the canal of the Pontine Marshes, which extended from the *Forum Apii* to near Terrecina, and was completed B. C. 152, as being intended for the double purpose of drainage and navigation.

The honor of bringing the art of canal making to its present state of perfection is generally awarded to James Brindley, the Engineer of the Duke of Bridgewater's Canal, which was opened between Manchester and the River Mersey, in 1761. It would appear, however, that Brindley did not accomplish anything more than was achieved by the Engineer of the Great Canal of China, which was constructed in the reign of the Emperor Yang-ti, who ascended the throne in the year 605 of the Christian era. The distinctive feature of the Bridgewater Canal project was "the determination of preferring one level, which led to the construction of tunnels, aqueducts, and embankments of very considerable magnitude."

The greatest artificial canal in the world—if we look to the cost of construction, the amount of business transacted upon it, and the volume of water it contains—is, undoubtedly, the Erie Canal, in this State. McCulloch, in his Commercial Dictionary, speaks of the canal from Amsterdam to New Dieppe, near the Helder—the object of which is to afford a safe and easy passage for large vessels between Amsterdam and the German Ocean—as "the greatest work of the kind in Holland, and probably in the world;" and he describes its size to be "twice as great as that of the New York canal, or the Canal of Languedoc, and two and a half times as great as the artificial part of the Caledonia Canal. The dimensions of the Holland Canal, above-mentioned, are as follows:

Length	51 miles
Greatest width of surface	130 feet
" depth	21 "
Cost	£850,000

The Ganges Canal has sometimes been described as the greatest canal in the world. A writer in *Blackwood's Edinburgh Magazine* for December, 1856, in an article on "Our Indian Empire," says of it: "No single canal in Europe has attained to half the magnitude of this Indian work. It nearly equals the aggregate length of the four greatest canals in France. It greatly exceeds all the first class canals of Holland put together; and it is greater, by one-third, than the greatest navigation canal in the United States of America."

The main line alone has the following dimensions:

Length	525 miles
Greatest width of surface	170 feet
" depth	10 "

These dimensions, however, include river improvements, and do not apply to the artificial channel of the canal.

Including branches, it is about 900 miles long, and irrigates an area of not less than a million and a half of acres. This canal leaves the bed of the Ganges at Hurdwar, at the foot of the Himalayas. It was opened April 8th, 1854. The whole main line of the canal was designed and executed within a period of eight years. Its cost is stated at £1,400,000, or about 7,000,000.

The Imperial Canal of China is 720 miles in length, and its depth is at no time more than from 5 to 6 feet, while in dry weather, it is frequently reduced to 3 feet. It is, in fact, composed of rivers and lakes—making the excavated portion of comparatively limited dimensions.

In the several cases which have been cited, the original dimensions of the Erie Canal have been assumed in any comparison, to wit: Length, 363 miles; width of surface, 40 feet; depth, 4 feet. But the magnificent work which now belongs to the Empire State, has the following dimensions through its entire length:

Length	361½ miles
Width of surface throughout	70 feet
Depth	7 "
Total cost	\$40,000,000

It is believed that the Erie Canal, with its present enlarged prism, may safely challenge a comparison, in point of dimensions alone, with any similar work of ancient or modern times. But if we look to the commerce which is carried on through its channels, showing a tonnage for the last twenty-five years of 61,853,392 tons, valued at \$3,829,588,868, it is speaking very far within bounds, to say that history contains no other records of any such commerce, either in the quantity or value of articles transported.

The following table shows the whole number of miles of canal in the United States, British America, Europe, and Asia, so far as can be ascertained from public records:

United States	5,172
Canada	237½
Europe	12,562
Asia	6,420

Total.....24,382½

The first canal built in the United States was the Santee, in South Carolina, in 1802. It connects the Santee and Cooper rivers by a length of 21 miles. The longest is the Wabash and Erie, extending from Toledo, on Lake Erie, to Evansville, on the Ohio river—469 miles. One of the last constructed, and the shortest—that around the Sault St. Marie—three-fourths of a mile long, promises to be one of the most important.

Except upon the New York canals, few or no statistics as to the cost, trade, &c., of most of the canals of the United States have been preserved. An approximate estimate shows the cost of construction to have been about \$25,000 per mile—a total of \$129,326,000—for the United States.

The supremacy of New York over all the other cities of the Union, dates from the completion of the Erie Canal. Up to that time it was the second city of the Union, in point of population, commerce, and extent of trade. Other cities, having more extensive natural means of communication with the interior of the country, not only enjoyed a larger and more important trade, but were increasing, both in population and commerce, with a rapidity which bid fair to leave New York relatively still lower in the scale of dignity and importance. The era of her unparalleled prosperity is coincident with the completion of the canal, by which the commerce of the lakes, and the agricultural products of the great West—just then foreshadowing the magnitude it has since achieved—were brought at once into our magnificent harbor.

The following table, showing the condition of this city at various periods, in respect of commerce, population, and wealth, indicates the agency which the Erie Canal has had in its growth and development:

	1825	1858
No. tons received by canal at tide water	185,405	1,985,142
Value of do.	\$18,540,000	\$61,536,961
Population of N. Y. City and Brooklyn	175,000	1,000,000
Valuation of real and personal property in N. Y. City and Brooklyn	\$106,000,000	\$630,519,208
Value of foreign imports and exports of N. Y. City	\$84,057,000	\$270,983,548*

The mere possession of means of communication is not sufficient to establish an extensive commerce. To win all the advantages desired, it is necessary to be constantly on the alert against rivals who are striving to surpass us in commercial facilities. Our most formidable competitor is Canada, with its great water-line of the St. Lawrence, made navigable from the head of Lake Superior to the Straits of Belle Isle, a distance of more than 2,500 miles, and with vastly greater capacity than is possible to any artificial channel. The St. Lawrence canals pass vessels of 500 tons burden—more than twice as large as the Erie Ca-

* Panic year. The values for the three previous years, were as follows: 1855, \$229,851,169; 1856, \$300,407,314; 1857, \$346,930,774.

nal will admit, even with its enlarged prism. The tolls upon them have been imposed rather with a view to encourage traffic than to raise a revenue. Their success has been most extraordinary. The following statement will show the amount of tonnage which has passed over them for a series of years:

WELLAND CANAL.		ST. LAWRENCE CANALS.	
Year	Tons.	Year	Tons.
1848.....	307,611	1848.....	164,267
1849.....	351,596	1849.....	213,153
1850.....	399,600	1850.....	289,103
1851.....	691,627	1851.....	450,400
1852.....	743,060	1852.....	492,575
1853.....	905,618	1853.....	561,601
1854.....	797,210	1854.....	662,613
1855.....	849,333	1855.....	541,254
1856.....	976,556	1856.....	634,535
1857.....	901,072	1857.....	593,652
1858.....	855,112	1858.....	605,558

The competition of these canals may be regarded as just commenced.

We can successfully combat their influence only by making it more for the interest of every portion of the interior to seek our market, by offering a cheaper rate of carriage, and better prices for its produce.

We have also to contend with an active and vigorous competition from the great lines of communication at the South. The railroads from Baltimore and Philadelphia afford advantages to those cities, by means of their greater proximity to the producing regions west of the Alleghenies, which can only be overcome by increased facilities for transportation on our part. The introduction of steam upon the Erie Canal promises to confer these facilities. A new era in the history of this great work is opened; and the fears, sometimes entertained, that it would cease to be used, are likely to be dispelled.

In view of this prospective revival of the business of the canals, the proposition to re-impose the canal tolls upon the merchandise carried over competing railroads, loses even the specious force with which it has heretofore been urged. Even with a certainty that the canal is ultimately to fall into disuse, such a measure could not be otherwise than impolitic. In any view, it would defeat the very object for which canals were constructed, viz: to cheapen transportation.

If any proof were wanting other than that which is suggested by a statement of the case, it is abundantly furnished by the experience of Ohio, a State which, in public improvements and extent of domestic commerce, may fairly be ranked with New York. This State has 849 miles of canal, built at a cost of more than \$15,000,000, nearly contemporaneously with the canals of this State. A large though decreasing business is still transacted upon them. The receipts from tolls since 1850 have been as follows:

1851.....	\$856,353
1852.....	688,776
1853.....	626,625
1854.....	511,416
1855.....	468,832
1856.....	427,813
1857.....	348,673
1858.....	285,301

The importance of these canals has dwindled to such an extent, that no statement whatever is made of them in the "Second Annual Report of the Commissioner of Statistics," presented to the Legislature of that State, February 1, 1859. Notwithstanding this diminution, unparalleled in the commercial annals of a prosperous and growing State, would not the entire community rebel against any attempt to impose canal tolls upon railroads of that State, with a view to restore to the canals their lost traffic? Is it not manifest that such a proceeding would be suicidal to the entire commercial interest of the State? More wise than to follow the course urged by interested parties elsewhere, Ohio leaves traffic to seek its own medium of conveyance, untrammelled by any legislative test or restriction. Mr. E. D. Mansfield,

the Commissioner of Statistics for that State, in alluding to the diminished revenue, says:

"This is certainly not a very satisfactory picture in regard to revenue; but the canals were not made for revenue merely. They were made for the utility and benefit of commerce; to carry off large amounts of produce, which would otherwise be charged with quadruple cost in reaching market. This purpose they have accomplished; and although the freights on the canals have diminished, yet we see they have transported a very great amount of produce, and we believe they amply repay the interest of the public debt in the benefits to commerce."

Regarded in any just point of view, there is really no rivalry between canals and railroads—especially with canals situated like those of New York.

There are certain articles, the value of which mainly depends upon the rapidity of their transportation—such as live stock, and all the more perishable kinds of food, as well as those possessing great value in proportion to their bulk. The railroad, by the facilities it affords for travel, and the transmission of mails, is instrumental in filling up the interior with people whose industry in turn creates business for the canal. The articles of freight especially belonging to the latter are the various kinds of grain, lumber, salt, iron, cured provisions, etc., etc. Such articles must always constitute a large portion of the traffic on every great route of commerce, and of such the canal will have the monopoly, by virtue of its greater facilities, and cheaper transportation.

Coal Burning on the Boston and Providence Railroad.

Below we give a table showing the amount of coal consumed, and the miles run by fifteen locomotives on the Boston and Providence road for the six months ending May 31st, 1859. The freight and passenger service is kept distinct, and the averages stated in each. The engine 'Washington,' running the largest amount of miles, has used the smallest amount of coal per mile. We print the tabular statement as follows:

Names of Locomotives.	Lbs. of Coal.	Miles run.	Lbs. per mile.	Average.	Total.
New York.....	227,850	8,611	32.3	29.3	1,491,018
Roxbury.....	35,380	828	42.7	50.461	50,461
King Philip.....	282,618	10,980	25.7	29.3	1,491,018
Washington.....	177,970	6,807	25.7	29.3	1,491,018
Tachonic.....	102,826	3,213	32	29.3	1,491,018
Rhode Island.....	172,924	5,847	29.6	29.3	1,491,018
Canon.....	166,748	6,393	26.1	29.3	1,491,018
W. R. Lee.....	122,043	3,361	36.4	29.3	1,491,018
Neponset.....	40,559	1,257	32.3	29.3	1,491,018
Providence.....	14,216	364	39	29.3	1,491,018
Bristol.....	50,084	1,743	28.8	29.3	1,491,018
Massachusetts.....	47,800	1,267	37.7	29.3	1,491,018
Iron Horse.....	...	...	...	29.3	1,491,018
Attleborough.....	...	...	...	29.3	1,491,018
Total.....	1,491,018	50,461	29.3	29.3	1,491,018

The average coal used per mile for both passenger and freight engines is 32.9 pounds, or about 10 miles per ton. The average cost per mile is 8.57 cents. The coal costs on the tender, all expenses included, \$5.84 per ton of 2,240 pounds. The whole number of pounds of coal used is 2,597,270, or 1,159½ tons, and the aggregate

miles run by both passenger and freight trains, was 78,995. The fuel expenses per mile run on this road have been reduced within a very few years, about 67 per cent, according to the above statement. This shows what can be done by an intelligent adoption of the means to the end.

Michigan Central Railroad.

The annual statement of this company has just been published. The capital account for the year ending May 31st, 1859, is stated as follows:

June 1, 1859.	Dr.
To capital stock.....	\$6,057,840 00
Bond account, viz:—	
6 per cent. sterling bonds, unconvertible, 1st mortgage...	\$167,488 89
8 per cent. sterling bonds, convertible, 1st mortg...	500,000 00
8 per cent. bonds, unconvertible.....	258,000 00
8 per cent. bonds, convertible, 1st mortg...	3,831,000 00
8 per cent. bonds, convertible, 1st mortg., 1st sinking fund....	3,087,000 00
8 per cent. bonds, convertible, 1st mortg., 2nd sinking fund....	41,000 00
To income account, balance of this account.....	108,975 97
Unpaid dividends.....	495 00
Total.....	\$14,351,799 86

By construction No. 1, purchase of road.....	\$2,000,000 00
By construction No. 2, expenditures since purchase.....	10,847,238 17
By cash on hand.....	34,478 20
By cash loaned on call.....	34,000 00
Accounts and bills receivable.....	211,579 32
Assets in hands Oliver Macy, General Receiver.....	33,518 63
Assets in hands R. N. Rice, Sup't..	60,506 49
New Albany & Salem Railroad Co., stock and bonds.....	609,763 99
Joliet and Northern Indiana Railroad stock.....	168,225 00
Joliet and Northern Indiana Railroad construction.....	40,768 18
Steamboats.....	311,719 88
Total.....	\$14,351,799 86

The receipts for the year have been....	\$1,889,777
Operating expenses.....	\$979,552
Taxes.....	93,180
Net.....	\$817,045

This amount has been disposed of as follows:	
Interest and exchange.....	\$735,488 07
Paid to sinking fund.....	60,000 00
Balance to credit of income.....	21,557 00
Total.....	\$817,045 07

Nothing has been charged to construction during the year; the permanent improvements, as detailed in the Superintendent's report, having been charged into the operating accounts:

The bonded debt of the company, June 1, 1858, was.....	\$8,284,063 33
Bills payable of the company were.....	118,576 35
Total debt.....	\$8,402,639 68
Capital stock.....	6,057,840 00
Total.....	\$14,460,479 68
The bond'd'd't is now.....	\$8,184,488 89
Less sinking fund....	64,800 32
Total net debt....	\$8,119,688 57
Capital stock.....	6,057,840 00
Total.....	\$14,177,528 57

Total debt reduction during the yr...\$282,951 11

The gross earnings of the road, as compared with the previous year, show a decrease of \$590,627 85; divided among the different branches of traffic as follows:

Decrease in passenger earnings	\$382,430 17
Do. freight do.	202,312 86
Do. miscellaneous do.	5,884 82

Total.....\$590,627 85

The total amount of expenses of working and repairs for the year has been \$1,071,732 88, being less than last year by \$581,039 48, or 35 per cent.

The comparative monthly statement of earnings is as follows:

	Year ending May 31st, 1858.	1859.	Decrease.
June ..	\$244,373 57	\$170,847 58	\$73,525 99
July ...	211,635 98	143,872 45	67,763 53
August.	221,353 98	176,060 82	45,293 16
Sept. ...	301,588 74	224,574 50	77,014 24
Oct. ...	262,923 83	209,868 03	53,055 80
Nov. ...	211,860 89	156,298 00	55,562 89
Dec. ...	170,464 77	130,108 71	40,356 06
Jan'y ...	122,379 95	101,386 50	20,993 45
Feb'y ...	107,502 40	102,959 35	4,543 05
March ..	165,936 03	151,864 66	14,071 37
April ...	223,010 37	143,143 30	79,867 07
May ...	185,727 01	127,145 77	58,581 24

Totals \$2,428,757 52 \$1,838,129 67 \$590,627 85

The following table will show some of the leading changes in the earnings and operations of the company during the last two years:

	1857.	1858.	1859.	Percentage of decrease of the last yr fr. the next previous.
Local passenger earnings	\$602,992 68	\$452,670 51	\$377,978 88	16 1/2 per cent.
Local freight earnings	661,958 83	558,344 14	496,789 16	11 "
Miscellaneous earnings	80,691 47	73,069 61	68,084 82	8 "
Total local earnings	1,345,640 98	1,084,084 29	942,852 86	13 "
Through passenger earnings	1,007,423 07	868,169 05	560,630 61	36 1/2 "
Through freight earnings	748,538 61	475,404 18	331,616 30	29 1/2 "
Total through earnings	1,755,961 71	1,343,573 23	892,246 91	39 1/2 "
Total earnings	3,101,602 69	2,428,657 52	1,838,129 67	24 1/2 "
Operating expenses, exclusive of State tax	2,005,156 55	1,580,290 59	979,552 80	39 "
Earnings, per mile run, pass'ger trns	2 02 1/2	1 96 1/2	1 48 1/2	25 "
Do. freight do.	1 69	1 81	1 62	10 1/2 "
Average earnings per mile run	1 85	1 88	1 55	17 1/2 "
Expenses per mile run	1 19 1/2	1 12 1/2	82 1/2	86 1/2 "
Net earnings per mile run	65 1/2	75 1/2	72 1/2	4 "
Percentage of earnings used in operating, exclusive of taxes	64 1/2 per cent.	59 1/2 per cent.	53 1/2 per cent.	6 "

The president in his report attributes the falling-off of earnings to the following causes:

First. A decrease of business to and from the States beyond our line, the railroads and general business of that region having suffered quite as much as any other part of the country, from the great depression of the times.

Second. The opening of several new avenues to market from the region which had heretofore been drained principally by the two Michigan roads.

Third. The large reduction of freight rates brought about by the competition of the four great seaboard lines, one of which extending to Illinois brought upon all the East and West lines from that State, the evils of that competition and its low rates.

Fourth. The competition for the small business upon the Lakes this year has reduced the rates charged by the lake craft upon freight, between Buffalo and Chicago, to a point below that of any other period.

Some of these causes are temporary and may not occur again for years. The opening of the new lines is a permanent evil, which nothing but the natural increase of the population and business of the new country tributary to all, will outgrow. Should that region upon the return of its usual prosperity develop as rapidly as before, the loss occasioned by the new lines before very long will be overcome.

The local business of the road has been affected by the partial failure of the wheat crop last year. We have received for the transportation of wheat and flour (which is principally local) over \$112,000 less than last year, while our eastward local freight earnings have fallen off \$43,000, which shows the miscellaneous freight to have increased a small amount even in this bad year, and that Michigan as heretofore, is relying less and less upon the uncertainties of the wheat crop.

Our road is in fine order and our rolling stock in excellent condition. The property in every department has been well kept up, and it is probable we were never as well, certainly never better prepared than now, to do a large business with economy.

The cost of operating the road the past year have equalled 53 per cent. of the receipts. For 1858 they equalled 69 per cent.—showing a saving equal to 16 per cent. on the gross earnings. In 1857 the expenses exceeded 60 per cent. of the receipts. The results stated are extraordinary, as we are not accustomed to expect the expenses of carrying on a large business to be reduced in ratio to the reduction in amount of such business. If the road should earn, say, \$1,500,000 for 1858-'59, we have no doubt that the expenses would be reduced to 50 per cent. of the receipts. The reason is obvious. With money flush, our Railroad Companies go it with a high hand. Economy is little heeded. It is only enforced by the pressure of necessity. It would be considered a burning shame if such a road as the Michigan Central could not earn the interest on its debt, representing only about one-half of its cost. This was the stint set before the managers the past year. It was barely accomplished—\$21,557 only, being the excess.

The statement just made places the dividends of the company some distance in the future. If the present ratio of receipts to expenses could be maintained, they need not be despaired of. We think the road has seen the worst of the *hard times*. Each year should show an increase of receipts of 2 or \$300,000. If one-half of this increase could go to the stockholders, they might begin to expect something in two or three years. To pay 6 per cent. dividends, additional net earnings of only \$370,000 are needed, requiring an increase of, say, \$800,000, or a total of \$2,700,000 as gross receipts. The gross earnings for 1858 were \$2,428,787, and for 1857, \$3,104,600, or \$1,214,823 greater than the earnings for the past year. It may take five years to come up to the earnings of

1857, but we think not. Certainly with a fair degree of prosperity, for the interior. The uncertain element in the future is the *cost of operating* the road. The probabilities are that the current expenses will increase in a much greater ratio than the increase of gross receipts. The greatest degree of economy is obtained only by that patient and conscientious discharge of duty, that constant watchfulness which on our railroads is not the habit or rule, but which are only temporarily enforced by an extraordinary crisis, and are relaxed from as soon as such crisis is past. If a new principle could be introduced into the management of our railroads—if the compensation of the employees could be made to depend upon the value of their services, or the saving they could effect in their several stations, then an *extraordinary* would become an *ordinary* economy.

Brunswick and Florida Railroad.

The annual meeting of the stockholders of this company was held at Brunswick, Ga., on the 12th May, 1859, at which the following gentlemen were elected directors for the ensuing year:

H. G. Wheeler, S. C. King, A. S. Atkinson, H. C. King, of Georgia, and D. R. Martin, C. Kibbard and G. E. Gray, of New York. On the organization of the new board, H. G. Wheeler was unanimously re-elected President and Treasurer.

Since the last annual report, the company have directed their efforts mainly to the construction of this road towards the point of its proposed connection with the Atlantic and Gulf (Main Trunk) Railroad; but their progress has been slow, owing to financial difficulties. Since December last, there have been landed at Brunswick 1,000 tons of American rail, 51 pounds to the yard, sufficient to lay about 12 1/2 miles, in addition to the 31 miles then in use. Of this distance, 4 miles had been laid. Beyond the point to which construction was completed to the proposed connection with the Main Trunk line, 67 miles from Brunswick, is mostly graded, and a large part cross-tied. The entire cost of the road so far has been \$755,000; and to carry on the work, the company held immediate means, amounting, exclusive of conditional stock notes, etc., to \$190,000. These stock notes were given by parties residing on the line of the road, and are made payable when the road is completed to certain points. They amount to upwards of \$50,000 on the main line to the Alabama river, and \$93,000 on the Albany branch.

The mortgage debt of the company remains the same as at the date of their previous report, viz: \$8,500. The floating debt is stated at about \$70,000.

The charter of the Brunswick and Florida Railroad covers a line which is located from Brunswick to near the junction of the Flint and Chattahoochee rivers, via Mill Town, Sharp's Store and Thomasville. Also, branches to the Florida line from any point on this route, together with a branch to the Chattahoochee river via Albany, &c.

The State chartered the Atlantic and Gulf Railroad (generally known as the Main Trunk) and appropriated \$1,000,000 to aid in its construction.

The right of way and franchise of 300 feet on each side of the line of road was granted by the Brunswick and Florida Railroad to the Atlantic and Gulf Railroad, and your Board, before deciding on the further extension of their road, waited until the Atlantic Junction and Gulf Railroad Company should make such a location as appeared to them best for the interest of the country.

It is now ascertained that the route of the Atlantic and Gulf Railroad passes from the Initial Point, or Zero, near the corner of Wayne, Wade and Appaling counties, almost on an air-line to a point on the Brunswick and Florida Railroad, 67 miles from Brunswick; thence in a south-westerly course in the direction of Monticello, in Florida, until it reaches within a few miles of the Florida line, and thence to Thomasville and Bainbridge.

This location leaves a vast extent of country lying open for a railroad leading from the Junction of the Atlantic and Gulf Railroad with the Brunswick road, in a north-westerly direction; and as soon as the location of the Atlantic and Gulf Railroad was definitely settled, instructions were given by your Board to the Chief Engineer, to organize a corps and to commence a survey of the line from the Junction to Albany—upon nearly an air-line as was practicable.

As soon as the waters subsided, the party took the field, and the surveys are now being carried on between the Alapaha and Albany.

The Chief Engineer reports, that he made a reconnaissance in a direct line from Albany to the Alapaha river, where he met his party 29 miles from the Junction. The route surveyed, so far on an air-line, is very favorable, presenting no heavier work than that which occurred in the same distance on the road already graded from Satilla Station to Randolph Station, west of Big Creek. The measured distance from Brunswick to the Junction is 67 miles. From the Junction to Albany, the computed distance is 100 miles. *This line of rail will bring Albany within a distance of 167 miles of the seaboard at Brunswick.*

From Albany a direct communication by rail will be made with Montgomery in Alabama. Already a railroad is being constructed from Cuthbert to a point on the Chattahoochee opposite Eufala. Both Cuthbert and Eufala are on an air-line drawn from the junction through Albany. The distance in a direct line from Albany to Cuthbert is 38 miles, from Cuthbert to Eufala 22 miles, and from Eufala to Montgomery (estimated) 75 miles making the distance from Albany to Montgomery 135 miles, and from Montgomery to Brunswick only 302 miles.

The distance by rail from Montgomery to Savannah via the Montgomery and West Point—Opelika—Muscogee—South-western and Central Railroads is 383 miles—making a difference in favor of the direct line from Montgomery to Brunswick, via Eufala, Cuthbert and Albany, of 81 miles.

This saving in distance and time must necessarily bring both up and down freights, from and to Montgomery, over the line of road leading to Brunswick, and it is just as certain that return freights, merchandise, &c., destined to supply those portions of the States of Alabama and Mississippi dependent upon the line of road leading from Montgomery to Vicksburg, must pass over the Brunswick road, via Albany and Montgomery and be distributed at least as far West as Vicksburg.

The construction of this road is under the supervision of Col. Charles L. Schlatter, Chief Engineer.

Debt of Chicago.

The entire amount of the city of Chicago debt to March 1, 1859, was \$2,239,000, all of which has been issued for strictly municipal purposes. The debt is apportioned as follows:

	Funded.	Floating.	Total.
Municipal.....	\$514,000	\$200,000	\$714,000
Water work.....	1,025,000	.....	1,025,000
Sewerage.....	500,000	.....	500,000
Total.....			\$2,239,000

The water rents produce annually an amount sufficient to pay operating expenses, the interest on that portion of the debt, and an annual sinking fund for its gradual extinction. The balance of interest is provided for by taxation. The sinking fund of the sewerage loan now amounts to \$30,000, duly invested according to the provisions of the act.

The assessed value of taxables in the city was, in 1855, \$26,992,893; in 1856, \$31,736,084; and in 1858, \$36,200,000, being only one-third of the actual value. The population in 1855 was 83,509, and in 1859 is estimated at 130,000.

Journal of Railroad Law.

ACTIONS FOR DAMAGES.—PLAINTIFF'S NEGLIGENCE.

The case of Mackey vs. the New York Central Railroad Company, drew in question the principles governing the liability of a railroad company to a person injured while crossing their railroad track; a subject on which we have lately mentioned several cases.

This action was brought by the administrators of Abram Mackey under the New York statute, to recover damages for negligently causing the death of Mackey.

Mackey was run over and killed, on the 21st of December, 1854, by the defendants' locomotive and express train of cars, while he was crossing, with his team and sleigh, their railroad, at the highway crossing at the Savannah station, in the county of Wayne. It was claimed in the complaint, that the defendants' agents, on approaching the station, at the time in question, neglected to sound the whistle or ring the bell as required by statute. The proof was that Mackey, who had been engaged for some time previous, in drawing and piling wood at the railroad station at Savannah, was crossing the track northwardly with his team, as the express train was going by that station from the west. The locomotive struck and killed him. Some witnesses did not hear the signals of either bell or whistle, some heard the one and not the other, and some heard both. The defendant's wood house and several piles of wood, stood south of, and within 100 feet of the track, and west of the highway, obstructing the view of a person approaching from the south.

It appeared that as Mackey standing on his empty sleigh, his horses walking approached within 40 feet of the track, he was warned by one Remer, a witness in the case that "*the cars were coming.*" He turned an instant and looked toward the witness without stopping, then suddenly struck his horses, drove upon the track, and as he was crossing, the engine struck him. These facts were not controverted.

A motion for non-suit was denied, the Court leaving it to the jury to say whether this was negligence in Mackey.

The Court charged the jury among other things, that they were to consider the question of negligence on the part of the defendants; that they were guilty of negligence if they omitted to give the signal, either by ringing the bell or blowing the whistle. That they were also guilty in case they did not give such signal, if the jury should find that by reason of the position of the wood and other circumstances, extra care was made necessary for the deceased, in order to avoid injury, which they omitted to employ. That the defendants might by their own acts have made something necessary on their part beyond what the statute required, in order to avoid the imputation of negligence. That another question was: was the deceased guilty of negligence in crossing the railroad? That in passing upon this question, the jury would bear in mind and consider his opportunity to see and know what obstructions, if

any, there were to prevent his views, which had been created by the railroad company and his acquaintance with the premises and time of the passing of the trains. That if the deceased was negligent, although the defendants were also negligent the plaintiffs were not entitled to recover. That if the deceased's negligence contributed in measure with the negligence of the defendants, to cause the injury, the plaintiffs were not entitled to recover notwithstanding the negligence of the defendants. That the situation of the wood, could only be regarded in considering the obligation of the defendants to provide greater care against accidents.

To this charge of the Court the defendants excepted. The jury rendered a verdict for the plaintiffs for \$3,000 damages.

The defendants moved for a new trial, which was denied. They then appealed; and the following is the substance of the opinion of the appellate court upon their appeal.

E. DARWIN SMITH, J., after disposing of a preliminary question in the case. It was proved by one witness who was standing two rods south of the track and on the west side of the road or highway, at the crossing, at the time of the accident, that the plaintiff's intestate came out of the field into the road where the witness was standing, and was going towards the crossing when the witness spoke to him and told him the cars were coming; he (the deceased) was then going slowly, standing on his sleigh and his horses on a walk. "As I spoke to him" (the witness said) "he turned his head towards me, and then struck his horses with the lines and went on to the track." The witness, on cross-examination, further said that he was about six feet from the deceased when he spoke to him; was not able to say whether he (deceased) heard him or not. "He turned and looked towards me when I spoke to him, and then with quick motion struck his horses with the lines." This witness is not contradicted or in any way impeached. His testimony is clear and explicit, and is fully entitled to credit, for aught that appears in the case. I think upon this positive testimony, unexplained, uncontradicted, or in any way weakened, the justice at the trial would have been warranted in non-suiting the plaintiffs: and how the jury could say that the plaintiff's intestate was not guilty of negligence, or that his negligence in no way contributed to his death, I cannot comprehend. If the rule that a plaintiff suing for negligence must himself be free from fault is a sound one—if a plaintiff whose negligence has contributed to the injury is not entitled to recover against a party no more guilty of negligence than himself, and this rule of law is to be maintained, I cannot see how such a finding of a jury can be sustained. It is directly against the evidence, and we cannot uphold it or refuse to set it aside, unless we adopt the rule which is, I fear, quite prevalent in the jury box, that the same measure of justice is not to be meted out to a railroad corporation that is meted out to natural persons.

There are several exceptions to the charge, but they all relate to the wood pile of the defendants so placed as to obstruct the view of the plaintiff's intestate when coming on to their track from the south side of the road. The judge told the jury that the situation of the wood could only be re-

garded in considering the obligation of the defendants to provide with greater care against accidents. Wood was piled all along, for many rods from the crossing, on the sides of the railroad track westward, so as to obstruct the view of a person at the crossing. In what respect this imposed any extra duty upon the defendants in running their cars, I cannot perceive. The case contains no suggestions of any particular neglect of any duty in respect to the wood pile. The plaintiff was not a stranger there. He was at work drawing and piling wood at that station, and had been so engaged the whole of last season. (The accident was on the 21st of December 1854.) It was in proof that 24 trains of cars passed there daily, which must have been well known to the deceased, as well as to their relative times, and the customary practice in passing that station. It seems to me that it was the height of impudence and heedlessness for a man, with such knowledge, to approach and attempt to cross a railroad track about the time a train was due, till he had fully ascertained that it was entirely safe to do so, and that the fact of the location of this wood pile, perfectly well known to him, does not diminish his duty to be careful in the slightest degree. The rather, in my opinion, did it increase his duty to greater carefulness. I cannot agree with the implication of the charge, that because there was a wood pile in the way of his seeing far along the track—a wood pile placed there by the defendants probably through the personal agency of the plaintiff's intestate himself—he was, therefore, excused or relieved from exercising due care and diligence. I hold that he was bound to exercise care and diligence and foresight *in proportion to the danger to be avoided*, and the fatal consequences involved in his neglect. His vigilance should be quickened, not slackened, by the fact that he could not see the track sidewise to any distance, till he got right on it. He was bound to act as a prudent rational man in view of the surrounding circumstances; and no prudent man would drive heedlessly upon a railroad and attempt to cross its track, till he had actually and fully ascertained that the track was clear, and that there was no danger. The allusion which the circuit judge made to the wood pile, in his charge, I think clearly erroneous. He made it an excuse for the plaintiff's intestate in driving heedlessly upon the track. It must have been so construed by the jury. I think all the exceptions to the charge, so far as they relate to the situation of the wood pile, and its influence on the relative rights and duties of the defendants and the plaintiff's intestate, well taken, and that there should be a new trial.

Minneapolis and Cedar Valley Railroad.

At the annual meeting of the Minneapolis and Cedar Valley Railroad Company, held at Northfield, recently, John W. North, Esq., President of the road, resigned; and Gen. James Shields, of Rice county, was elected in his stead. Mr. North retains his position in the Board of Directors. It is understood that the election of Gen. Shields indicates that the policy of the company will be materially changed from that hitherto pursued; and in the programme of future management, we believe, it is intended to take prompt measures to bring what is known as "Railroad Currency" up to par, at least so far as this company can hasten the event.—*St. Paul Pioneer.*

Illinois River Railroad.

This road is to extend from Pekin, Tazewell county, to Jacksonville, Morgan county, a distance of seventy-three miles. It passes through the counties of Tazewell, Mason, Cass and Morgan, which are well known to be unexcelled as an agricultural district. It will connect, two miles west of Pekin, with the Peoria and Hannibal road now in process of construction, and thence to Chicago via the Bureau Valley and the Chicago and Rock Island roads.

All the iron necessary for this road was purchased some time since in England, and 6,500 tons of it have been shipped to New York. By the 1st of July 5,000 tons will have been shipped from New York to Chicago. Six cargoes of rails, chairs and spikes, making over 2,000 tons, have already arrived here, and several other cargoes are daily expected. Over 500 tons of rails and a portion of chairs and spikes have gone forward to the line of the road, and shipments will be continued rapidly. Arrangements have been made for sending forward in a few days two locomotives and the necessary cars for track-laying from two points, which will be commenced early next month and prosecuted vigorously to completion. The road-bed between Pekin and Virginia, Cass county, fifty-eight miles, is completed with the exception of about three miles of light work which will be finished by the time the track-layers reach it.

It is aimed to have the road completed to Virginia by the 1st of October next, and to Jacksonville by the 1st of January, 1860. This will be early enough to reap the benefit of carrying this season's crops to market. These, especially wheat and corn, along the line of the road, promise a full average yield, and they will mostly find their market at Chicago. Cass county alone, though containing less than 400 square miles, annually exports 30,000 hogs, several thousand head of fat cattle, besides a large amount of grain. Morgan county exports annually about 75,000 hogs, from 16,000 to 18,000 fat cattle, and a large amount of grain. Mason and Tazewell counties export largely of all these products—especially of wheat and corn. We congratulate the business men of Chicago, upon the favorable prospects of the speedy opening of a line of road from which they will derive a large and profitable trade. The energy and enterprise of those who have pushed it forward in the face of the monetary revulsion are worthy of all praise.—*Chicago Tribune.*

Philadelphia City Railroads.

There are ten different horse railroads for carrying passengers now in operation in Philadelphia, covering a distance of probably one hundred miles of single track. The number of cars is over 300, and the number of horses must be a couple of thousand. The men employed by them, in all capacities, amount to about one thousand. The Fourth of July was a great day on these roads. The amount of money received on all of them, on that day, was \$8,787. This represents a total of 175,740 passengers at full five cents fare. The operations of each road are shown by the following statement, which we have obtained from official sources:

Roads.	Cars.	Receipts.	Fares at 5 cents.
Second and Third....	57	\$1,564	31,280
Fifth and Sixth....	50	1,340	26,800
Fourth and Eighth....	38	1,050	21,000
Tenth and Eleventh....	37	1,015	20,300
Race and Vine....	26	780	15,600
Arch Street....	16	370	7,400
Ridge Avenue....	10	290	5,800
Girard College....	19	594	11,880
Market Street....	35	1,000	20,000
Spruce and Pine....	16	459	9,180
Darby Road....	9	325	6,500
Total....	313	\$8,787	175,740

These figures are surprising, but they do not tell all. For many persons got exchange tickets at six or eight cents, which carried them over two roads, and besides there are a good many persons

on the free list. So that it is estimated that the actual number of individual trips made was not less than two hundred thousand. This represents nearly one-third of the population of the city of Philadelphia, men, women, and children, the old and disabled, the invalids, and the children in arms. With such a result on a single day, who will say that city railroads are not a great public blessing? In the days when omnibuses were the only public vehicles for traveling at a cheap rate in the city, the number of passengers on a great holiday could scarcely have amounted to one-sixth of the travel by the city railway cars on the 4th. —*Philadelphia Journal.*

Hannibal and St. Joseph Railroad Lands.

It is generally known that Governor Stewart recently accepted a portion of the Hannibal and St. Joseph Railroad, thereby permitting the company to put in market a large amount of very valuable lands. This act seems to have given general satisfaction to the citizens along the line of the road.

The law requiring the road to pass inspection as a first class road before the lands should be certified to the company by the Governor, was undoubtedly intended to secure the State on her bonds loaned the company, and not to permit the company to sell their lands until the road would, of itself, be ample security to the States. Whether or not the road is, in every particular, a first class road, the object originally contemplated in the law has undoubtedly been attained. The road is paying well, and trains are constantly making their regular trips. On certain portions of the road where temporary structures were first erected, in order that trains might run over the road sooner than they otherwise could have done, permanent and substantial works are being supplied, and in a short time, if the present plan is continued, the Hannibal and St. Joseph Railroad, in its whole length, will compare favorably with other so-called first class roads.

The sale and improvement of so large an amount of valuable agricultural lands, will certainly result to the immediate and permanent benefit of the State, for the taxes arising from them will soon be an addition to the receipts of the Treasury of no small importance. Why then should they have been permitted to lay idle for one, two, or three years longer? We certainly cannot see any good that would have resulted from such a policy. We do not believe the company will ever forfeit the road to the State, but will continue to pay their interest, upon bonds, as they fall due.—*Jefferson City Examiner.*

The Welland Railroad.

We have the satisfaction of announcing that the capacity, and facilities, for the transportation of grain by the Welland Railway, have been successfully developed in such a manner as fully to carry out the opinions expressed by its promoters in their original prospectus.

Although, on account of inadequate notice, sufficient preparation had not been made for the experiment, and the machinery was not put in motion, until near 1 o'clock, the cargo of the schooner *Farnham* (12,750 bushels) was by 7 o'clock transferred to a train of 27 cars at Port Colborne, which, before 8 o'clock, was in motion down the line.

The weight of this train—something over 350 tons—was easily drawn by one locomotive; and, in the opinion of the Superintendent, the capacity of a first-class engine would equal 14,000 bushels of corn, or 382 tons a load. This fact shows the advantage possessed by the Welland Railway for carrying heavy trains at a small expense; and that, when the machinery is in good working order, a cargo can be transferred from the hold of a vessel on Lake Erie to the hold of a vessel on Lake Ontario within twelve hours.

The facilities of this line will, we feel assured, greatly increase the amount of trade in the direction of Lake Ontario, and regain what has been lost by the Canada route through the competition of the New York railways.—*St. Catherine's Journal.*

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending July 11, 1859.

BONDS.	Per cent.	
Little Miami, 1st Mort.	68	84 and int.
Oovington and Lexington, 2d Mortgage	68	83
Cinc. Ham. and Dayton, 2d Mortgage	78	85
Indianap. & Cincinnati, do.	78	85
STOCKS.		
Cincinnati, Hamilton & Dayton	64	
Columbus and Xenia	83	84
Indianapolis & Cincinnati	55	
Little Miami	85	

Railroad Earnings.

The earnings of the Chicago, Burlington and Quincy Railroad Company for June, 1859, were as follows:—

Freight	\$58,634 32
Passengers	27,256 90
Mail and miscellaneous	1,572 08

Total	\$87,463 30
Operating expenses estimated	50,000 00

Net earnings	\$37,463 30
Gross earnings per mile	546 64

Between Chicago and Burlington, 210 miles:—

Freight	\$65,912 75
Passengers	32,444 90
Mail and miscellaneous	1,930 58

Total	\$100,298 23
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Between Galesburg and Quincy, 100 miles:—

Freight	\$11,294 99
Passengers	10,930 50
Mails and miscellaneous	860 83

Total	\$23,090 72
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Total for 310 miles	123,388 95
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Earnings in June, 1858	\$170,996 62
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Decrease do. 1859	47,607 67
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The receipts of the Grand Trunk Railway of

Canada for the week ending June 25,	
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were	\$39,662 78
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Week ending June 26, 1858	38,463 50
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Decrease	\$1,199 28
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Total traffic from July 1st.	\$2,234,601 73
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Same period last year	2,328,665 22
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Decrease	\$94,063 49
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The following are the June earnings of the

Michigan Southern Railroad:

1853	\$148,946	1857	\$197,418
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1854	214,534	1858	178,927
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1855	248,370	1859	122,105
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1856	225,039		
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Decrease from 1858	\$56,822
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The traffic of the Great Western Railway of

Canada for the week ending July 1, 1859, was

as follows:

Passengers	\$21,717 07
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Freight and live stock	7,806 76
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Mails and sundries	1,428 88
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Total	\$30,952 66
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Corresponding week of last year	32,948 04
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Decrease	\$1,995 37
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The receipts of the New York and Harlem

Railroad Company for the month of June, 1858

and 1859, were as follows:—

June, 1859	\$89,239 09
------------	-------------

June, 1858	82,529 24
------------	-----------

Net increase	\$6,709 65
--------------	------------

The earnings of the Erie railroad for the month

of June, 1859, were

June, 1859	\$330,657 22
------------	--------------

June, 1858	384,378 93
------------	------------

Decrease	\$45,721 71
----------	-------------

The decrease was wholly in freight.

The business of the Illinois Central Railroad for June, 1859, was as follows:

Land Department.

Acres Construction Lands sold

1,258.41 for	\$18,656 57
--------------	-------------

Acres Interest Fund L'ds sold

80.00 "	1,482 40
---------	----------

Acres Free Lands sold

438.48 "	7,397 26
----------	----------

Total sales during the month

1,803.89 for	\$27,536 23
--------------	-------------

To which add Town Lot sales

755 80	
--------	--

Total of all

\$28,292 03	
-------------	--

Acres sold since Jan'y

1, 1859	17,049.67 for \$251,900 68
---------	----------------------------

Acres sold previously, 1,229,835.33

"	16,637,148 95
---	---------------

Total

1,246,885.00 for	\$15,889,049 63
------------------	-----------------

Construction Bonds canceled in June,

1859	\$39,000 00
------	-------------

Construction Bonds canceled previously

1,080,500 00	
--------------	--

Free Land Bonds canceled in June,

1859	\$7,000
------	---------

Free Land Bonds canceled previously

138,000	145,000 00
---------	------------

Total Bonds canceled up to June,

30, 1859	\$1,264,500 00
----------	----------------

Cash receipts in June, 1859

\$60,558 97	
-------------	--

Do. since Jan'y 1, 1859

290,524 14	
------------	--

Total cash and bonds received to

June 30, 1859	\$2,965,421 67
---------------	----------------

Traffic Department.

Receipts from passengers

\$57,526 60	
-------------	--

Do. freight

75,029 70	
-----------	--

Do. mails

6,358 23	
----------	--

Do. rent of road

5,258 33	
----------	--

Do. other sources

4,244 00	
----------	--

Total receipts in June, 1859

\$148,416 96	
--------------	--

Do. do. 1858

154,192 57	
------------	--

Do. since Jan'y 1, 1859

\$368,617 22	
--------------	--

Do. do. 1858

905,653 02	
------------	--

The June earnings of the Milwaukee and Mis-

sissippi Railroad were as follows:

Freight	\$29,443 45
---------	-------------

Passengers	20,769 70
------------	-----------

Mails	1,835 41
-------	----------

Total

\$52,048 56	
-------------	--

This is a falling off of 100 per cent. from the

earnings of the corresponding month last year.

The earnings of the Stonington Railroad in—

June, 1859, were	\$19,131 35
------------------	-------------

June, 1858, were	16,618 30
------------------	-----------

Increase

\$2,523 05	
------------	--

The earnings of the Galena and Chicago Union

Railroad Company, for the month of June, were:

1858.	1859.	Decrease.
-------	-------	-----------

Freight	\$164,685 95	\$73,659 66	\$91,026 29
---------	--------------	-------------	-------------

Passengers	41,933 13	34,120 87	7,812 26
------------	-----------	-----------	----------

Mails, etc.	4,108 57	4,000 00	108 57
-------------	----------	----------	--------

Total

\$210,727 65	\$111,780 53	\$98,947 12
--------------	--------------	-------------

Corrected earnings for the previous

month	\$122,007 63
-------	--------------

The North Pennsylvania Railroad earnings in—

June, 1859, were	\$27,362 34
------------------	-------------

June, 1858	22,101 93
------------	-----------

Increase

\$5,260 41	
------------	--

Earnings in 7 months, to June 30th,

1859	\$187,654 79
------	--------------

For same time last year	156,466 82
-------------------------	------------

Increase

\$31,187 97	
-------------	--

The receipts of the Little Miami and Columbus and Xenia Railroad, for June, were as follows:—

1859	\$87,458 04
------	-------------

1858	77,508 26
------	-----------

Increase

\$9,949 78	
------------	--

The earnings of the Central Railroad Company

of New Jersey, for the month of June, 1859,

were	\$80,627 65
------	-------------

For June, 1858	73,826 99
----------------	-----------

Increase, 9 per cent.

\$6,800 66	
------------	--

The following is a statement of the earnings of

the New York Central Railroad, for the month of

June, 1859, compared with its earnings for the

corresponding month of the previous year:

1859	\$440,126 44
------	--------------

1858	432,195 40
------	------------

Increase

\$7,931 04	
------------	--

The Norwich and Worcester road earned during

June, 1859	\$29,627
------------	----------

Do. 1858	23,972
----------	--------

Increase

\$5,654	
---------	--

The New Jersey Railroad and Transportation

Company has declared a semi-annual dividend of

5 per cent., payable August 1.

The earnings of the Pacific Railroad of Missouri

for June, 1859, were:—

Main line	\$51,002 20
-----------	-------------

S. W. Branch	1,249 00
--------------	----------

Earnings for June, 1858	\$52,251 20
-------------------------	-------------

	39,061 70
--	-----------

Increase

\$13,189 50	
-------------	--

In June, 1858, the road was only open to Cali-

fornia, 150 miles—making the earnings \$260 41

per mile.

In 1859, the road was open to Tipton, 163 miles

—making the earnings \$312 84 per mile.

The following are the earnings of the Michigan

Central Railroad, for June:

1859.	1858.
-------	-------

Passengers	\$67,510 35	\$99,249 56
------------	-------------	-------------

Freight	46,767 40	65,595 14
---------	-----------	-----------

Miscellaneous	5,492 85	6,001 88
---------------	----------	----------

Total	\$119,770 60	\$170,847 58
-------	--------------	--------------

	119,770 60	
--	------------	--

Decrease

\$51,076 98	
-------------	--

The earnings of the Macon and Western Rail-

road, for June, 1859, were:—

Through	\$611 30
---------	----------

Local	8,845 46
-------	----------

Mail	838 50
------	--------

Freight	12,359 49
---------	-----------

Total	\$22,654 75
-------	-------------

June, 1858	18,059 49
------------	-----------

Increase

\$4,595 26	
------------	--

The following are the June earnings of the

Cincinnati, Hamilton and Dayton Railroad, com-

pared with the corresponding month of previous

year:

June, 1859	\$41,321 47
------------	-------------

Pacific Railroad of Texas.

Intelligence has been received here that the important suit between Texas and the Pacific Railroad Company has been decided by the Supreme Court of Texas, and that the decision is adverse to the company. Such a result has not been expected here, and it will create a bitter disappointment in many quarters.

We can explain, in a few words, the progress of the controversy to this point. The State of Texas, through her Governor, instituted suit some time ago against the Pacific Railroad Company to obtain a forfeiture of their charter for non-compliance with its conditions. The suit was brought before a lower court of Texas, when it was dismissed without a trial, on the ground that there was no cause for bringing it.

The jury determined that the grounds of forfeiture of the charter set forth in the petition were all either insufficient, or insufficiently alleged, except one, which was, that the President, or Vice President, and a majority of the Directors, did not reside in the State of Texas at any time after the 19th of June, 1858. They held that the law requiring that was constitutional, and that it did not impair any right conferred upon the company by the charter. Thereupon the Governor appealed to the Supreme Court of the State for a decision as to whether there was not ground for trial in the lower court. The recent decision of the Supreme Court is, that there is cause of action, and, of course, the case must now go to trial in the lower court.

We presume that the company will go before the next Texas Legislature, if necessary, for relief from any disability to which they may have subjected themselves by dilatoriness, or informality of action. Of course, there must, at the best, be considerable delay, so that the progress of the great enterprise is utterly arrested for a time, at least.—*Louisville Journal.*

American Railroad Journal.

Saturday, July 16, 1859.

Copper Smelting at Baltimore.

For several years Baltimore has been largely engaged in the business of smelting and refining copper and contains two of the most extensive establishments for this purpose in the Union. One of these is owned by the "Baltimore and Copper Smelting Company" whose works are located at Canton and have been successfully managed by Dr. David Keener, one of our most accomplished metallurgists; and the other belongs to the "Baltimore and Cuba Smelting and Mining Company" located at Locust Point, and of which Haslet McKim, Esq., is the energetic and worthy president. The operations of these companies cover an immense interest, and together during the financial year ending 31st November, 1858, purchased and smelted the following amount of ores:

South American, 9,451 tons, valued at \$1,180,000	
Cuban.....1,832 do. do.	153,550
Domestic.....3,797 do. do.	350,000

Total....15,080 do. do. \$1,683,550

Of the domestic ores received at these works, 1,250 tons were from Polk county, Tenn.; 908 tons from Maryland (a large portion being from the Springfield mine) and Pennsylvania; 130 tons from Virginia; 540 tons from the Lake Huron region, and the remainder from the Lake Superior mines and other locations. The quantity of ingot copper produced at the two Works was about 8,000,000 pounds valued at \$2,000,000. The value of foreign copper received at Baltimore in 1857-8 was \$602,614, of which sheathing copper \$3,189,

copper in bars or pigs \$18,961, old copper \$196,232 and copper ore \$384,232. The value of the foreign material re-exported was \$185,436. The weight of these is not stated (as it ought to be) in the Treasury Report.

New York and Erie Railroad.

3 Threadneedle Street, E. C. }
LONDON, June 24, 1859. }

To the Editor of the AM. RAILROAD JOURNAL.

SIR: Your article of 4th June, embodying an anonymous proposal to take a ten years' lease of the Erie Road, has excited much interest in England. You invite responses to the proposal. Probably before you can receive this, the offer to lease may have been either dealt with, or dropped; but there may be good, and can be no harm, in giving you our opinion that a lease on the terms you mention, or on the more detailed terms stated in the *Tribune* of the 8th of June, would be favorably regarded by mortgagees, bondholders, and stockholders, in this country, provided the parties offering themselves as lessees be acceptable, and the knotty points can be solved which must arise in stipulating for sufficient guarantees that the line and rolling stock be fairly maintained, and that there shall be "honor bright" in sustaining the connexions, and capabilities, of the route.

There has been every disposition here to sustain Mr. Moran, and to favorably construe his actions and administration; but he has managed to sail so fearfully near the wind with the payment of his interest on 1st and 3d mortgage bonds, that everybody is afraid he will have the ship on the rocks. Europeans are at a loss to understand the policy which allows the world to doubt whether the 1st mortgage interest of \$210,000 a year will be met out of revenues amounting to nearly that amount fortnightly. Only \$76,000 per month are wanted to pay interest on the three first mortgages; surely nothing in the whole administration of the company's affairs is more important than the punctual payment of the coupons on these bonds. If forbearance be required on the subordinate securities, it may much more safely be counted on, and if the value and reliability of the 1st, 2d, and 3d, had been maintained, there would have been a sort of anchor of confidence to hold on by—an element of stability in one set of securities, which the return of good times would have extended to the others; but now all confidence is shaken from the highest to the lowest, and the panic-struck holders in America have been selling their 1st mortgage bonds as tainted property, although the whole amount of them is far less than one year's gross income.

No doubt the road required extensive improvement; we cannot judge whether any material part of the improvements effected might have been postponed; if not, then Mr. Moran may plead that necessity has no choice, but it certainly does lie on him to prove that he could not have avoided the course which has so shaken the confidence of every class whose interests have been committed to his care; and we shall sincerely rejoice if he will place his defence before his constituents (particularly the inferior bondholders on this side of the Atlantic), and succeed in re-establishing their confidence.

If, however, a lease of this road is to be the order of events, would it not be well for the New York Central, alone, or jointly with the Pennsylvania

Central, to become, in substance if not in name, the lessees; not for ten years, but in *permanence*, and so, let one of the elements of these periodical fits of pugnacity be finally withdrawn.

Yours respectfully,

HESELTINE & POWELL.

On this side, we are as much in the dark as to the present condition of the Erie railroad, or rather of the causes that have produced its present apparent condition, as are the stock and bondholders abroad. We know that the company are in default upon *all* its bonds, but whether from inability to pay the interest on them, or whether the company have otherwise appropriated such net earnings as have been realized, the public have no information. In 1858, the acknowledged net earnings were sufficient to pay the interest on about \$17,000,000. We think it very probable, though we have no means of knowing, that the next annual report of the company will show net earnings equal to the interest on the 1st, 2nd and 3rd mortgages, which call for about \$900,000 annually. Whatever they may be, we presume they have been used in liquidation of the *floating* debt of the company. We can offer no other solution. Mr. Moran does not choose to ventilate his mode of doing things before the public. We will not impute to him any unworthy motive; we believe him incapable of conspiring to sacrifice the road to any of the mortgage bondholders, but certainly he could not have taken any course so effectually to produce such a result as the one he has steadily pursued.

With regard to the proposed *lease* of the road—we take it that no one will dispute the premise, that a party of competent railroad managers *could* run this road cheaper by at least 20 per cent., than it has been, or can be managed by the company. They would make it for the interest of every person employed to do his best, instead of doing nothing, or doing his worst, oftentimes. We appeal to every man of sense, to say whether it is not reasonable to suppose that were the road owned by individuals, *one fifth* more might be made out of it than is at present made? and whether every commercial and manufacturing enterprise conducted as the Erie railroad is would not fail? Twenty per cent. of the earning of the past year saved, would have produced \$2,200,000, equalling the interest on \$31,000,000. English railroads earn a trifle over 7 per cent., *gross*, upon their cost. Yet they contrive to place something over one-half of this amount on the side of *net* earnings. The Erie railroad, for 1858, earned something over 18 per cent. on its funded debt. Nothing but incompetency could prevent *seven* per cent. of this amount from going to the bondholders.

Again. A competent party, taking hold of this road would increase its receipts a half a million a year over the *do-nothing* policy of Mr. Moran, in reference to securing business. We have traveled a good deal within a few months past, and we have to see the *first* handbill or advertisement of the Erie at the stations of, or on the lines of other roads. We have made it a point to have our eyes about us for the special purpose of seeing what the Erie was doing to keep its road before the public. A person can hardly go into a station in the most remote parts of the country without see-

ing flaming advertisements of the other leading companies, the Pennsylvania in particular, with minute directions to the travelers passing over their lines, setting for its advantages and attractions. In this mode of advertising, the Pennsylvania Company take the lead.

Gentlemen who have traveled all over the Western States tell a similar story. If one road advertises itself thoroughly, a rival line must do the same, or lose its business. If all unite in such a course, they stimulate, create travel, to an amount exceeding ten times the cost of doing so. The Erie Company has driven away every passenger, and every pound of freight, that can be driven away from its road. It is now, luckily, at low water mark. Those now managing the road can never turn the tide in their favor. They are completely played out, particularly at the West, the great source of business for the road. Before, the former prosperity of the road can be regained, a considerable portion of its future business must be created.

The great obstacle to leasing the road will come from the directors. We can hear of opposition from no other source. Such opposition is to be expected. The course proposed is the alternative to the threatened ruin they have brought upon the road. They cannot be supposed to be eager to acknowledge themselves incompetent for their duties. It is very likely that many of them have complications of one kind or another with the road. Then there is a *Long Dock*. There is probably a good sized *cat* under this heap of meal. Whatever may be the case, one thing is clear—the party in power have either ruined the road, or have brought it to the very brink of ruin. Mr. Moran may have the financial talents of an *Archangel*, but has made a very poor show of them on the Erie Railroad. If we are correctly informed, the company is in fault upon every issue of bonds. It has not a single dry spot to stand upon—not a single point it can urge in its favor. The only good feature in the case is that *financiers* are no longer wanted. Their functions are at an end. The credit of the company is no longer to be sustained. It is gone. What is now wanted are parties who will make the most money out of the road for its owners. Notwithstanding the giving out from certain interested quarters, we assure the bondholders that a party stand ready to take a lease of the road on favorable terms to the former, possessing as much means, as much respectability, and *fifty* times the practical talent possessed by the present board of directors, for the proper management of the road.

Niagara and Detroit Rivers Railroad.

We learn from the *Detroit Free Press*, that the contract for building this road has been awarded to James Morton, of Kingston, the original contractor under the old McBeth Board. Mr. Morton is a gentleman of great practical ability in railroad matters, and of ample means to construct the entire line.

Dayton and Michigan Railroad.

We learn that track-laying on the Toledo division of this road, is progressing so rapidly that the line will be opened by the first of September from Dayton to Toledo. At the same time good progress is being made, at several points north of Lima, ditching the road and ballasting the track with gravel.

Eastern Railroad.

We have received the 24th annual report of the Directors of this company, for the fiscal year ending May 31, 1859, from which we learn that the receipts from earnings of the road during that time were:

From passengers.....	\$493,092 54
" freight.....	130,553 63
" parcel, post and cars.....	12,958 29
" mails.....	9,624 00
" property and territorial accounts, rents, etc.....	16,906 83
	\$668,135 29

And the expenditures were:

Maintenance of way.....	\$77,869 32
Locomotive power.....	47,146 77
Train expenses.....	66,003 02
Station ".....	44,900 07
Fuel.....	60,634 90
Office establishment.....	22,592 55
Miscellaneous.....	3,748 41
Rent of Gr'd J'n Road.....	11,000 00
Insurance and taxes.....	9,714 91
	343,609 95

Net earnings.....	\$319,525 95
Less interest paid and accrued.....	124,150 21

Net income.....	\$195,375 13
The net earnings of the previous year, interest off, were.....	138,041 92

Showing a gain, the past year, of. \$53,333 21

The road-bed, superstructure, and equipment, have been kept in good condition. The company have expended during the year \$40,304 32, in repairing and re-building bridges—making no less a sum than \$106,303 expended for this purpose within the past four years. The floating debt has been reduced during the year, \$100,735 14; and the funded debt, \$75,000—making the total reduction of indebtedness for the year, \$175,735 12

Against the floating debt, amounting to \$99,301 14, the company have cash, \$9,193 06, and notes receivable, mostly secured by mortgage, amounting to \$41,456 38—thus leaving \$48,651 70. The wood and materials on hand, and paid for, amount to more than that sum. The bonds due in 1862, amount to \$700,000; and those due in 1874 to \$445,500. These, and all other liabilities, except the income bonds, floating debt, and interest, are to be considered and treated, not as an annual charge upon the earnings of the road, but as so much invested as permanent capital, to be funded anew at maturity, and ultimately converted into capital stock, inasmuch as stock has never been issued to the amount of the cost of the road. There remains, then, to be provided for from the annual earnings, aided by sales of property as opportunity offers, the balance of the floating debt, the interest on the funded debt, and \$75,000 a year for income bonds. Should the business of the road the present year be as prosperous as that of the past, the net receipts will extinguish the floating debt, and provide for the income bonds; and should sales of lands be effected, the proceeds of such sales, by relieving the net income to that amount, will leave it applicable to the payment of dividends.

The South Reading Branch, as usual, has been operated at a loss—the deficiency being \$874 75. The earnings of the Essex Road were \$59,991 89, and the expenses, \$45,685 10—leaving \$14,306 79—sufficient to pay the interest on their bonds (except those held by the Eastern Company), and \$305 12 besides. The earnings of the Portland,

Saco and Portsmouth Railroad were \$208,299 41, and the expenses \$104,270 25, leaving \$104,029 16—sufficient to pay its stated dividend of 6 per cent., and leaving \$14,029 16 as surplus. As this must be retained by that corporation for its own uses, the Eastern Company receive no income from that source for the year.

GENERAL STATEMENT.

	Dr.
Capital stock.....	\$2,853,400 00
State of Massachusetts.....	500,000 00
Bonds.....	1,605,500 00
Notes payable.....	76,651 22
Borrowed money.....	22,649 92
Due other roads.....	26,046 15
Coupons for interest unpaid.....	6,117 00
Dividends unpaid.....	6,588 96
Essex Railroad interest.....	127 00
Grand Junction Railroad coupons..	2,400 00
Suspense account.....	4,780 55
Contingencies.....	4,021 47
Interest.....	18,371 59
Profit and loss.....	2,115 53
	\$5,128,719 39

	Cr.
Cost of Main line, 41.2 miles.....	\$3,124,848 65
" M'ble'h'd Br. 3.0 ".....	55,843 05
" Glouce'r " 13.1 ".....	338,879 71
" Sal'bury " 3.8 ".....	79,189 38
" Saugus " 8.4 ".....	236,246 82
" S. R'd'g " 8.1 ".....	299,468 36
	80.6
	\$4,134,475 97

" Essex Railroad.....	262,102 34
Equipment.....	456,523 86
Real estate.....	85,049 02
Stocks and bonds.....	35,536 00
Notes receivable.....	41,456 38
Due from agents.....	53,123 19
Materials on hand.....	49,259 57
Cash.....	9,193 06
	\$5,128,719 39

Fayette County (Pa.) Railroad.

This railroad when completed will extend from Uniontown to McConnellsville, and at the latter place connected with the Pittsburgh and Connellsville Railroad. Its length is about 12½ miles, but in this is included about 9-10ths of a mile which will ultimately be taken by the P. & C. R. R. Company. It was probably opened to Mount Braddock, a distance from Uniontown of 8 miles, on the 4th inst. Of the whole line 65½ per cent. is straight, and 34½ per cent. curved. The whole amount of curvature is 770°; and the entire distance from Uniontown is 19 per cent. longer than a straight line. In this respect, as well as in some others, the road will compare favorably with other lines through uneven countries. The highest grade is 95 feet to the mile, and the whole amount of ascent going East is 249¾ feet, and of descent 323¾ feet, the difference being 74 feet, by which amount the bridge on the Youghiogeny river is lower than the grade at Uniontown. The cost with rail 48 pounds to the yard, is estimated at \$6,113,371, and may cost \$125,000. Though a comparatively short road, this is an important one to Uniontown, which through the P. & C. R. R., and the Pennsylvania Railroad, will be secured a direct communication with Pittsburg, and the whole East and West. Uniontown is situated on what was formerly the greatest of national highways, the National or Cumberland Road. Since the opening of the great railroads of the country, however, this previously most important thoroughfare has become comparatively insignificant, and Unio-

town, which then possessed advantages second to none in the way of communication Eastward and Westward, has since been entirely shut out from the commercial world. The present enterprise is an attempt to resuscitate its fortunes, and again place Uniontown, and the rich agricultural and mineral region around it, in easy communication with the best markets. The officers of the company for the year 1859 are—Hon. Nath. Ewing, President; John N. Lewis, Chief Engineer; and S. D. Oliphant, Secretary and Treasurer. Office, Uniontown, Pa.

Macon and Western Railroad.

The condition of the financial affairs of this company, June 1, 1859, is shown in the following general statement:—

Construction accounts, etc.....	\$1,500,000 00
Expenditures.....	88,684 18
Dividend No. 25.....	57,552 00
Interest on Bonds.....	3,189 50
Winn Case.....	9,322 89
Treasurer's Balance.....	\$33,686 74
Bills receivable.....	47,881 07
Freight agents.....	7,163 55
Bank of the Republic.....	3,440 52
Central R. R., J. J. Soutler.....	40,000 00
Bank of Charleston.....	6,020 01
Post Office Department.....	2,993 04
Geo. Parsons & Co.....	83 15
American Atlantic Screw	
Steamship Co.....	5,073 72
G. B. Lamar Loan.....	10,000 00
	156,345 80
Total.....	\$1,815,094 37
Capital stock.....	\$1,438,800 00
Bonds.....	65,500 00
Profit and loss.....	107,917 05
Freight earnings.....	\$115,014 67
Passenger earnings.....	61,077 04
Mail earnings.....	5,086 90
	181,178 61
Interest.....	564 62
Negro Hire.....	4,638 52
Central Railroad and Banking Co.....	564 62
Sale of freight cars.....	15,707 98
W. and A. Railroad.....	175 10
Total.....	\$1,815,094 37

The road has practically no floating or funded debt, the uncalled-for instalment on the stock being sufficient to pay the entire amount of outstanding bonds when matured.

Mobile and Girard Railroad.

The Columbus papers contain the proceedings of the late annual meeting of the stockholders of this road, at Girard, Maj. Jno. H. Howard, was re-elected President.

The following gentlemen were chosen Directors for the ensuing year: Homer Blackmon, John Goldsmith, Wm. H. Mitchell, T. P. Threewits, D. B. Thompson, Thos. H. Dawson.

GROSS RECEIPTS OF ROAD.

Rec'd from passengers.....	\$31,922 01
" " freight.....	44,851 51—\$76,773 53
EXPENSE OF ROAD.	
Transportation.....	\$35,711 37
Repairs of road.....	20,055 50—\$55,766 77
Receipts of road.....	\$76,773 52
Expenses.....	55,766 77

Net earnings of road.....	\$21,006 75
Assets of road.....	36,659 48
24 city bonds at 90c.....	21,600 00
Mail contract.....	4,500 00—\$62,759 48

LIABILITIES OF ROAD.

Bills payable.....	\$26,163 04
" passed by Supt.....	20,900 00—\$47,163 04

\$15,596 44

Interest and Dividends.

The King's Mountain Railroad Company have declared a dividend of three and a-half per cent., payable at Yorkville, S. C.

A 5 per cent. dividend has been declared by the Cleveland, Columbus and Cincinnati Railroad Company, payable Aug. 1, at the office of the United States Trust Company, in this city.

The Waltham and Watertown (Horse) Railroad, a dividend of 4 per cent., payable July 11th.

The Macon and Western Railroad Co. have declared a dividend of 7 per cent., payable August 1.

Railroads in Texas.

Texas is fast becoming a great and prosperous State.—Within a brief period, her people have turned their attention to railroad building, and the progress they have made attests their zeal and energy. There are at present in active operation in Texas 228 miles of railroad—57 of which were constructed during the past six months. In addition to this, 124 miles have been graded within that period, and 164 put under contract, while the amount of iron purchased and arrived, or arriving, for future work, is in the aggregate about 23,000 tons. Something like 1,000 or 1,200 hands are constantly employed upon the various sections under contract, and it is expected that 80 or 100 miles more of road will be put in working order in the State during the year. This for Texas, laboring under the disadvantages of partial isolation, and a not very numerous population, scattered over a large amount of territory, must be looked upon as a very fair effort, giving promise, if it holds out, of pushing that State in due time into the front rank of enterprise, prosperity and greatness.

Ohio and Mississippi Railroad.

Annexed is the official statement of the business of this road for the past half-year:

Gross earnings for 6 months, ending	
June 30, 1859.....	\$486,796 38
Expenses for same time, including	
taxes.....	246,425 26
Net for 6 months.....	\$240,371 12
5 per cent. dividend declared July 6,	
1859.....	237,805 00
Surplus.....	\$3,066 18

Military Value of Railroads.

The German papers express their astonishment at the omission of the Austrians to tear up the railroad track, and so destroy a military means which the French have so utilized. The Vienna Press, improving the topic, points out the fact that the French soldiers brought out from the reserve at Montebello, approached so near the scene of action in the trains that they commenced firing from the car windows before they were disembarked.

Louisville and Nashville Railroad.

We learn from the Chief Engineer of this road that it will be ready at this end, by the middle of August, for cars to run as far as Bowlinggreen. The other end is now traversed by the cars, we believe, from Louisville to a point within 30 miles of Bowlinggreen. This gap will, of course, be greatly shortened by the 15th of August. The Engineer is confident the cars will run through from Nashville to Louisville by the middle of November. Considering the nature of the ground through which the road runs, in connection with the fact that several difficult tunnels, and not less than five very expensive bridges, including one or two of unusual length, have been included in its construction, the present managers of the work have made good time, notwithstanding the diffi-

culties they have had to encounter in relation to county bonds.—Nashville Gazette.

Rock Island Railroad.

The statement of this company for the fiscal year which closed June 30th, has not yet been served up. Reason—not sufficiently cooked.

Buffalo and State Line Railroad.

The election of officers of the Buffalo and State Line Railroad Company resulted as follows: President, George Palmer; Vice President, Dean Richmond, James S. Wadsworth, Joseph Field, Charles H. Lee, William Keep, Harrison White, John Wilkeson, H. F. Lansing, Alanson Robinson, George W. Patterson, Charles Moran, Daniel Drew.

Texas Railroads.

We learn from the Houston Telegraph that the Central road is completed sixty-five miles from Houston, and that thirty miles of the Brazoria road are completed and in running order. The company is at work laying down the balance of the iron, all of which, to complete the road to Columbia, has arrived. There are now over 200 miles of railroad in Texas completed, connecting with the city of Houston.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
CASWELL & PERKINS,
Brokers, 60 Wall st.

New York, July 9, 1859.

Car Wheel Boring Machine FOR \$400.

ONE of Wheeler's best vertical Machines, with over-head pulleys and shafting, cost \$700. Has been used a short time and is in perfect order, ready for use.

WILLIAMS & PAGE,
44 Water st., Boston.

FREIGHT CARS for SALE.

11 CARS—Have been run about one year,—viz:—
2 long 8-wheel Box Cars,
9 " Platform Cars.
These Cars are made in the best manner, with large axles, brakes, Lightner boxes, etc., and will be sold low for cash.
WILLIAMS & PAGE,
44 Water st., Boston.

FOR SALE.

2 FIRST CLASS LOCOMOTIVES, warranted to be superior in every respect. Weight 21 tons. Gauge 4 feet 8 1/2 inches. Cylinder 16x22 inches. Outside connection. Boiler 44 inches diameter. 130 Copper Flues, each 10 feet 6 inches long, 2 inches diameter. 800 sq. feet Fire Surface. Tender 1,700 gallons. 5 feet Drivers. Are entirely new, never having been used. For terms apply to
GEO. T. M. DAVIS,
47 Exchange Place.
4:25

New York, June 22, 1859.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about
250 Tons English Rails same size and weight.
M. K. JESUP & COMPANY,
New York, June, 1859. 44 Exchange Place.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.
NORRIS & BROTHER,
BALTIMORE.
And 17 Nassau st., New York.

NOTICE to RAILROAD CONTRACTORS.

OFFICE OF THE RICHMOND & YORK RIVER R. R., }
Richmond, June 25, 1859.

THE undersigned is authorized to receive Proposals for the unfinished Grading, Bridging, Delivery of Cross Timbers, Laying the Track, Depots, and all other work necessary to complete the 2nd Division of the Richmond and York River Railroad to West Point (15.3 miles) including Pamunkey River Bridge, Wharfing at Pamunkey River and at West Point.

Proposals sealed, will be received at this office in Rock-Hill in this city, until the 20th day of July next, at 12 M., where Plans, Specifications and all information necessary for bidders, will be furnished on and after the 10th of July.

Two separate bids to be made by each bidder:—One to state the price in cash for each item; the other to state the price in 5 per cent. 1st Mortgage Bonds of Company at their par value, and 20 per cent. reserved from monthly estimates until contracts are completed.

3:27

D. S. WALTON, Chief Engr.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPLY,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

JOS. R. ANDERSON,
JOHN F. TANNER,
R. ARCHER,
R. S. ARCHER.

TREDEGAR IRON WORKS,

RICHMOND, VA.

WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL

METAL—
BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE.
CANNON AND PR JECTILES, ALL KINDS
IRON AND BRAS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES,
SAW AND CRIST MILLS,
SUGAR MILLS AND ENGINES.

Our SPIKE AND BOLT FACTORY, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

J. R. ANDERSON & CO.

SANDERSON, BROTHERS & CO.,

MANUFACTURERS OF THE

CELEBRATED CAST STEEL,

FOR MAKING SUPERIOR TOOLS.

SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,

Armitage's Genuine Mousehole Anvils, etc.

16 CLIFF STREET, NEW YORK.

43 BATTERY MARCH ST. Boston.
94 BANK PLACE, New Orleans.

516 COMMERCE ST., Philadelphia.
TYLER, DAVIDSON & CO., Cincinnati, O.
HISS & COLE, Baltimore, Md.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
Boston, June, 1851. 29 Central Wharf.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 Cliff st., N. Y.

RAILROAD IRON.

THE RENSSLAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

RUSSELL, CROCKER & DODGE,
23 Cliff St.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLOROW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Secy,
WHEELING, VA.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

LACKAWANNA

IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES, from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 65, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, New York.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA, NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.

LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.

CAR SPRING STEEL.

Far superior to the ordinary kind.

FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.

ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,

45 Cliff st., New York.

THE

RAILROAD IRON MILL COMPANY,

CLEVELAND, OHIO,

MANUFACTURERS EXCLUSIVELY OF

RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation.

February, 1854.

MORRIS & JONES & CO.,

IRON MERCHANTS,

MARKET AND SIXTEENTH STREETS,

PHILADELPHIA.

IRON AND STEEL

IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,

BOILER RIVETS, RAILROAD IRON,

CUT NAILS AND SPIKES, FISH IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.

August 25, 1854.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or ex ship at ports in the United States.

M. K. JESUP & COMPY,
44 Exchange Place.

New York, 1st June, 1859.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY**, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.

New York, Aug. 1, 1859.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections, T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

**WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.**

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

STEEL, FILES, ETC.

R. GROVES & SONS,
SHEFFIELD, ENGLAND,
MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, **Cast Steel Files**, of high reputation, especially adapted for the use of Machinists, and **Saws and Edge Tools** of all kinds.
A stock of the above goods constantly on hand.

CORPORATE MARK



CHAS. CONGREVE & SON, Agents,
13 Cliff street, N. Y.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,
Agents for the United States,
12 SOUTH CHARLES STREET,
BALTIMORE.

Add 17 NASSAU STREET, NEW YORK.

WEISSENBORN'S PATENT**Incrustation Preventer FOR STEAM BOILERS.**

EFFECTUALLY obviates the **Formation of Scale** on the **Plates** by separating the incrusting matter from the water before it enters the boiler, at the same time condensing a large portion of the steam and **supplying the purified water to the boiler at about boiling heat.** The apparatus is compact, simple, and applicable to all kinds of Engines. Recent modifications render it still more efficient than heretofore. Testimony as to its successful operation in preventing scale, and also as a **HEATER AND CONDENSER**, can be furnished by the subscriber.

Probably no modern improvement connected with Steam Power combines so many advantages as this. **The economy of Fuel alone from its use soon repays the cost of the apparatus.** Prices reduced. Terms easy.

STEWART KERR, Engineer,
Agent, 15 Broadway, NEW YORK.

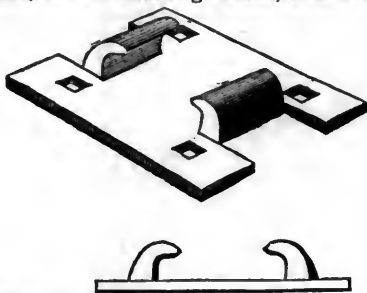
NEW YORK RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "NEW YORK WROUGHT IRON RAILROAD CHAIR COMPANY," and also the entire machinery for manufacturing their improved **Wrought Iron Railroad Chair**, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the **best Wrought Iron Chair** now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned WITH the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing. Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R. R. Co., etc., etc.

Messrs. **M. K. JESUP & CO., 44 Exchange Place, NEW YORK**, are the only parties authorized to act as our Agents.

Mr. JACOB ROWE, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

BEERS'**CAST-IRON ENDLESS RAIL, FOR CITY RAILROAD;**

Now being laid in Philadelphia and elsewhere;

THIS road is exclusively of cast iron, without tie, string-piece, or chair; Rail 85 to 100 lbs. per yard; Durability four fold over the present road, with 65 lbs. groove rail; And with a saving on first cost; effecting a reduction in current yearly repairs, and relays, of at least \$1,000 per mile.

Also, —

**BEERS'****ELASTIC IRON RAILWAY, FOR LOCOMOTIVE USE;**

This road can be built and equipped, without additional cost over a road with 55 lbs. T rail; saving not less than 60 per cent. on motive power, 50 per cent. on dead weight, and 80 per cent. on repairs of way; thus reducing the yearly expense from \$1,500, to \$2,000, per mile. For full particulars, with drawings, relating to both roads, see a recent Treatise, entitled **Railroads, their construction and management**, with the remarks from twenty-five years experience, by **S. A. BEERS**, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

S. A. BEERS.

JOURNAL

OF THE

American Geographical and Statistical SOCIETY.

The Sixth Number of this Journal is now ready.

Subscription Price, \$3.00 per year, or 25 cents per copy. Letters relating to the business of the JOURNAL are to be addressed to the Publishers.

JOHN H. SCHULTZ & CO.,
9 Spruce st.,
NEW YORK.

FINANCIAL.**BANKING and COMMISSION AGENCY.**

A. G. JAUDON,
No. 54 Wall street, NEW YORK.

AGENCIES of a financial nature connected with Railroads Manufacturing and Commercial Business, and Banking operations generally, receive special attention. **STOCKS, BONDS, NOTES and PILLS OF EXCHANGE BOUGHT and SOLD on orders.**

THOMAS GEORGE WALKER.

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Business Paper and Bills of Exchange negotiated.

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STOCKS and BONDS Bought and Sold on Commission.

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Advances made on all approved Securities.

COLLECTIONS MADE throughout the United States and Canadas.

CINCINNATI STOCK EXCHANGE.

KIRK & CHEEVER,

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NO. 83 WEST THIRD STREET,

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Railroad Stocks, Bonds, &c., bought and sold on commission. Regular sales at public auction at the MERCHANTS' EXCHANGE.

R. H. RICKARD,**MINING AGENT & STOCK BROKER,**

Office No. 21 Nassau st., NEW YORK.

BUYS and sells MINING SHARES, MINES and MINERAL LANDS on commission, will examine Mines and Mineral Lands in any part of the United States, and report on their value, etc., etc.

REFERENCES:—P. Chouteau, Jr., & Co., New York and St. Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A. Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., First & Forrest, Com. Mer's N.Y., John F. Butterworth, Esq., N.Y., G. O. Williams & Co., Detroit, Mich., Capt. D. Tyler, Norwich, Conn., Rittenhouse, Fant & Co., Bankers, Washington, D. C. Particular attention given to Lake Superior business.

EUGENE THOMSON.**STOCK AUCTIONEER AND BROKER.**

No. 37 William st., NEW YORK.

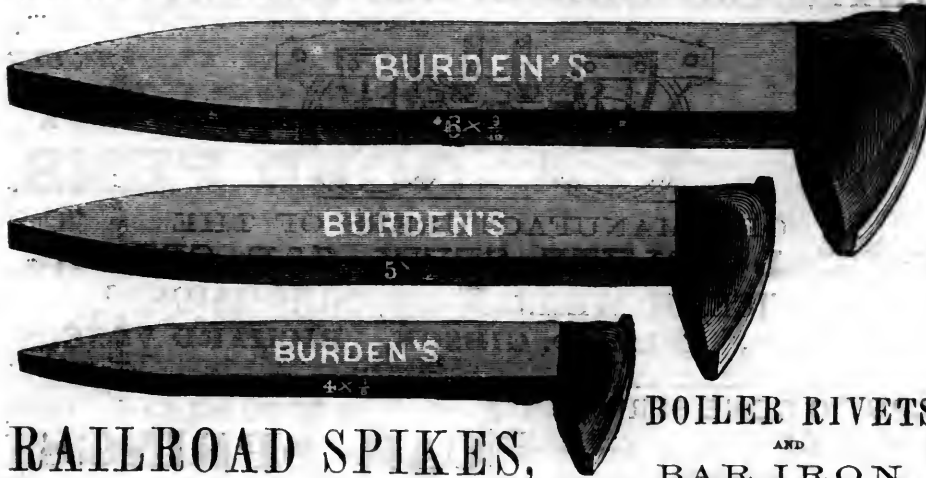
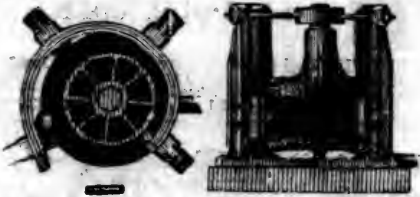
AUCTION SALES OF STOCKS and BONDS every TUESDAY, at 12½ o'clock, at the Merchant's Exchange, **RAILROAD BANK, INSURANCE** and other SECURITIES bought and sold at the BANKERS' BOARD, at PRIVATE SALE, or at AUCTION. All dividends payable in New York collected, and prompt remittances made.

NONE BUT SOLE FINE QUOTATIONS FURNISHED THE PRESS. THE MARKET VALUE OF SECURITIES WILL NOT BE SUPPRESSED OR ALTERED, AND DECEPTIVE OR IRRESPONSIBLE CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES:—Messrs. Wm. and Jas. O'Brien, Thos. Denny & Co., Horace Greeley & Co., Craig & Co., Todd & Co., J. & C. Berrian, Geo. F. Nesbitt & Co., Eugene Thunkett, Esq., (President Excelsior Ins. Co.), John G. Storm, Esq., (President Lenox Ins. Co.), L. G. Irving, Esq., (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Griscom, M.D., Rev. Edwin F. Hatfield, D.D., Rev. Theo. L. Cuyler, John Cameron, Esq., Benj. F. Manierre, Esq., New York; Otis Allen, Esq., Albany N.Y.; Messrs. Gorham & Co., Providence, R. I.

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HENRY R. FOOTE.	<i>Secretary.</i>

H. BURDEN & SONS.Manufacturers of **BRAD-HEAD, COUNTER-SUNK and CROSSING****BOILER RIVETS
AND
BAR IRON.****WM. F. BURDEN, Agent,****N. Y. CITY OFFICE,
24 BROADWAY.****TROY, N. Y.****HENRY BURDEN'S
PATENT REVOLVING
SHINGLING MACHINE.**

THE subscriber having recently purchased the Right of this Machine for the United States, now offers to make transfers of the Right to run said Machine, or sell to those who may be desirous to purchase the Right for one or more of the States. This Machine is now in successful operation in ten or twelve Iron Works in and about the vicinity of Pittsburgh, also at Phoenixville, and Reading, Pa., Covington Iron Works, Md., Troy Rolling Mills, and Troy Iron and Nail Factory, Troy, N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are numerous: Considerable saving in first cost; saving in power; the entire saving in shingler's, or hammerman's wages, as no attendance whatever is necessary.

It being entirely self-acting; saving in time from the quantity of work done, as one machine is capable of working the iron from six puddling furnaces; saving of waste, as nothing but the scoria is thrown off, and that most effectually; saving of steel, as none are used or required. The time required to furnish a bloom being only about six seconds, the scoria has no time to set, consequently is got rid of much easier than when allowed to congeal, as under the hammer.

The iron being discharged from the machine so hot, rolls better and is much easier on the rollers and machinery. The bars roll sounder, and are much better finished.

The subscriber feels confident that persons who will examine for themselves the machinery in operation, will find it possesses more advantages than have been enumerated.

For further particulars address the subscriber at Troy, N. Y.
P. A. BURDEN.

**VULCANIZED RUBBER GOODS,
MACHINE BELTING,
STEAM & PISTON PACKING,
HOSE OF ALL DESCRIPTIONS,
SHOE SOLEING,
LACE LEATHER,
VALVES,
FIRE BUCKETS, ETC.**

THE undersigned Wholesale Agents of the **BOSTON BELTING COMPANY**, beg to call the attention of DEALERS and JOBBERS to the above mentioned goods, which are conceded by all practical mechanics to be

THE BEST PRODUCED.

For list of prices, and a full description of goods, terms, etc., apply to

**BRADHILL & CAMPBELL,
190 William st., near Spruce, NEW YORK.**

**PARK'S IMPROVED
TRACING LINEN,
DRAWING MATERIALS,
FOREIGN AND DOMESTIC STATIONERY,
PRINTING & LITHOGRAPHING.**

**DEVLIN & HAGAN,
No. 7 Nassau st., N. Y.**

**DR. A. MERRIMAN,
DENTIST.**

**1 Waverley Place, opposite New York Hotel,
NEW YORK.**

PROFESSIONAL CARDS.**Sylvester W. Barnes.**

Chief Engineer Watertown and Madison R.R., Madison, Wis.

Alfred W. Craven,

Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,Steam Marine and Railway Engineer,
122 Broadway, New York.**Davidson, M. O.,**Chief Engineer Havana Railroad Company,
HAVANA, CUBA.**C. Floyd-Jones.,**Division Eng'r 3d and 12th Divisions, Illinois Central R. R.,
Vandalia, Ill.**Gay, Edward F.,**

Civil Engineer, Philadelphia, Pa.

Robert B. Gorsuch,City of Mexico,
MEXICO.**James H. Grant,**

Civil Engineer, Christiansburg, Rutherford Co., Tenn.

Theodore D. Judah,Chief Engineer, and Commissioner of
San Francisco and Sacramento Railroad, and of
San Francisco and Sacramento Northern Extension Railroad,
SAN FRANCISCO, CAL.**S. W. Hill,**

Mining Eng'r and Surveyor, Eagle River, Lake Superior.

Ellwood Morris,

Civil Engineer, Franklin Institute, Philadelphia.

Mills, John B., Civil Engineer,
Lake Ontario and Hudson R. R., 20 Exchange Place, N. Y.

Osborne, Richard B.,

Civil Engineer, Office 73 South 4th st., Philadelphia

W. Milnor Roberts,

Civil Engineer, Carlisle, Pa.

J. S. Sewall,CIVIL ENGINEER,
ST. PAUL MINNESOTA.**Silas Seymour,**Consulting Engineer and General Agent,
271 Broadway, N. Y.**Shanly, Walter,**

Grand Trunk Railway, Toronto, Canada.

Charles L. Schlatter,Chief Engineer Brunswick and Florida Railroad,
Brunswick, Georgia.**Charles B. Stuart,**

Consulting Engineer, 19 Nassau st., New York.

Trautwine, John C.,

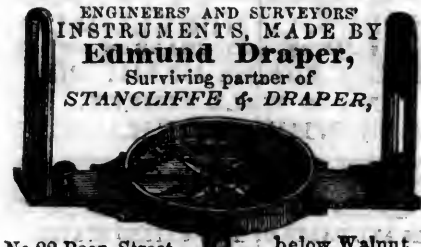
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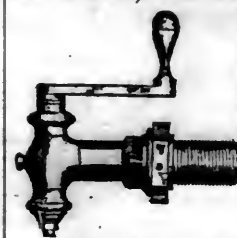
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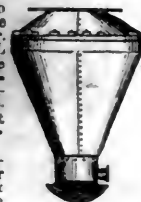
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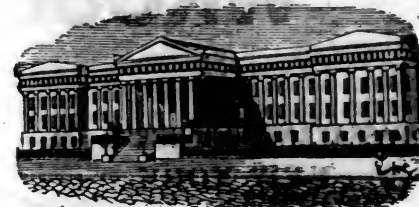
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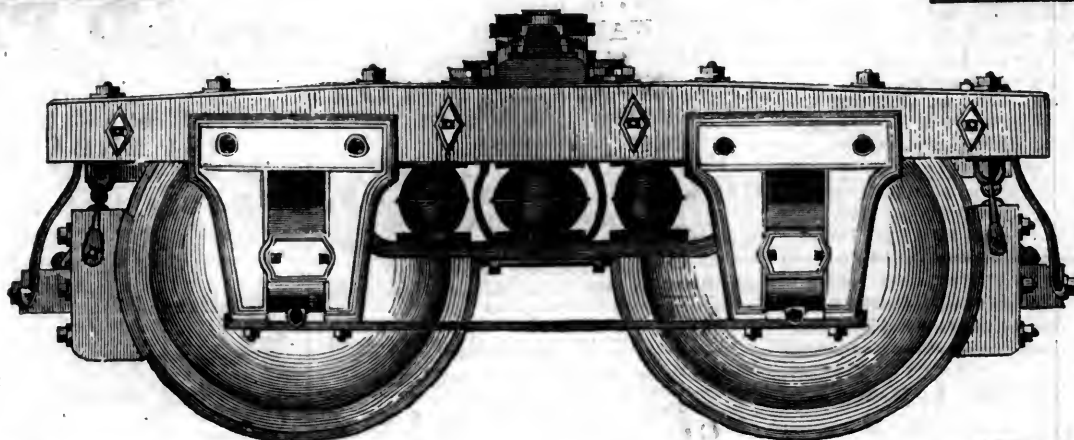
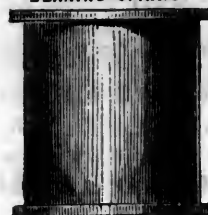


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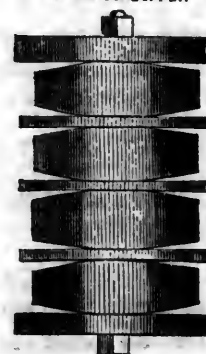


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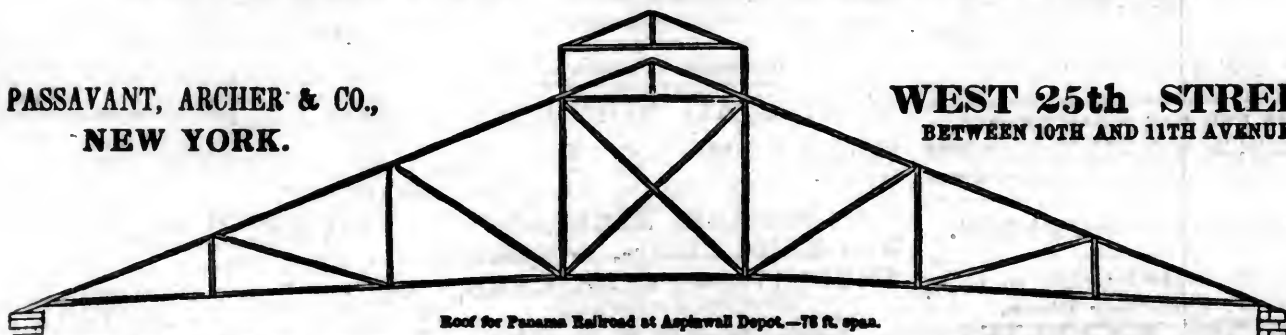
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STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 30.]

SATURDAY, JULY 23, 1859.

[WHOLE No. 1,214, VOL. XXXII.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, July 23, 1859.

New York and Erie Railroad.

We copy from the *New York Handel-Zeitung* some extracts from a letter published in that paper, addressed by Mr. H. Gelpcke, late Treasurer of this road, to Messrs. Koch & Koster, of Frankfurt-on-the-Main. As Mr. Gelpcke occupies a prominent position in the Erie Company, his statement may be regarded as having a sort of an official character in whatever relates to the condition of this company. In this letter he says:

The company cannot prefer any one creditor, as by doing so it would forget the purpose of the 4th mortgage. This was originated to pay off the floating debt, for which it will be applied. If unsecured bonds, with adding 20 per cent., cash, can obtain a 4th mortgage, the bonded debt of the company would be lessened, but the unfortunate floating debt would remain, and the company be but little assisted by the peculiar nature of its debt. * * *

Your advice to give up the competition with the New York Central, has previous to this been complied with. The Erie, however, had, in the last instance, little to do with it. The opposition originated with the New York Central and the Pennsylvania Railroads. The Erie being placed between both, was drawn into it, and had to carry at the same low rates as the other roads, or give up its business altogether.

Every one is aware that such competition is the greatest folly—the most insane policy—and the frequency of its occurrence is caused principally by the shareholders of rival roads taking so little interest in the management of their roads, by their staying away from shareholders' meetings. The natural consequence is, that most roads are managed by men who use the property of the company for their own selfish ends, instead of attending to the interests of the company.

Time will remedy this evil, but not until the shareholders of either of the companies fail to receive any dividends, and their credit becomes so weak that they, (the companies), cannot borrow any more money for that purpose. * * *

The rates of freight are still low, but less so than they have been, and they are expected to be raised again towards the fall, as the opposition of the canals at that season of the year subsides.

To return to the state of affairs of the Erie Road, I expected to have received the official statement of its earnings and expenses up to June; but the making-up of the accounts is proceeding at such a slow pace, that I will wait no longer, but send them to you as far as they are made up.

The earnings from Oct. to Feb'y amount to.....\$1,898,796
The expenses, for the same period, &c. 1,308,527

Excess of earnings.....\$590,269

The interest on the mortgage bonds, of \$16,571,000, amounts to \$96,665 a month, or for 5 months to \$483,335. By comparing this with the net earnings, you will find that, of these five months, \$106,944 is made over and above the interest on the mortgage bonds. This sum shows a profit of \$21,389 a month, or \$256,668 annually, equal to the interest on about 8½ millions more. By this we find that the road, in this year of unparalleled dullness, has earned the interest on the whole four mortgage debts, taken at par, amounting to 19 millions, and besides that, on a million of the fifth mortgage bonds not yet issued.

The expenditures according to the above statement, amount to \$261,705.44 a month. Those being the winter months we may presume that the expenditures in the second half of the fiscal year amount to a little less. In my opinion, the average expenditures for the whole year will be \$250,000 a month, or 3,000,000 yearly.*

Here it may be the proper place to state, that the road is in an excellent condition; that the expenses of operation for the last two years have been greater than before, from the fact that the

* The estimates of Mr. Gelpcke enable us to present very nearly the result of the operations of the road for the three-quarters of the present fiscal year. Estimating expenses at \$250,000 per month,

road had been entirely worn out, so that the expenses were twice as much as they would have been if the repairs had been effected whenever they appeared necessary. This may, at the same time, serve as a caution against the current reports of earnings and expenses of railroads. Attempts at economy by neglecting necessary repairs are a source of an expense twice as great in the future.

The financial condition of the company is as follows: On the first of June the outstanding acceptances of the company were \$505,980, of which \$406,024.04 are secured by a deposit of mortgage bonds, amounting to \$1,697,000.

Here you have in a nutshell the whole policy of the concern, and the reason why the interest on mortgages, though, and even more, earned, has not been promptly paid.

The administration made a grave mistake in securing the floating debt by bonds, by which six months to a year was gained to pay it off. When it did so, it counted on the participation of the holders of unsecured obligations, who then were able to save their property, while at present they have only to trust to the forbearance of the mortgagees in not taking possession of the road.

and the interest on the five mortgage bonds, at \$96,665, we have the following:

	Gross earnings.	Current expenses.	Interest on mort. debt.
5 months.	\$1,890,796	\$1,308,527	\$483,335
As above.....			
March	364,296	250,000	96,665
April	380,342	250,000	96,665
May	349,953	250,000	96,665
June	330,657	250,000	96,665
	\$3,816,044	\$2,808,527	\$869,995
		869,995	
		\$3,178,522	
		3,316,044	
		\$137,522	

Showing a balance of \$137,522 of the net balance remaining after the payment of current expenses and interest on the \$19,000,000 of mortgage bonds.

For the balance of the year, the road will earn probably about \$1,100,000; the expenses and interest for the three months will be, by the estimates of Mr. Gelpcke, \$1,039,995, leaving a balance of \$60,005 to be added to \$137,522, making a total of net earnings; after paying the interest on the mortgage, of say \$200,000. At this rate the total net earnings of the road would be \$1,357,517, equal to the interest on nearly \$20,000,000.—[E. R. R. JOURNAL.]

The mortgagees, by this mistake, were placed in an entirely different position toward the road and the "floating debt," and thus arose the non-payment of interest on the mortgages at maturity.

It can serve the interest of mortgagees that, should they become the future owners of the road, to obtain it at as low a cost as possible. They will, undoubtedly, sell the road, if the acceptances are not met, or payments made on account. The mortgage debt would naturally become larger, and the mortgagees, even if they were now already owners of the road, could not act indifferently, as they will, of course, prefer to purchase it at \$16,750,000 than at \$19,000,000.

So long, therefore, as acceptances, covered by bonds, are not met, it is the policy of the mortgagees to take them up, even at the expense of their interest. As soon as they are out of circulation, it ceases to be their policy to use any forbearance toward the holders of the unsecured bonds. Though this may never happen, it will not be amiss, for the owners to the unsecured bonds to make an effort to retain the road, and save their property.

The unpaid interest on the mortgages in June was \$197,197. The unpaid interest on the unsecured bond, including Sinking Fund, amounted to \$400,925, of which \$302,925 were due to the public, and \$98,000 to the Sinking Fund. The earnings for March, April, and May, are, even with the strong opposition and low rates, just as satisfactory as those from October to February, and there is no earthly reason to assume that the company cannot pay the interest on the mortgages.

As regards the leasing of the road for \$1,600,000, rumored in the papers, I beg to state, that for my part, I entirely dispute the right of either President or Directors to make any such lease. They were elected to manage the road, but cannot lease it without previously obtaining the consent of the shareholders. The temptations are too large to give any guarantee, even with the securities preferred. I deem it more to the interest of bondholders to foreclose, than to let out the road.

But on the other hand, I deem such a project against the interest of every one who owns bonds or shares of any description. If the lessees did not fulfill their obligations, I submit to your consideration that it would take a long time before, the bond owners could get the road returned to them. I remind you of the Chicago and Mississippi. In that case, the lessee of the road, Governor Matteson, had five years possession of the road, and never paid any interest on it; and now, at last, the bondholders have succeeded in getting the road returned to them by an agreement, but not before they had paid \$600,000 in addition, and carried on proceedings in courts of justice through a period of five years.

The inducements are too formidable, and render any kind of security offered, insufficient. Take for instance, the lessees of the road apprehending that the contract is not profitable for them, satisfy themselves with the earnings of one month, about \$100,000, and then leave the road to take care of itself. What an enormous process of law there would be to get back those \$100,000! It would be better to foreclose the mortgage at once than, for stockholders, to accept of any such proposition.

* * * * *
II. GELPCKE.

This letter of Mr. Gelpcke helps us to better understand the position of the Erie. The company secured its floating debt, or a portion of it, by a deposit of their 4th mortgage bonds, at the rate of 20 cents on the dollar. If the acceptances were not paid, the 4th mortgage bondholders had it in their power to sell the road. To relieve the company, all the net earnings of the road had to be taken, leaving, for a time, nothing for any of the mortgage bondholders. In four months from the first of June, the second acceptances should be taken up, when the net earnings can again go to the mortgage bondholders.

Mr. Gelpcke's letter is not calculated to re-as-

sure the unsecured bondholders. Their interest is running on at the rate of \$700,000 a year, adding so much annually to the floating debt of the company from this source alone.

Railways and Steam Colliers.

We copy the following interesting article upon the history and progress of Railways, from Newton's Journal of Arts, for May, being a paper read before the British Institution for Mechanical Engineers:

Although railways may now be said to belong to the whole world, there is no doubt that they had their origin in the county of Durham. It would appear that railways were first used in the north of England about the end of the sixteenth or commencement of the seventeenth century. At that time nothing but horses were used; and the railways being of timber, the general performance was 42 cwt., drawn on a level by one horse. Malleable iron plates appear next to have been used, fastened upon the upper surface of the wooden rails, to lessen the resistance; and about the year 1738, cast iron appears to have been used for rails, and about 1815, solid malleable iron rails were first introduced for railways.

In the early period of railways, it does not appear that, although the coals were generally brought from the distant collieries down considerable inclinations, the use of gravity or self-acting planes were resorted to. The full load for one horse was one wagon containing from 2 tons to 53 cwt. of coals. The number of horses employed at some of the collieries may be judged of by the fact that one firm of coal owners, namely, Lord Ravensworth and his partners, had 300 hired horses, or employed carriages in finding that number for the western section of their collieries. It is not ascertained when gravity or self-acting planes were first employed for the motive power of railways; certainly to a very small extent previously to the commencement of the last fifty years. They are now, however, constantly employed on private lines of railway where the inclination or other circumstances render the line unfitted for the use of locomotive engines.

Fixed steam engines were the next description of motive power, in point of time, which was used on railways,—dragging the wagons by means of ropes from one station to another, or up steep planes: they were exclusively used on private railways.

The use of locomotive engines is of a comparatively recent date. Although as early as 1769 the attention of Mr. Watt appears to have been drawn to this subject, and in 1784 he describes modes of applying engines to the moving of wheel carriages. Messrs. Trevethick and Vivian were the first to apply the power of steam to a machine to run upon railroads; and in 1804, a machine was tried by them on the Merthyr Tydvil Railway, which drew after it 10 tons of bar iron a distance of 9 miles, at the rate of 5 miles an hour. The obstacle at that time was the supposed want of adhesion of the wheels upon the rails to propel the engine forwards, and to drag the load; and to obviate this, Mr. Blenkinsop, of Leeds, introduced, in 1811, a rack or toothed rail, into which cog-wheels, placed on the engine, worked, and it was thus propelled forwards. In 1812, Messrs. Chapman had a chain stretched along the line of railway, which the engine laid hold of, and thus dragged itself forwards; and Mr. Brunton, in 1813, had an engine made with legs, by which it was propelled. Mr. Trevethick sent an engine to the Wylam colliery in Northumberland, to Mr. Blackett, where it was tried, but did not answer. Mr. Hedley, however, Mr. Blackett's engineer, improved the engine, and applied it by means of the adhesion of its wheels on this railway; and he was unquestionably the first to prove that it was practicable to apply to a certain extent, an engine which could propel itself, and also drag a considerable load after it, by means of the adhesion of the wheels upon the railway.

Mr. George Stephenson then made his appearance in connection with the locomotive engine. He had been recently appointed engineer to the Killingworth colliery, and, as such, recommended the use of the locomotive engine. Mr. Blackett's railway was a tram-railway, with plate rails, whereas, the Killingworth rails were round-topped rails; but experiments were made upon them which proved that the latter rails presented as much adhesion to the wheels as the plate rails; and the resistance to the carriage being less, there appeared no reason why a locomotive engine should not be used upon the edge rail as upon the plate rail. Accordingly an engine was constructed by Mr. Stephenson, and tried on the Killingworth railway in 1814: the result was perfectly satisfactorily. This engine had two cylinders, which were placed vertically on the top of the boiler, with a cross-head to each cylinder, and two side rods working cranks on the driving wheels. On an ascending inclination of 1 in 330, it dragged a load of 40 tons at the rate of 6 miles an hour, or a gross load of 70 tons,—the weight of the carriages being 20 tons, and the engine and tender 10 tons. Upon the Stockton and Darlington Railway, with a more powerful engine, the gross load conveyed was about 87 tons, the useful load 48 tons—the weight of the carriages being 24 tons, and the engine and tender 15 tons. Such was the performance of the engines improved by Mr. Stephenson, until the year 1829, when the important competitive trial took place upon the Liverpool and Manchester Railway,—the essential drawback to their utility and performance having hitherto been the want of sufficient evaporating power of the boilers, and the consequent inability to employ engines with larger cylinders or of greater power. The immediate result of this trial of skill was the adoption of multitubular boilers, which presented a vast increase of evaporating surface, and led to the great increase of power of those engines, and their consequently increased performance. So that, instead of 40 tons of goods conveyed at the rate of 6 miles per hour, being the maximum performance of locomotive engines, as was the case but 30 years ago, engines on railroads of the same description are now conveying a net load of 300 tons of coals, from near Newcastle to London, over all the intervening gradients at the rate of a minimum speed of 15 miles per hour; and a train of passengers and carriages, of more than 150 tons gross weight, at upwards of 40 miles per hour; the weight and cost of the engines are, however, greatly increased.

Most important consequences to the coal trade of the two northern counties have resulted from this development of the locomotive engine; for we had the railways conveying coals from those counties to the amount of 2,903,497 tons, in 1857; and in the same year, there was conveyed to within the limits of London, from the collieries in the midland district, the enormous quantity of 1,206,775 tons of coal, exclusive of the quantity of coals conveyed to the different towns and villages of all the southern parts of the Kingdom.

There has also been an extensive application of iron steam vessels for carrying coals, forming the class of screw colliers at present used, which have had an important bearing upon the economy of transit of coals "sea-borne." This has all taken place within the last four or five years. The general size of the screw colliers is about 465 tons register, and 140 tons engine room; drawing about 13½ feet of water, when loaded; being 167 feet in length, 27 feet in width, and 16 feet depth of hold. The engines are generally about 70 horse power, and the vessels carry about 600 tons of coals. Their speed is about 9 miles an hour, and they generally perform the single voyage between London and the northern ports in about 30 hours. They are constructed to use water as ballast in the return voyage, which is a great advantage, and is peculiar to iron vessels, which have much greater capacity than wooden vessels, with the same displacement of water. The iron vessels, in fact, admit of space sufficient for a cargo of coals which will put the vessel deep enough in the water when fully loaded, and also allow adequate space for

tanks, to contain about 220 tons of water, as ballast in the return voyage. The increased facilities afforded for loading the colliers at the large coal drops, enable them to take in their whole cargo, of 600 tons, often in a single tide; and the result of the employment of these vessels to convey coals to London and some of the southern ports, has been that, when proper facilities are given for unloading the coals in about the same time, they make nearly a voyage every week, and a total of between 40 and 50 every year, between the northern ports and London. They thus compensate most effectually for the effect of the conveyance of coals by railway from the midland counties, by reducing the cost of conveyance considerably below that by railway, at the lowest rate of $\frac{1}{2}$ d. per ton per mile. The sailing vessels previously employed as colliers made only one-fourth the number of voyages per year; averaging about 10 voyages per year, and seldom reaching 12 voyages.

Steamboats themselves may be considered to be included among the inventions of the last half century; for although the project was no doubt started by Symington in 1789, it was not until 1802 that he actually constructed a boat propelled by steam, on the Forth and Clyde Canal, for the purpose of towing other vessels; and it was only in 1807, that a steamboat was started on the Hudson river, in America, by Fulton. The writer recollects going down the Tyne, in 1814, with Mr. George Stephenson, in the first steamboat on that river. It appears that they were first regularly employed on the Clyde in 1812; on the Thames in 1815; and in 1819, the first steamboat crossed the Atlantic, commencing the important era of steam navigation.

Operations of the United States Mint.

As much interest has been recently excited by the discussions which have arisen, both in this country and Europe, on the politico-economical relations of the increased supply of gold, we have thought that the statistics showing the gross product of that precious metal from domestic sources in the United States might prove instructive to the intelligent reader. According to the annual report of the Director of the Mint at Philadelphia, it appears that, from the commencement of its operations to the 30th of June last, the gross product has reached the sum of \$443,127,921, of which, as the following table shows, more than ninety-five hundredths have been drawn from the mines of California:

California	\$424,464,240
Georgia gold mines	6,708,910
North Carolina gold mines	8,709,094
Virginia gold mines	1,510,400
South Carolina gold mines	1,247,356
Alabama gold mines	191,855
Tennessee gold mines	84,880
Oregon gold mines	63,466
New Mexico gold mines	48,397
Other States	78,819
Total	\$443,127,921

As the total coinage of the United States during the same period has amounted to \$651,639,069, it results that of this sum \$208,511,168 have been derived from foreign gold.

As showing the comparative operation of the mint at Philadelphia, and its different branches, under the head of the coinage derived from both domestic and foreign sources, we append the subjoined statement:

Mints.	Deposits of American gold.	Tot. coinage of the U. States.
Philadelphia	\$237,292,937	\$411,895,963
San Francisco	92,543,133	91,333,072
New Orleans	21,200,555	63,680,415
Charlotte	4,663,273	4,641,629
Dahlonaga	5,923,563	5,925,914
N. Y. Assay Office ..	80,504,457	74,162,096
Total	\$443,127,927	\$651,639,069

From the annual Treasury Report for 1858, we

learn that the total coinage of the last fiscal year has been as follows:

Mints	Coinage from June 30, 1857, to June 30, '58.	Total annual expenses of coinage	Comparative cost
Philadelphia	\$15,427,699	\$188,000	1.20 pr. ct.
New Orleans	4,257,000	78,000	1.70 do.
San Francisco	19,423,593	215,000	1.11 do.
Dahlonaga	100,167	8,000	8.00 do.
Charlotte	177,970	8,000	4.50 do.
New York Assay Office	21,970,652	69,000	0.02 do.
Total	\$61,357,088	\$566,000	

Androscoggin and Kennebec Railroad.

We have received the report of this company for the fiscal year ending June 1, 1859. During the past year, and since December 1, 1856, the Androscoggin and Kennebec, and the Penobscot and Kennebec Railroads, have been operated as one line—the latter road being run under a lease to the former company, who have sole charge of the operating department, and are responsible for the efficient condition and maintenance of the roadway, stations, and equipment. The net earnings being divided in the proportion of four-sevenths to the former, and three-sevenths to the latter company. The gross receipts from the joint operations of these roads for the year ending June 1, 1859, were:

From 101,177 passengers	\$132,457 81
" 70,455.63 tons freight	133,665 34
" express, mail, etc.	15,806 71
Total	\$281,929 86

And the expenses were:

Repairs of work	\$11,669 13
" equipment	22,894 09
" buildings etc.	2,489 97
Train expenses	12,258 11
Station	13,117 32
Fuel	18,071 68
Miscellaneous	14,339 51
Total	124,839 81

Net earnings:

And. and Ken. Co.	\$89,765 74
Pen. and Ken. Co.	67,324 31
Total	157,090 05

Compared with the previous year the gross earnings show an increase of.....\$2,780 63 And the expenses a decrease of.....8,415 31

Making a net increase of.....\$11,195 94

The Directors believe that the expenses for the last year have been reduced as low as it is possible to reduce them, consistently with maintaining the road and its equipments in a safe and efficient condition. In the department of the track, in consequence of the long and severe cold of last winter, and its effects in the wear of the iron, it is likely the expenses of repairs will be increased in the year to come.

The net earnings belonging to this company for the year, are not sufficient to pay the interest upon the indebtedness of the company, including the interest on the bonds payable in stock. The deficiency of net earnings to pay the interest on the indebtedness of the company, has been procured by your Directors, during the year, on their private credit, hoping that the business of the community would revive at an early period, and the earnings of the road be sufficient to meet the demands upon the company. Thus far, however, their hopes in this respect have not been realized.

From the report of the Treasurer it appears that \$29,557 of the bonds of the 1st and 2d loan, issued in 1848, to run four years, are still outstanding and overdue. The interest on these has, however, been paid semi-annually, and the holders, who reside, for the most part, in Massachusetts, have

been very indulgent to the company, in thus holding them so long after they were due. Eight thousand four hundred dollars of bonds, the balance of the \$250,000 loan created in 1852, not secured by mortgage, are also overdue. During the year to come also, (in Oct. 1860), a portion of the million loan bonds will become due, and the residue of that loan will fall due, from time to time, within the next four years. Provision for meeting these bonds, by renewal or otherwise, should be made during the year next to come. These, together with the floating debt of the company, which has been increased during the last two years by the falling off of the traffic of the road, will require the careful attention of the Directors for the coming year.

The relations of this company with all connecting roads have been during the year, and are now harmonious and friendly. The operation of the lease of the Penobscot and Kennebec Railroad with which your road is connected on the East, has been beneficial to both parties, and at the same time conduced greatly to the convenience and accommodation of that portion of the public, who have occasion to transact business over portions or all of the two lines embraced in the lease.

The contracts between this company and the Androscoggin Company, and the Grand Trunk Company, have been honorably carried out during the year, and the Directors again desire to express their satisfaction with the manner in which their trains have been managed over that portion of the Grand Trunk Railroad between Danville Junction and Portland. They have found the managers of that line at all times ready to afford all the facilities which they have asked. These are all the companies with which your road is by law connected, and with all of them contracts, for a long term of years, exist.

LIABILITIES.

Bills payable	\$96,396 39
Overdue Bonds:	
Furniture bonds	500 00
Bonds of \$200,000 and \$350,000 loan ..	29,557 00
Interest bonds	8,400 00
Bills audited and approved	6,265 64
Interest	5,516 27
Total	\$146,635 30

ASSETS.

Cash on hand	\$4,721 48
Bills receivable	3,747 00
Amount due from stations	11,048 45
" " P. O. Department	3,660 81
Wood on hand	20,752 26
Materials for repairs on hand	8,075 00
Million loan bonds, not sold	15,000 00
Androscoggin Railroad Co. bonds	6,000 00
Pen. and Ken. Railroad Co. stock	21,924 79
Total	\$94,929 79

GENERAL STATEMENT.

Capital stock	\$457,900 02
Bond Account:	
Million loan bonds	1,000,000 00
Interest bonds	8,400 00
Bonds of \$200,000 and \$350,000 loan ..	29,557 00
Furniture bonds	500 00
Stock bonds, convertible into stock in from $4\frac{1}{2}$ to $6\frac{1}{2}$ years	710,000 00
Stock coupons	6,740 00
Sundry accounts, payable in stock and stock bonds	1,820 00
Balance bills payable and receivable ..	92,649 39
Total	\$2,307,566 41
Construction account	\$2,210,947 28
Androscoggin Railroad Co. bonds ..	6,000 00
Pen. and Ken. Railroad Co. stock ..	21,924 79
Million loan bonds, not sold	15,000 00
Cash on hand	4,721 48
Balance of income account	48,972 86
Total	\$2,307,566 41

The officers are: JOHN WARE, President; JOSHUA NYE, Treasurer; EDWIN NOYES, Superintendent.

Penobscot and Kennebec Railroad.

The annual meeting of this company was held at Bangor on the 12th inst., at which the report of the Directors for the fiscal year ending May 31, 1859, was presented. This road has been operated during the past year, and since Dec. 1, 1856, by the Androscoggin and Kennebec Railroad Company. The earnings and expenses of the joint road are given in our abstract of the report of that company. Of the net earnings of the entire line, the proportion belonging to this company is three-sevenths, or \$67,324.31—being an increase of \$4,798 26 over that of the previous year.

During the year, the sum of \$4,365 has been collected from outstanding stock subscriptions. The Funded Debt consists of:

City of Bangor bonds, for which the 1st mortgage, and equivalent bonds, are held by the City \$800,000
2d mortgage bonds 250,200
3d do. do. 156,600

\$1,206,800

—being an increase over the previous year of \$27,900.

The Floating Liabilities are:

Bills payable and accounts \$106,616 59
Interest scrip due to stockholders 21,959 28
Coupons outstanding 18,061 00
Unsettled land damages, and unliquidated claims 6,300 00

\$152,936 87

—showing a reduction from last year of \$16,301.85.

The Assets consist of:

Bonds of City of Bangor, unsold. \$2,000 00
Bills receivable and accounts 2,678 25
Cash 1,503 02

\$6,181 27

The company has of 2d mortgage bonds \$49,800; of 3d mortgage bonds \$143,400; 313 shares of stock in hands of Trustees; and 789 shares of stock received for 3d mortgage bonds.

For \$52,233 45 of the above liabilities, a portion of the property of the pier corporation, and other lands, for which the liabilities were incurred, are held as security; and for a further sum of \$37,356.61, the unsold bonds of the company, and \$2,000 of Bangor City bonds are pledged.

At the date of the previous report, a large amount of the liabilities given for the pier corporation lands, had matured, and were unpaid; since that date, about \$36,230 have been extended by annual payment of from one to eight years, with semi-annual interest; and about \$7,800 has been extended to November next. The resources of the company being inadequate for this latter payment, without a diversion of the receipts from the fund for the payment of the City and 2d mortgage coupons, it is recommended that a loan, for a term of years, be obtained on the security of the lands, which is ample, now held for this maturing obligation.

Of the bonds of the City of Bangor, \$20,000 fall due in April next, for which provision must be made the ensuing year.

GENERAL STATEMENT.

Capital stock \$555,228 65
City of Bangor bonds, 1st mortgage .. 800,000 00
Company's " 2d " .. 250,200 00
" " 3d " .. 156,600 00
Interest scrip due to stockholders 21,959 28
Bills payable and accounts 106,616 59

\$1,890,604 52

Construction \$1,611,413 80
Equipment 104,019 21
Stock in P. & K. Railroad 78,014 20
Bonds of City of Bangor 2,000 00
Bills receivable and accounts 2,678 25
Cash 1,503 02
Balance profit and loss 90,976 04

\$1,890,604 52

The officers are:

HOLLIS BARMAN, *President.*

ELIAS MERRILL, *Treasurer.*

EDWIN NOYES, *Superintendent.*

Baltimore and Ohio Railroad.

Statement of the performance of Coal Burning Passenger Engines, for the month of June, 1859.

Builders.	Number of miles run.	Cords of Wood for Lighting Fires.	Tons of Coal.	Miles run to One Cord of Wood.	Lbs. Coal per mile run.
25—Wm. Mason ..	3,040	5½	33.92	552	24.90
26— Do. ..	2,980	5½	34.59	567	26.00
27—Taunton Locomot. Works.	3,020	5½	37.50	549	27.80
89—Balt. & Ohio R. R. Co. ..	1,018	1½	12.35	580	27.17
95—Do. do. ..	2,850	2	28.84	1,425	22.66
200—R. Norris & S'n	2,840	2	28.85	1,420	18.81
201— Do. ..	2,172	2½	26.32	827	27.10
207—Murray & Hazlehurst	2,840	2	23.24	1,420	18.32
208— Do. ..	2,968	7	32.00	424	24.10
220—Denmead & S'n	3,045	1½	35.35	1,740	22.73
221— Do. ..	3,150	1½	41.10	1,684	29.33
188—B. & O. R. R. Co.	3,110	1½	26.25	1,658	18.90
231—Wm. Mason ..	2,968	5	24.75	593	18.70
232— Do. ..	1,040	½	9.69	1,386	20.80
233— Do. ..	2,998	2	30.67	1,499	22.90
234— Do. ..	2,968	2½	26.25	1,372	19.80
435— Do. ..	2,968	4½	28.00	624	21.10
236— Do. ..	2,452	1½	20.16	1,783	18.40
	48,427	55½	494.83		

Average number of cars in each train, 6.

HENRY TYSON, Master of Machinery.

Locomotive Department on the Illinois Central Railroad.

The cost per mile of running and maintaining the Locomotive Department of the Illinois Central Railroad, for the month of May last, was as follows:

No. of miles run 165,749
No. of cars per train 8.59
Lbs. waste used 1,969
Gallons oil " 1,459
Cords of wood used 2,852
Tons of coal " 999

Wages of engineers and firemen \$6,318
Repairs 8,685
Value of waste, tallow and oil 1,364
Value of wood and coal 13,962
Cleaning engines 1,010

Total cost 31,349

Cost of oil, waste and tallow, per mile.82
Cost of wood and coal " 8.43
Wages of engineers and firemen " 3.81
Cost of repairs " 5.23
Cost of cleaning " 62

Total cost per mile 18.91

Average miles to pint of oil 14.20
" " cord of wood 46.74
" " ton of coal 33.67
Estimated value of wood 4.16
" " coal 2.10

SAMUEL J. HAYES, Sup't of Machinery.

Journal of Railroad Law.**CONSTRUCTION OF INSURANCE POLICY—MEANING OF TERM "EXPOSURES."**

The case of *Chaffee vs. The Cattaraugus County Mutual Insurance Company*, lately decided in the New York Court of Appeals, drew in question the meaning of the term "exposures," as employed in a warranty by the accused, that in his application all "exposures" within a given distance are mentioned.

The facts of the case were as follows: The action was in a policy of insurance, on the plaintiff's store, and stock of goods. There was an application for the insurance, in the usual form, and which contained a provision that it might be read as a part of the policy. This application was a printed form, filled up by one Ide, the surveyor, of the company, and signed by the insured. In the margin was a series of printed interrogatories, the fifth of situation as to other buildings, distance from each within ten rods for what purpose occupied?

Opposite to these questions were written answers as follows:

"In the middle of a block of three stores: one clothing store, one grocery, one hardware and stove store, one tin shop; mansion house across the street, about six rods; cabinet-shop, three rods; harness shop, five rods; grocery and dwelling house, six rods; wagon shop, and blacksmith shop, about eight rods; two small houses, from four to eight rods; new building, to be used for tin shop, about three rods; one store house, and one barn, about four rods."

At the bottom, printed in large type, and just above the signatures, was:

"All of the exposures within ten rods are mentioned."

Upon the trial, the defendant proved that at the time of the application, and of the fire, the building called the Mansion House was only seventy-two feet from the insured buildings, and that there were within ten rods, measuring to the nearest point, Orr's grocery, Parker's two stores, Webster's leather store, Palmer's shop, Barker's Hotel, or the Lodi House, Hooper's store and dwelling house, Brown's store and dwelling, Orr's barn, and the Mansion House woodshed, and Brown's store. The Court charged the Jury that a building within ten rods was not necessarily an exposure; that whether it was, or not, was a question of fact for the Jury; to which defendant's counsel also excepted.

The defendant requested the Court to charge the Jury that a wooden building situated within ten rods of the insured building, was an exposure. The Court refused so to charge, and the defendant excepted. The plaintiff had a verdict, and defendant excepted.

The following is the substance of the opinions rendered in the Court of Appeals upon the principal question in the cause:

PRATT, J.—The main question in this case, is whether the answer to the fifth interrogatory, by a fair interpretation of the question and answer, taken together with the clause at the bottom, that "all exposures within ten rods are mentioned," asserts that no buildings, other than those mentioned, are situated within ten rods of the insured building. The question calls for the relative situation as to other buildings, distance from each within ten rods, and for what purpose occupied, &c. ? The answer is: "In the middle of a block of three

stores: one clothing store, one grocery, one hardware and stove store, one tin shop; Mansion House across the street, about six rods; cabinet shop, three rods; harness shop, five rods; grocery and dwelling house, five rods; wagon shop and blacksmith shop, about eight rods; two small barns, from four to eight rods; new building, to be used for tin shop, about three rods; one storehouse, and one barn, about four rods." In addition there is placed at the bottom of the clause, "all exposures within ten rods are mentioned."

The question manifestly calls for all the buildings within ten rods, and their several distances from the buildings proposed for insurance. And the answer names several buildings, and gives their distances. Giving the language a fair natural construction, it seems to me plain that it asserts that the buildings named, are all the buildings within ten rods. And such has been the uniform construction given by the Courts to similar language in other cases. (5 Hill, 188; 2 Denio, 76; 2 Seld, 58; 3 id., 370; 7 Hill, 122.)

It is claimed upon the part of the plaintiff, that the clause, "all the exposures within ten rods are mentioned," should be deemed to modify the language of the answer, so as to make it merely an assertion that all the buildings within ten rods which were exposures, that increased the risk, were mentioned. I agree with the counsel that this clause should be deemed a part of the answer, but I do not agree that it aids the construction which the plaintiff seek to give to the answer. The question does not, as I understand it, call for every structure which could possibly be called a building, but for all those buildings which, if near enough, would expose other buildings to fire, or be the means of communicating fire to other buildings. And exposures mean, in this connection, precisely the same thing. It was not the design of the company to leave it to the applicant to decide the question in regard to what buildings, within ten rods, added to the risk, and what did not, requiring a statement of the former only. If that had been the purpose of the inquiry, there would have been no reason for limiting it to those within ten rods. The question assumes that buildings beyond ten rods would not materially affect the risk, that within that distance they might affect it. The inquiry was, therefore, for all the buildings which, in their nature or character, would expose other buildings in their neighborhood, reserving to the company to pass upon the extent—or whether at all—the risk would be increased by them, and so fix the rate of insurance accordingly. The term "exposures" refers rather to the character, than to the location of the buildings. Now it is manifest that the buildings mentioned in the case, as being within ten rods, and not contained in the answer, were of a character deemed exposures in the ordinary use of the term; and, to render it more certain, the Judge was asked to charge that a wooden building, situated within ten rods, was an exposure within the meaning of the term as used in the application, which he refused.

Besides, the case was not tried upon any theory that the buildings were not exposures. No evidence was given nor question made during the trial, upon the point whether they did or did not expose the insured buildings to fire. The charge of the court, therefore, was entirely outside of the

case, as it had been tried upon both sides. But if it were not, the clause instead of modifying what would otherwise be the natural construction of the answer, renders it still more clear that all the buildings within ten rods were designed to be stated. Suppose the answer had, after the statement of the various buildings and their several distances, continued, "and these are all the exposures within ten rods," could there be any doubt that the terms "buildings" and "exposures," if thus used, would mean the same thing. I think, therefore, that this part of the charge was erroneous.

DENIO, J.—The question is upon the interpretation to be given to the words "all of the exposures within ten rods are mentioned" in the connection in which they stand in the application. The construction which was put upon them at the circuit was, that they qualified the inquiry contained in the blank form so as to limit it to a statement of only such of the buildings within ten rods of the insured premises as, from their structure or use, or other circumstances, exposed the insured property to injury from fire. The sentence, no doubt, has reference to the inquiry, and is to be construed in connection with it; but in my opinion, it qualifies it in a sense entirely different from the one supposed by the judge, and in a way much less favorable to the plaintiff. The form of the application, without the additional sentence might possibly be understood to be calling only for the nearest of the buildings within ten rods. The buildings in the closest proximity to the one insured would of course be those from which danger would be most readily apprehended, and parties applying for insurance might not unreasonably suppose that if the distances between these and the insured premises were stated and the manner of their occupation described, the inquiry would be substantially answered, though the buildings standing behind these and more remote from the subject of insurance, were not mentioned. Several of the reported cases show that such an understanding has prevailed to some extent among insured parties, while the insurance companies have contended for a more strict and literal, and as the cases show—the true interpretation of the inquiry. It was for the purpose of putting an end to this misunderstanding, and to avoid all questions as to the scope of the inquiry, that this company required the insured to mention all the exposures within ten rods, and not merely the most proximate of them. Taking the inquiry and the added clause together, it will be seen that all the buildings within ten rods, are treated as causes of exposure to the insured building. Upon the construction which prevailed at the trial, it would be left to the assured to judge, in the first instance, whether a particular building within ten rods affected the hazard or not; and if some buildings existed within that distance it would always be a question for the jury to pass upon, whether under all the circumstances, any of them were of such a character as to expose the insured property to hazard. The interpretation adopted by the judge would change the inquiry in the application into one by which the insured should be requested to state the distance between the insured building and all such other buildings within ten rods as might expose the insured property to injury from fire, and how the former were occupied, thus leav-

ing it to the applicant to judge what buildings within the specified distance it was proper to mention. But the object of the application was to enable the company to judge for itself what degree of hazard was attached to the property offered for insurance, that it might accept or reject the risk, and determine upon the premium to be paid in case it concluded to take the risk. To that end the company required the applicant to state the distances and mode of occupation of all buildings within ten rods of his building. In short, I consider the clause under consideration to be intended as an assertion by the assured that he had, in his answer to the inquiry, described all the buildings within the specified distance.

The Cost of War.

(From the London Bankers' Circular, June 25.)

If the cost of war be compared with the advantages which nations gain in exchange, we fear that the balance will be a very formidable one on the wrong side of the account. As far as our own country is concerned, the annual expenditure has become a very serious item. The great problem to be solved is, how can it be reduced consistently with our national safety? If we are to take any active part in the war now commenced in Europe, it is perfectly certain that no reduction will be made; and even should we maintain an armed neutrality, there is almost an equal certainty that the financial demands for the ensuing year will be considerably increased.

At the close of the French war in 1816 the total cost of the army, ordnance, and navy, amounted to £26,593,128. The number of men voted in that year for the army, ordnance, and navy, and the expenditure were as follows:—

	Men.	Expenditure.
Army.....	133,505	£13,047,583
Ordnance	13,748	2,661,711
Navy	33,000	10,883,834
Total.....	180,253	£26,593,128

If we measure this expenditure by the total number of men, the ratio will be found to be £147 per head.

At the end of the subsequent five years, namely in 1821, the total number of men voted for the army, ordnance and navy, was 122,969; and the total expenditure was £16,468,696, or in the ratio of £133 per head. From this period there was a decrease in the total expenditure, which remained almost stationary until the commencement of the Crimean war, in 1854, which more than doubled the amount in the three following years. In order to show more clearly the progress of military and naval expenditures since 1816, we shall divide the years into quinquennial periods, showing the number of men voted, the total expenditure and the ratio of cost per man.

Years.	Total number of Men voted.	Total Expenditure.	Ratio per head.
1821.....	122,969	£16,468,696	£133
1826.....	125,266	16,825,424	134
1831.....	128,873	15,367,805	119
1836.....	123,262	12,289,716	99
1841.....	144,097	15,218,518	105
1846.....	159,787	16,671,273	104
1851.....	162,287	14,801,898	97

Here ends the last quinquennial period previously to the Crimean war. During a period of thirty-five years, ending 1851, the highest amount of expenditure for the army, ordnance and commissariat was £15,709,294 in 1816, and the lowest was £7,558,057 in 1835. For the navy the highest amount of expenditure was £10,883,834 in 1816, and the lowest amount was £4,148,146 in 1835, exclusive of the civil establishments.

During the next quinquennial period, the amounts have far surpassed those of former years, that we shall give them for each year:—

Years.	Total number of Men voted.	Total Expenditure, p. head	Ratio
1852-3	165,019	£14,958,566	£90
1853-4	165,381	15,914,517	96
1854-5	226,751	27,908,811	125
1855-6	285,941	48,186,482	168
1856-7	307,716	33,871,148	110
1857-8	181,996	21,497,290	118
1858-9	189,515	30,429,126	107

We must caution our readers from drawing any inference from the above figures, other than the progressive increase of expenditure which war necessarily incurs; but this increase exhibits itself in so enormous a proportion that we may well pause before we venture again to incur such heavy responsibilities. During the three years that the Crimean war lasted, this country spent in its army and navy no less than £109,966,441, or an average sum of £36,655,480 per annum, exclusive of the cost of the civil departments. During the same period it added £29,000,000 to the funded debt of the country. There are statesmen who look upon these enormous sums with the greatest indifference, and under the plausible argument of supporting the "national honor" they levy these millions upon the industry of the nation; this enormous expenditure must be changed, or we shall be changed as a nation; there must be a limit to the amount of pressure which war, and its tendencies, can be borne by the people. An attempt has been recently made to fix these ever-increasing charges upon the tory administration of the government; but nothing can be more incorrect in point of fact, and proof has been amply given that the late administration have been most strenuous opponents against everything that tended to involve this country in the war now going on in Italy.

At the rate of outlay we have given, the interest upon the public debt, added to our military and naval expenditure, are becoming frightful in amount, and, if continued at the same ratio, they must ultimately undermine the foundation of our commercial supremacy. We are not alarmists in calling the attention of the public to the progressive increase in the cost of war, and its necessary accompaniments; but we place before our readers facts which cannot be disputed. The two great obstacles to the advancement of civilization, even amongst the most enlightened nations of Europe, are war and debt. They are, in short, the scourge of the human race wherever they exist. The great and paramount duty of England, therefore, is to enter her protest against them both in her Parliament and amongst her people. We have only to cast our eyes upon the most powerful nations in Europe, and we find that war and debt have bound them in fetters of iron; and whilst this state of things remains, the people that live under such governments cannot be free.

Before we close this subject we shall present a statement of the claims which war and debt have made upon the country during the last five years:

Year.	Naval and Military Expend'tre.	Interest on Pub. Debt, Funded & Unfund'd.	Total Expenditure for War and Debt.
1854	£27,908,811	£27,093,340	£55,002,154
1855	48,186,482	28,185,958	76,372,440
1856	33,871,148	28,681,177	62,552,325
1857	21,497,290	28,627,103	50,124,393
1858	21,429,126	28,527,484	48,956,610

We see by these figures that the war and debt of this country during a period of hostilities absorbed the whole of the ordinary income of the State. The following statement gives the actual proportion which the military and naval expenditure, and public debt, bear to the total ordinary income of the country in each of the above years:

Year.	Total Expenditure for War and Debt.	Total ordinary Revenue.	Proportion pr. ct. paid for War and Debt.
1854	£55,002,151	61,206,818	89.8
1855	76,372,440	65,704,489	116.2
1856	62,552,325	60,808,996	89.6
1857	50,124,393	72,334,062	69.2
1858	48,956,610	67,881,512	72.1

The above sums are so formidable in their proportions that we need not urge any other argument to show the necessity of avoiding the expenditure which war and debt bring in their train. It may be estimated, almost to a certainty, that England could not engage in a war with any of the great Powers of Europe without expending in her military and naval departments from sixty to eighty millions a year, and probably adding to her public debt some twenty or thirty millions more. We do not infer from this that war can, in all cases, be avoided; but we say this, that to spend such vast amounts in the destruction of human life is one of the remnants of barbarism, which every statesman is bound, in justice to his country, and to the cause of freedom and civilization, to avert to the utmost of his power.

Finances and Trade of the United States, 1859.

The official statements of the expenditures of the United States, together with the exports and imports, for the fiscal year ending June 30, 1859, have just been partially completed. We find from them that the expenditures of the United States for the fiscal year ending June 30, 1859, exclusive of trust funds and payments on account of the public debt, have been for—

Civil foreign intercourse and miscellaneous	\$23,686,181 76
Interior	4,753,972 60
War	23,243,822 38
Navy	14,712,610 21
Total	\$66,396,586 86

Statement exhibiting the value of imports of foreign merchandise, specie, and bullion, from 1st of July, 1858, to 1st of April, 1859. \$233,182,278 00

Statement exhibiting the value of exports of specie and bullion, foreign merchandise and domestic produce, from 1st of July, 1858, to 1st of April, 1859. 246,680,194 00

In the statement of imports, the amount of specie and bullion imported is. 3,541,862 00

In the statement of exports, the amount of specie and bullion exported is. 29,137,275 00

Comparing the above statement with those of the past eight years, we find that the Imports, Exports, and Duties, have been as follows:

Year.	Imports.	Exports.	Duties.
1851	\$216,224,932	\$218,388,011	\$19,017,568
1852	212,945,442	209,642,325	47,329,326
1853	267,978,647	230,452,250	58,931,865
1854	304,562,381	278,241,064	64,224,190
1855	261,468,520	275,156,846	53,025,794
1856	314,639,942	326,964,908	64,022,863
1857	360,890,141	362,960,682	63,875,905
1858	282,613,150	321,644,421	41,789,620
1859	233,182,278	246,680,194	.....

The total imports and exports are respectively less than for any year since 1855. We find, on making out the balance of trade, that nominally it is in our favor, as follows:

Exports, 1859	\$246,680,194
Imports, do.	233,182,278

Difference in favor of U. S. \$13,497,916

If, however, we exclude specie from both exports and imports, as it is only a means of paying a balance of trade, and should not legitimately enter into the comparison, we find, as follows:

Total imports, 1855	\$233,182,278
Specie do. do.	3,541,862

Imports exclusive of specie \$229,640,416 |

Total exports, 1859	\$246,680,194
Specie do. do.	29,137,275

Exp'ts excl'ive of specie. \$217,542,919

Excess of imports over exports. \$12,097,497

From this we see that the real balance of trade

against us last year was over twelve millions of dollars.

L'Anse Bay and State Line Railroad.

A correspondent of the *Detroit Tribune*, writing from L'Anse, under date of July 11th, says: We have finally got through our line, having reached the Brule river, the line between us and Wisconsin, on Monday, July 4th. It took four days to come back to this place. Our last stakes numbers 85 miles, and is on the river on section 36, township 42 north, range 34 west.

This is the longest road in the Upper Peninsula and runs all the way through the wilderness. We commenced on the south shore of Portage Lake, in township 55 north, and followed as near as possible, range line 33, after striking it.

The country from Portage Lake to L'Anse Bay, with the exception of two miles, is fine rolling land, and will yield as well as any land in the State. At the head of the Bay, we were obliged to cross a swamp a mile and a half, as it was impossible, on account of deep gullies, to get around it. After we crossed this, we passed over a burnt pine district some four miles, and then struck a good section for farming. We passed many nice streams, abounding in trout and several lakes full of the finny tribe. Bear, deer and beaver abound along the whole line. After straightening our line a little at the head of the Bay and at our starting point, which will take about three days, we shall be ready to make our report and advertise for contracts.

Sault Ste. Marie Canal.

A correspondent of the *Detroit Tribune*, writing from Sault Ste. Marie, under date of July 9th, says: The Canal is a decided success. Its business is constantly increasing. Without it the vast mines of iron and copper on the shores of Lake Superior would be almost valueless.

To show the worth of the Canal, and the business of the Superior country, the following statement is given of the amount of work done by the canal during the months of May and June, for 1858 and 1859, viz:

	1859.	1858.
MAY.		
Steamers passed	16	21
Propellers do.	25	12
Tugs do.	35	4
Vessels do.	44	20
Whole No.	120	57
Amount of tolls. .	\$2,393 86	\$1,438 08

JUNE.		
Steamers passed	20	21
Propellers do.	25	11
Tugs do.	42	30
Vessels do.	96	50

Whole No. 184 112
Amount of tolls. . \$3,294 04 \$2,088 56

From which it will be seen, that during the months of May and June, 1859, 135 more crafts passed than during the same time in 1858, with an increase in tolls of \$2,161 26.

South-Side Railroad.

The Treasurer of the South-Side Railroad Company has been paying out considerable sums since the 1st instant, in liquidation of debts due by the Company, on that date, and in the course of a few days will have disbursed \$90,000. Arrangements have been made for the disbursement of some \$85,000 more, on the same account.—*Petersburg Press.*

Western, Mass., Railroad Company.

A contemporary, in speaking of the Western Railroad sinking funds, which now amount to \$35 per share on the stock, remarks that—

"These constantly accumulating funds are reserved to pay the 5 per cent. bonded debt of the company, at maturity. When that is accomplished, the value of the stock will be about doubled, as there will then have to be no deduction from the net income for the half-yearly payments of interest, and all the profits will then be divided among the stockholders."

If we read correctly the last annual report to the State, the funded debt was increased \$398,785 during the year, and this makes a total of \$463,000 six per cent. bonds, in addition to the above-named 5 per cents., and not secured by a sinking fund that we are aware of. The floating debt is \$243,800, and then we have the "Hudson and Boston Railroad loan" \$250,000, making a total already of \$956,800 of indebtedness still to remain after the 5 per cent. bonds mature, provided the sinking funds shall prove sufficient to liquidate all of the last-named. The Western Road is a good property, and can, we presume, stand on its own merits; therefore, all the facts in the case can do it no harm.—*Boston Journal*.

Pennsylvania Coal Company.

At an election for Directors of the Pennsylvania Coal Company, the following gentlemen were elected Directors for the ensuing year: John Ewen, Wm. R. Griffith, Isaac L. Platt, Wm. H. Falls, Geo. A. Hoyt, Charles Morgan, Thomas W. Pearsall, Jonathan Thorne, William F. Havemeyer. At a subsequent meeting of the Directors, John Ewen was unanimously re-elected President of the company for the ensuing year.

Grand Rapids and Indiana Railroad.

The public will be glad to learn that a settlement has been effected between this company and Mr. Beckel, of all their matters of difference, and that Mr. Beckel has now surrendered possession of the road to the company.

President Lomax has secured the iron for the entire length, and made arrangements for ample funds to equip the road.

We understand that the company will immediately resume the construction of the road-bed, and to do this will require of those who have subscribed to the stock of the company, immediate payment. It is to be hoped, now that everything else is arranged so as to place the speedy construction of the road beyond doubt, that the subscribers will feel it incumbent upon them to do their part. Everybody admits that times are hard, but it is believed that all are abundantly able to fulfill their obligations to this company. A large share of the subscriptions can be met without a direct expenditure of money, especially by those living upon the line of the road. The information that everything is now ready for the work to go ahead, will be acceptable and gratifying to all.—*Grand River Eagle*.

Loaning Money in Minnesota.

Minnesota has no usury law restricting the contracts of borrower and lender, except one of fifteen per cent., applicable to banks only. The law gives the mortgagee the right to sell mortgaged premises in six weeks after default of any of the conditions of the mortgage, and the mortgagor can redeem in 12 months, by paying 12 per cent. interest on the amount of debt and costs from the time of sale.

The mortgagee may sell by a bill in chancery in nine months, and get the full interest called for by the contract. There is a redemption right there also for the mortgagor, by paying the interest for a year—12 per cent. Money loans from 15 to 36 per cent., and there is no difficulty in getting 15, 18 and 20 per cent. for a year, or two years, and good improved St. Paul property, or lands worth from three to six times the sum loaned—estimating the property always below the views of the owner. The interest is payable semi-annually.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending July 19, 1859.

BONDS.		Per cent.	
Little Miami, 1st Mort.	7s	64	and int.
Covington and Lexington, 2d Mortgage.	7s	63	
Ohio and Mississippi	7s	49	
Cinc., Ham. and Dayton, 1st Mortgage.	7s	92	
Do. do. 2d do.	7s	85	
Indianap. & Cincinnati, do. do.	7s	85	
STOCKS.			
Cincinnati, Hamilton & Dayton	64		
Columbus and Xenia	82		
Indianapolis & Cincinnati	51		
Little Miami	53		

Railroad Earnings.

The following is a statement of the earnings of the Pittsburg, Fort Wayne and Chicago Railroad, for June, 1859, compared with the same month last year, viz:—

	1859.	1858.	Increase.
Freight	\$58,028 87	\$41,966 91	\$16,061 96
Passengers	66,710 37	61,384 21	5,326 16
Mails	7,825 00	4,482 29	3,342 71
Miscellan's	87 17		*37 17
Total	\$132,564 24	\$107,920 58	\$24,643 66

* Decrease.

The business of the Baltimore and Ohio road, in June, was as follows:—

MAIN STEM.	
Passengers	\$55,541 80
Mails	7,833 32
Express	3,770 00
Tonnage	242,321 60
Total	\$309,466 72

WASHINGTON BRANCH.	
Passengers	\$25,984 26
Mails	1,000 00
Express	1,300 00
Tonnage	6,359 48
Total	\$34,643 74

N. W. VIRGINIA BRANCH.	
Passengers	\$3,712 35
Mails	866 66
Tonnage	10,339 54
Total	14,918 55

Total \$359,029 01

The financial year of the company commenced with October. The receipts of the first nine months of the present year compare with those of the previous year as follows:—

	1858-9.	1857-8.
October	\$392,503 02	\$396,191 85
November	383,159 22	361,443 38
December	336,861 01	379,259 02
January	327,176 63	317,513 73
February	321,391 10	277,044 49
March	410,061 21	439,061 02
April	369,067 33	483,558 45
May	397,959 53	397,770 07
June	359,029 01	402,591 71

\$3,297,203 96. \$3,457,433 76
Decrease present year \$160,229 80

The earnings of the Great Western Railroad Company of Illinois for June, 1859, were \$38,013 70
For June, 1858 32,528 04

Increase \$5,485 63

The earnings of the City railroads for 1857 and 1858, were as follows:

	Total Earnings.		Dividends.	
	1857.	1858.	1857.	1858.
Brooklyn City	\$388,610	\$395,026	\$77,434	\$80,000
VIII. Avenue	341,471	338,410		96,000
Harlem	1,027,572	975,853	45,000	
II. Avenue		227,457		12,544
VI. Avenue	262,048	280,617	75,000	75,000
III. Avenue	419,029	403,055	93,600	93,600

The receipts of the Grand Trunk Railway of Canada for the week ending July 2,

were \$41,265 65
Week ending July 3, 1858 44,081 99

Decrease \$2,816 34
Total traffic from July 1st \$11,480 47
Same period last year 13,039 45

Decrease \$1,558 98

The following is a comparative statement of the earnings of the Ohio and Mississippi Railroad for June:

	1858.	1859.
Passenger Express	\$58,321 78	\$58,611 20
Freight	18,441 68	41,870 28

Total \$76,763 46 \$130,481 48

Increase for 1859 \$53,718 02

The earnings of the Sandusky, Mansfield and Newark Railroad Company, for June, 1859, were \$16,440 17

June, 1858 17,136 13
Decrease \$695 96

The earnings of the Scioto and Hocking Valley Railroad for June, 1859, were \$8,309 21
And the expenses were 4,880 73

Leaving net earnings \$3,428 48

The following is a comparative statement of earnings and expenses for the month of June, 1858 and 1859, of the Buffalo and State Line Railroad:—

EARNINGS.				
	1858.	1859.	Decrease.	
Passengers...	\$39,633 92	\$31,087 91	\$8,546 01	
Freight	25,434 45	26,011 75	*576 30	
Other sources .	1,150 00	1,735 52	*585 30	

Totals \$66,219 37 \$58,835 18 \$7,384 19

EXPENSES.				
Construction...	\$2,151	20	.....	\$2,151 20
Road	17,785	19	\$19,663 80	*1,878 61
Machinery	3,915	36	4,105 29	*189 93
Operating	17,657	87	14,341 35	3,316 52

Totals \$41,509 62 \$38,110 44 \$3,399 18

* Increase.

The following statement shows the business of the Philadelphia and Reading Railroad Company, for the month of June, 1859, compared with the corresponding month of last year:—

	1859.	1858.
Received from coal	\$167,159 13	\$158,205 20
Do. merchandise	33,789 80	24,951 02
Do. travel, etc.	29,428 47	24,416 98

Total \$230,377 40 \$207,573 20

Transportation, road-way, dumpage, renewal Fund, and all charges 126,432 97 120,504 44

Net profit for the month, 103,944 43 \$57,068 76
Do. for previous 6 mos. 519,865 78 432,284 67

Total net profit for 7 months \$614,810 21 \$519,353 43

Catawissa and Towanda Railroad.

Engineers are now engaged in locating the Catawissa and Towanda Railroad, the charter of the road having been renewed by the last Legislature. That portion of the road upon which they are now engaged, is between Towanda and Bloomsburg, on the Lackawanna Road. The proposed Catawissa and Towanda Road is to commence at Rupert, or Bloomsburg, and intersect the New York and Erie Railroad at Waverly, passing through Sullivan, near this county. We understand that the greatest obstacle to be surmounted on the route, is to

get a proper grade over the North Mountain.—
Bloomsburg, Pa., *Star of the North*.

American Railroad Journal.

Saturday, July 23, 1859.

New York and Erie Railroad—Can It Pay the Interest on Its Indebtedness?

We have had much to say about the Erie. We now propose to say a word further as to its future net income, for the purpose of seeing whether it cannot be made to pay the interest annually accruing upon the indebtedness of the company.

There is no doubt of the affirmative of this proposition, provided the road can be operated at rates as low as other leading roads of the country. The Erie, fortunately, has a very large gross income, amounting in 1856 to \$6,300,000, and in 1858 to \$5,151,000. A plenty of money comes into the coffers of the Treasury. Can it be saved to the stock and bondholders?

Can the Erie railroad be operated as cheaply as the Western railroad of Massachusetts? It is vastly superior to this road in grade and alignment. The Western railroad, in a comparatively short distance, between the Connecticut and Hudson rivers, climbs over a series of hills having a culminating point nearly 1,500 feet above tide water. For its whole course, it is one of the most tortuous roads in the country. Fuel upon it costs at least one-third more than upon the Erie. They earn very nearly similar amounts per mile. In comparing the cost of operations of the two, everything appears to be in favor of the Erie except the matter of *gauge*. But this drawback is not so great as to counterbalance the other advantages possessed by it. We make this assertion without qualification, as we are confident that there is not a man in the United States of any authority in railroad management that will not agree with us, that the Erie railroad can be operated at as low a per centage upon its receipts, as the Western.

The Western railroad has been in operation 17 years. Its total earnings during this period have been \$22,467,452—current expenses \$11,689,988; leaving as net earnings \$10,777,464, equal to 48 per cent. of the gross receipts. The Western is in good condition. It has always been maintained in such. The figures given cover the whole period of its history. There can therefore be no fallacy in them, nor any pretence that they do not express the cost of operating this road.

If the Erie could have been carried on at a similar rate the past year, the net earnings would have been \$2,472,000. We are aware that it is claimed that during the year extraordinary sums have been expended upon the road. But the comparison will show what ought to be realized from the road, when the necessary improvements upon it are made, and to disprove the assertion so often made by the present managers that the road cannot be run for less than 70 per cent. of the gross receipts.

Again.—Let us compare the operations of the Erie with those of the main stem of the *Baltimore and Ohio*. In comparison with this road, the Erie has every advantage in grades, curves, and in amount and kind of business. The former crosses the Alleghenies at an elevation of 2,620 feet, which is nearly 1,000 feet higher than the

highest point on the Erie railroad. It has some 25 miles of grades equalling 116 feet to the mile,—the maximum on the Erie being 60. The freight on the Baltimore and Ohio consists of lower priced articles than on the New York and Erie, and will not, consequently, bear such high rates of charges. The carriage of coal by the former constitutes a very large source of revenue. This has been carried at the rate of about $1\frac{1}{4}$ cent per ton per mile. The only advantage the Baltimore and Ohio railroad possesses over the Erie is in its gauge and the greater cheapness of its fuel—coal being chiefly used. It can be had on the line of the company, near Cumberland, for \$1 or \$1.60 per ton. But the Erie railroad, for nearly its entire distance, skirts the Pennsylvania coal fields, and can use coal just as well, and at a rate nearly as low as upon the Baltimore and Ohio. The difference between the two companies, at the present time, in this respect, is, that one has learned the art of using coal; the other has not. But if one has, the other certainly can. The difference between the companies, in this particular, can be almost entirely overcome.

The total earnings of the Baltimore and Ohio railroad since 1843, a period of 15 years, have been \$32,044,110—current expenses \$18,190,829, equalling 56 $\frac{2}{3}$ per cent. of the gross receipts. The person is not to be found in the United States who will not say that the Erie railroad ought to be operated at as low a per centage as the Baltimore and Ohio; in fact at a lower. For the comparison we take a long series of years, to remove all chance of mistake, or fallacy in the calculation.

Now to take care of the interest on all of its indebtedness, the Erie has to earn less than 40 per cent. *net* on its receipts. At the date of the last annual report, the entire indebtedness of the company was \$27,170,274. The accruing interest for the year was stated to be \$1,870,251. Forty per cent. of the gross earnings, \$5,151,616, would have produced \$2,060,464, a sum larger by nearly \$200,000 than the whole amount of interest falling due. That the Erie can be operated at 60 per cent. of its earnings, is as certain, as that the Baltimore and Ohio railroad has been operated at an average per centum of 56 $\frac{1}{2}$ for a period of 15 years. Nothing is wanting to as favorable a result upon one road as upon the other but an equal degree of steadiness of purpose and capacity. The managers of the Erie railroad may say that they cannot bring their expenses down to any such figures. We do not suppose they can. What *they* cannot do, others can.

Since the consolidation of the New York Central, during a period of six years, the road has earned in *gross* \$39,361,948. Its current expenses for the same time have been \$20,556,838; or 52 per cent. of its receipts. This road, we know, can be operated at a cheaper rate than the Erie. It has, however, several unproductive branches that never earned anything before the consolidation. These taken out, we have no doubt that its expenses have been less than 50 per cent. of the earnings. We do not believe they will exceed this ratio for the next five years.

We think we have given enough to prove that the Erie railroad, properly managed, is capable of paying the interest on all it owes, and something more. All it wants is to be managed as well as

the Western of Massachusetts, or the Baltimore and Ohio. This is a proposition that will not be controverted by any railroad man in the United States.

The solution of the present embarrassments of the company is to find such men. It is particularly worthy the attention of the *unsecured* bondholders, as they are in the greatest peril of being cut off altogether. They lie at the mercy of any one of the *five* mortgages, three of which have been created since the bonds they hold were issued. They have no safety but in placing the road in the hands of persons who will make every cent that can be made out of it.

The Crops.

So much dependence has been placed on good *crops* the present year, to give business to our railroads and to relieve the commercial embarrassment that presses so hardly upon the new States, that a brief notice of our prospects in this particular will be of interest to all. The most uncertain of all, and liable to be cut off at any stage of its progress—*wheat*, is already *harvested*, in good condition. This crop is fully up to the average in every portion of the country, and larger in the aggregate than in any previous year. So far all is well. *Indian corn* is looking remarkably well. This is a much more important crop than wheat, and, with a good stand in July, seldom fails. We have a right to expect a much larger yield the present than any previous year. The crop of *hay* is abundant. *Potatoes* promise to be equally so.—In fact, throughout the Northern States the farmers had never better prospects of a most bountiful harvest.

In the Southern States, their great staple, *cotton*, is reported as looking remarkably well, while the breadth planted is much greater than last year. With favorable weather for the balance of the season, the yield must largely exceed that of the past, which was much greater than for any previous year.

Of the great elements of a renewed prosperity, therefore, we are in almost certain possession. Our railroads, which serve as the carriers of our crops, must begin to feel at once the good effect resulting from them. We are confident that the period of the greatest depression for these works has passed. In the Eastern, Middle and Southern States they are, with one or two exceptions, doing well, with steadily increasing receipts over the past year. The North-west alone is without the evidences of improvement. We shall be greatly disappointed if August does not show a change with these. Wheat will then begin to move in Michigan, Indiana, Illinois and Wisconsin. The old crop is everywhere used up. There must, consequently, be an immense movement of the new before the close of the season. We have a right to expect a full *fall* business for all our western roads.

More Default in County Bonds.

The county of Athens has neglected to pay the July interest on the Bonds (\$100,000) issued to the Cincinnati and Marietta Railroad.

Florida Railroad.

The rails have been laid for a distance of about 120 miles on this road, leaving about 38 still to be completed. The road will probably be opened for business the present year.

Florida Peninsula Railroad.

The stockholders of this road met at Brooksville on the 28th ult. and elected the following gentlemen directors for the current year:—S. H. Owens, M. S. Perry, Geo. W. Means, A. G. Gordon, Elias Banknight, Micanopy; Jas. Gettis, Jas. McKay, William B. Hooker, and S. B. Todd, Tampa. S. H. Owens was elected by the Directory President.

We learn in addition that the whole amount of stock authorized by the charter was taken, viz: \$600,000, \$341,000 having been taken by the town of Micanopy, and the remaining \$259,000 by the town of Tampa and individuals residing in or near Micanopy and Tampa.

Alabama and Mississippi Rivers Railroad.

The gross earnings of this company from operations of their road during the fiscal year ending February 28th, 1859, were.....\$55,791 06
And the expenses attending the same. 23,938 33

Net earnings transferred to construction account.....\$31,852 73

—being an increase of \$18,535 93 over those of the preceding year. It will be seen that the net earnings amount to a fraction under 59 per cent. of the gross; for the year preceding, they were 47 per cent.; and for the eleven months ending March 1, 1857, 35 per cent.: thus showing a gradual saving of expense each year. The number of bales of cotton transported during the year was 36,438; the number the year previous, 16,832. The receipts from all sources during the year were.....\$99,033 79
And the expenditures.....98,010 75

Leaving cash on hand.....\$1,023 04

The equipment of the road consists of two engines, two passenger cars, and nineteen freight and construction cars. During the year one new locomotive had been purchased, and another ordered, which was expected to arrive in ample time for the requirements of the road.

The floating debt of the company, including Directors' bills, cost of rolling stock, other work and material contracted for, coupons, etc., to be met during the year, by sale of bonds, and receipts of the road, is stated at about \$45,000.

This road, when completed, will extend from Montgomery, Ala., to the Mississippi State line, in the direction of Meridian, a distance of about 88 miles. The only portion as yet completed, is that between Selma and Uniontown, a distance of about 30 miles. The connection of Montgomery with Selma has not yet been commenced, but hopes are entertained that it will be at no very distant day—the interests involved being too important to admit of delay. The friends of the road, intended to connect Selma with the Gulf, at Pensacola and Mobile, are also sanguine of success. A connection is also urged between Uniontown and Greensboro', to be eventually extended to some suitable point on the N. E. and S. W. Ala. But all these connections are considered secondary to the extension of the Main line west to the Mississippi State line. To this end, resolutions were adopted authorizing the Directors to extend the road so as to form a connection in some suitable manner with the Mississippi Southern Road. No doubt is entertained that an amount of stock can be obtained along the line as will enable the Directors, by the issuance of bonds, to fill, in a reasonable time, this

important gap. This done, the road will become, as it was designed to be, one of the greatest thoroughfares for travel and traffic in the country.

The total receipts and expenditures of the company from its organization to March 1, 1859, were:

RECEIPTS.	
Capital stock, paid in.....	\$211,838 12
State of Alabama.....	123,171 94
Company's bonds.....	109,500 00
Bills payable.....	21,632 08
Net earnings of road.....	51,091 66
Miscellaneous.....	1,731 42
	\$518,965 22

EXPENDITURES.	
Construction, including iron.....	\$401,575 79
Equipment.....	30,990 47
Engineering.....	15,570 77
Right of way.....	2,841 39
Depot grounds and houses.....	10,527 21
Bills receivable.....	11,120 80
Interest coupons.....	9,224 00
Discount, interest, and exchange....	9,873 95
Expenses, salaries, &c.....	15,206 64
Company's bonds.....	4,400 00
Miscellaneous.....	6,611 16
Cash on hand.....	1,023 04
	\$518,965 22

The officers are: JAMES L. PRICE, President; D. A. BOYD, Superintendent and Treasurer.

Norwich and Worcester Railroad.

The report of this company for the fiscal year ending May 31, 1859, has been submitted to the stockholders.

The total receipts for the year were.....	\$315,462 88
And the expenses were.....	\$194,295 42
Interest.....	48,502 79
	242,798 21

Net earnings over expenses and interest.....\$72,664 67

The entire indebtedness of the company, which is funded, is.....\$697,754 41
And the assets applicable to its extinguishment, consisting of cash balances, real estate, etc., is.....140,269 36

Leaving a balance of.....\$557,485 07

Compared with the previous year the gross earnings show an increase of.....\$50,046 28
And the expenses a decrease of.....26,534 65

Making a total net increase of.....\$76,580 88.

Included in the general expense account are items amounting to nearly \$40,000, consisting of new cars, engines, coal wharf, etc., which were required to facilitate the increased freighting business, which, if not properly considered construction, are extraordinary expenses. The increase of receipts has been wholly on freights, yet the freight expenses have not increased more than \$1,000 over the previous year. The reduction of expenses in fuel has been the most important:—
The cost in 1858 was.....\$42,801 50
That of this year.....27,044 11

Decrease.....\$15,757 39
—being a saving of 37 per cent., notwithstanding the increased service.

The affairs of the company have been greatly improved during the year, the receipts being about twenty per cent. in advance of those of 1858. Resolutions were unanimously passed, instructing the Directors to declare regular dividends from the net profits, and to commence the same as soon as the funded debt, falling due in 1860, is advantageously refunded. It is thought that a dividend may be declared in thirty days,

Interest and Dividends.

The Indianapolis and Cincinnati Railroad Company have declared a dividend of 4 per cent., payable August 1st.

The Delaware and Raritan Canal and Camden and Amboy Railroad a semi-annual dividend of 6 per cent., payable at the office of the company in this city.

The Morris Canal Company has declared a semi-annual dividend of 5 per cent. upon the preferred stock and 2 per cent. upon the consolidated stock, both payable on the 2d of August.

The Philadelphia and Trenton Railroad Company has declared a semi-annual dividend of 4 per cent.

The Brooklyn and Jamaica Company have declared a dividend of four and one-half per cent.

The Brooklyn City Railroad Company has declared a semi-annual dividend of 4 per cent.

The Committee on Finance of the Baltimore and Ohio Railroad recommended the payment of certain coupons due in 1856-6, from bonds of the North-western Virginia Railroad, guaranteed by the Baltimore and Ohio Railroad Company.

The interest due August 1st, on the First Mortgage Bonds of the Hudson River Railroad will be then paid at the Company's office, No. 68 Warren street.

Coupons due Nov. 1, 1858, on the 1st Mortgage Bonds of the Scioto and Hocking Valley road will be paid Aug. 1st, by the receiver in Portsmouth, Ohio, with exchange and interest.

The half-yearly interest on the First Mortgage Bonds of the Cincinnati, Hamilton and Dayton Railroad Company due July 20, will be paid at the Bank of America.

The Treasurer of the Great Western Railroad Company of Illinois gives notice that the coupons due August 1, on the 7 per cents, upon all bonds of which holders have complied with the terms of the re-organization of the Company, will be redeemed at the office of the company.

The Sheboygan and Mississippi Railroad Company will pay the semi-annual interest on their bonds due on the first of August, at the Bank of New York, on and after that date. The city of Sheboygan, Wisconsin, and the county of Sheboygan, will also pay the semi-annual interest due August 1, on all their bonds, at the Bank of New York, on and after that date.

The Directors of the Michigan Southern road state that the interest due August 1, will be paid.

The Bank of the Manhattan Company of this city will pay on demand, to New York stockholders, the semi-annual 4 per cent. dividend of the Mechanics' and Traders' Bank of New Orleans. The Southern Bank of New Orleans has declared a semi-annual dividend of 4 per cent., payable to the New York stockholders at the Chemical Bank.

The Excelsior Fire Insurance Company has declared a semi-annual dividend of 7 per cent. payable on demand. The Peter Cooper Insurance Company a semi-annual dividend of 6 per cent., payable August 1. The Rutgers Insurance Company a semi-annual dividend of 9 per cent. payable 2d August. The Home Insurance Company a semi-annual dividend of 10 per cent., payable on demand. The Exchange Fire Insurance Company a semi-annual dividend of 6 per cent., payable August 1. The St. Nicholas Fire Insurance Company has declared a semi-annual dividend of

5 per cent., payable August 4. The Beekman Fire Insurance Company has declared a semi-annual dividend of 6 per cent., payable August 1. The Humboldt Fire Insurance Company a semi-annual dividend of 6 per cent. payable on demand. The Kings County Fire Insurance Company has declared a semi-annual dividend of 5 per cent., payable on demand. The Brevoort Insurance Company a semi-annual dividend of 5 per cent., payable on demand. The half-yearly dividend of the New-World Fire Insurance Company is 6 per cent., payable on demand. The Lamar Fire Insurance, 8 per cent.; Arctic Fire, 8 per cent.; Continental, 7 per cent. to stockholders, and 50 per cent. of the earned premiums of the year, to be issued to the policy-holders on the 15th of September; Clinton Fire, 7 per cent.; Citizens' Fire, 15 per cent.; Republic Fire, $3\frac{1}{2}$ per cent.; the Broadway Insurance Company, 8 per cent.; the Astor Company, 10 per cent. The Commercial Mutual Insurance Company, a scrip dividend of 40 per cent. on the net earned premiums of the year ending June 30, 1859, and 6 per cent. interest on the outstanding scrip. The New York Mutual Insurance Company will pay, August 1, 6 per cent. interest on outstanding certificates and a scrip dividend of 35 per cent.

Railroads in Tennessee.

A movement is on foot which will probably end in opening, in a short time, a direct route between Nashville and New Orleans, by way of the Nashville and North-western and the Mississippi Central Railroads. The latter road is now consolidated with the Mississippi Central and Tennessee, forming a line of road under one company from Canton, Miss., to Jackson, Tenn., a distance of about 240 miles. It is now proposed to construct a railroad from Jackson to Huntington, on the line of the North-western Railroad, a distance of about 25 miles. This last road is now making good progress under the management of V. K. Stevenson, Esq., President of the Nashville and Chattanooga Railroad, with means sufficient, we are assured, to carry it to the point named. We are also informed that no difficulty will be experienced in raising the means of constructing the work between Huntington and Jackson.

No argument is required to show the importance of such a communication, which would place Nashville and New Orleans in immediate connection by a very direct route, and one that could be opened in a very short time. The total distance by rail between these points would be about 575 miles. The Louisville and Nashville Railroad will be completed the present season. The work proposed would thus form a continuous line of railroad from Louisville to New Orleans, lying to the east of the Ohio and Mississippi rivers. With the inducements to such a line, and the ease with which it could be built, we regard its accomplishment certain, at a very early date.

Chattanooga and Cleveland Railroad.

The Chattanooga Advertiser says the railroad between Chattanooga and Cleveland is now in running condition, and that passengers on arriving from Memphis or Nashville pass directly on through East Tennessee without going down to Dalton, as used to be the case. Two trains are running daily between Chattanooga and Bristol, with unerring regularity, and upon as safe and sound a track as is to be found in the Southern country.

Cape Cod Railroad.

The earnings of this road for the year 1858, were\$108,582 15
For the year 1859 102,011 77

Decrease\$4,750 38
The total debt May 31, 1858, was ...\$279,156 18
Do. 1859, do. ... 239,374 74

Showing a reduction of the debt...\$39,781 44
The floating debt a year ago was 122,506 55
Now it is 88,066 52

Showing a reduction of.....\$34,440 03
The stockholders have authorized the directors to issue bonds of the company to an amount not exceeding \$200,000, bearing interest payable semi-annually, at the rate of six per cent. per annum, and having not more than ten years to run, and to dispose of the same on such terms as shall to them seem fit.

Atlantic and Great Western Railroad.

At a meeting of the stockholders of this road, held at Karsima, Ohio, on the 12th inst., the following gentlemen were elected Directors for the current year:

Gaylord Church, John Dick, and William Reynolds, Penn.; James S. Huber, Phila.; George Wright, New York; Martin Kent, Portage Co., O.; B. B. Clark, Ashland Co., O.; John H. Chamberlain, Summit Co., O.; James Coffinberry, and Peter Thatcher, Cleveland, O.; F. W. Seymour, and E. B. Taylor, Portage Co., O.

The vote upon accepting the amendment of the charter, stood thus:

For acceptance.....6,571
Against 107

The Board of Directors organized as follows: President, Martin Kent. Secretary, F. W. Seymour. Treasurer, E. P. Brainerd.

Gauge of the Ohio and Mississippi Railroad.

The Cincinnati Commercial says that it is not at all improbable that within the next two years, a strong effort will be made to induce all parties in interest to change the gauge of both divisions of the Ohio and Mississippi Road from 6 feet to 4-8 $\frac{1}{2}$, or 4:10. It is pretty generally conceded by railway managers of experience, that the average cost of operating a six-foot gauge is nearly, if not quite, ten per cent. over the cost of operating a narrow gauge line. Upon the lowest estimated traffic on the Cincinnati and St. Louis line for 1860, this extra expense will amount to one-half the cost of changing the gauge on the entire road. It is believed that this change could be made at a cost not exceeding three hundred thousand dollars.

Mississippi River Railroad.

This is a contemplated road between Memphis, Tenn., and Cairo, Ill., or a point opposite, which is immediately to be surveyed. We imagine that the route is sparsely settled to give much traffic, yet it is possible that a remunerative through travel might be secured, as it would be much shorter than any other. A Board of Directors was elected by the stockholders at Memphis, on the 4th of May, who seem inclined to push the matter at once.—Cincinnati Commercial.

Cincinnati, Dayton and Toledo Railroad.

Thirty-two miles are laid upon the Northern end of the Dayton and Michigan road, and about eleven miles are laid from Lima toward Toledo, leaving but 28 miles to be completed to give an all rail route between Cincinnati, Toledo, Detroit, and all points on the Grand Trunk and Great Western roads of the Canadas. It is believed that the entire line of the Dayton and Michigan road will be completed by the end of the first week in August,

Wabash and Erie Canal.

A party of prominent and influential gentlemen, residents of the Wabash Valley, have concluded an arrangement with the Trustees for the leasing of the canal for a period of four years. The details of the contract have not fully transpired, but we are advised that it is proposed to form a joint stock company, with a limited capital of \$50,000, for the operation and maintenance of the canal, with all powers in regard to tolls, water rents, &c., that now invests in the trustees. It is understood that Hon. Mr. Edgerton, of Hicksville, Ohio, is to be the Managing Director, and Hon. J. L. Williams, of Fort Wayne, Chief Engineer. The stock of the company will soon be taken, and the canal is to be put into thorough navigable order for the approaching harvest.

Orange and Alexandria Extension.

The work of track-laying is making good progress on this road from each end. It is expected to be opened for its whole length during the present year.

Taxation in Indiana.

The following is the aggregate of the real taxables of Indiana, as reported to the State Board:

Whole number of acres 22,125,124
Value of lands and improvements...\$252,383,779
Value of lots and improvements 47,443,723

Total value of real estate....\$299,827,502

Changes made by the District Boards:

Increase\$4,679,507
Decrease 3,152,153
Net increase 1,527,354

Total value of real estate\$301,354,856

Average value of lands and improvements, per acre..... \$12 62
Total valuation in 1851\$147,198,484
Increased value since 1851 154,156,372
Increase over 100 per cent. in eight years.
Increase since 1858, 70 per cent.

It is estimated that the assessment of personal property will amount to about \$130,000,000, which, with the railroads added to the real estate, will make the total taxables about \$470,000,000. The total number of polls will be about 200,000. This assessment will produce \$1,040,000 of State tax, \$470,000 of school tax, and \$94,000 of State debt sinking fund tax.

The assessment of personal property is based upon the crops of the last year, which were generally short. The prospects of crops this year will give a great increase in the assessment of the personal property of the State for 1860.

Osage Valley and Kansas Southern Road.

The Directors elected on the organization of this company are:

J. F. Taylor, Montcalm Co.; Thomas Monroe, Morgan Co.; A. C. Marvin, Warsaw, Benton Co.; Judge Kerr, Prairie Lea; Lafayette Cruce, Col. A. M. Tutt, A. Wamsley, Henry Co.; J. H. Martin, Jas. M. Cogswell, J. S. Robinson, Bates Co.; Thaddeus Hyatt, N. Y. City; W. F. M. Army, John O. Wattles, Kansas Ter.

Officers.—President, Anderson M. Tutt; Vice President, James M. Cogswell; Treasurer, I. A. Rogers; Secretary, B. G. Boone; Engineer, W. A. Ella; Auditor, J. G. Thornton.

The surveys are now in progress, and will be finished early in the summer. This road will diverge from the Pacific Railroad at some point between Jefferson City and Tipton, and thence proceed through Versailles, Cole Camp, Clinton, and Butler, to the State line, at its intersection with the Swana river.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.

BEERS' 'CAST IRON ENDLESS RAIL,' FOR CITY RAILROAD.

Patented August 24, 1858, and May 10, 1859.



THIS Road is constructed exclusively of **Iron**, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

ALSO

BEERS' "ELASTIC IRON RAILWAY," FOR LOCOMOTIVE USE.

This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from nodulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$9,000 to \$11,000; out of which \$3,000 will be saved on the first cost of equipment, and character of grading. The undersigned is prepared to construct, either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

S. A. BEERS, C. E., Brooklyn, N. Y.

A specimen of these Roads may be examined at 55 Liberty st., NEW YORK.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

JOS. R. ANDERSON,
JOHN F. TANNER,
R. ARCHER,
R. S. ARCHER.

TREDEGAR IRON WORKS,

RICHMOND, VA.

WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL METAL—

BAR IRON OF EVERY SIZE AND SHAPE.
RAILROAD CHAIRS, VARIOUS PATTERNS.
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE.
CANNON AND PROJECTILES, ALL KINDS.
IRON AND BRASS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES.
SAW AND GRIST MILLS.
SUGAR MILLS AND ENGINES.

Our SPIKE AND BOLT FACTORY, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

J. R. ANDERSON & CO.

SANDERSON, BROTHERS & CO.,

MANUFACTURERS OF THE

CELEBRATED CAST STEEL,

FOR MAKING SUPERIOR TOOLS,

SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,

Armitage's Genuine Mousehole Anvils, etc.

16 CLIFF STREET, NEW YORK.

43 BATTERYMARCH ST. Boston.
24 BANK PLACE, New Orleans.

516 COMMERCE ST. Philadelphia.
TYLER, DAVIDSON & CO., Cincinnati, O.
HISS & COLE, Baltimore, Md.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,

10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 34 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,

Boston, June, 1851.

29 Central Wharf.

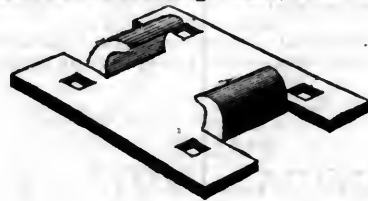
NEW YORK RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "NEW YORK WROUGHT IRON RAILROAD CHAIR COMPANY," and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned with the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R. R. Co., etc., etc.

Messrs. M. K. JESUP & CO., 44 Exchange Place, NEW YORK, are the only parties authorized to act as our Agents.

Mr. JACOB ROWE, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 3 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY

MORRIS, TASKER & CO.,**PASCAL IRON WORKS.**

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

THE

ROUND OAK IRON WORKS,

STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,

Agents for the United States,
12 SOUTH CHARLES STREET,
BALTIMORE.

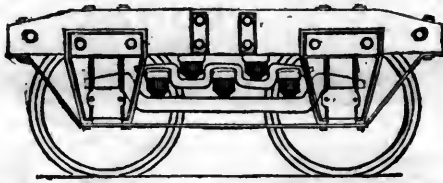
And 17 NASSAU STREET, NEW YORK.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

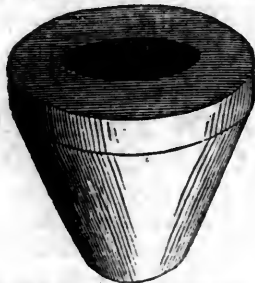
R. & J. MAKIN, 70 Broad st.

NEW YORK METALLIC CAR SPRING COMPANY,



SOLE MANUFACTURERS OF THE
CONICAL VOLUTE STEEL CAR SPRING,
OFFICE, 54 WILLIAM ST., NEW YORK.
C. PALMER, CHAS. D. GIBSON, RICHARD VOSE,
Pres't. Treas'r. Sec'y.

ELASTIC CONE SPRING CO.,
OFFICES } 20 Exchange Place, New York,
and Jersey City, New Jersey.



MANUFACTURERS of the **PATENT ELASTIC CONE SPRINGS** for Railway Cars. This Spring is new, and simple in its construction, and possesses superior advantages. It is manufactured from the best quality of India Rubber prepared under the JOSLIN Patent, and is less expensive, and at the same time affords more ease, than other shaped springs. It can be fitted to all descriptions of cars without alteration or expense.

JAMES JEFFRIES & SONS,
MANUFACTURERS OF
**LOCOMOTIVE, CAR AND TANK
SPRINGS,**
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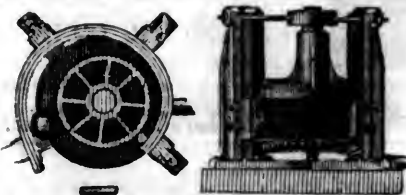
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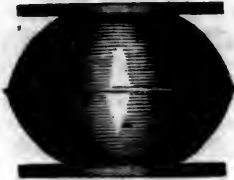
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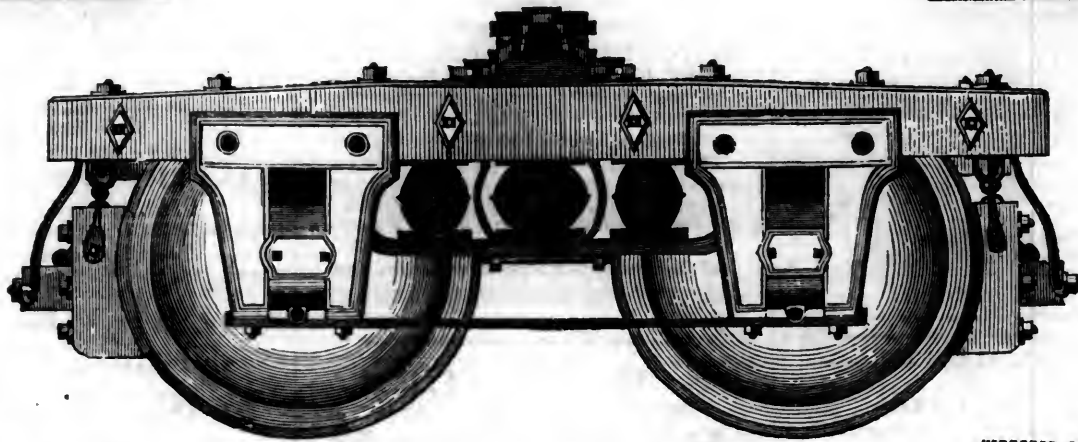
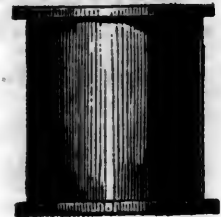


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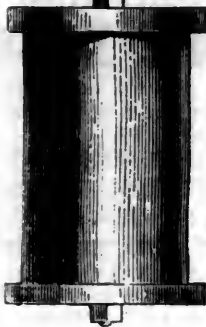
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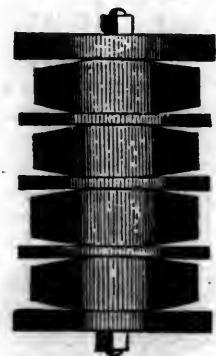


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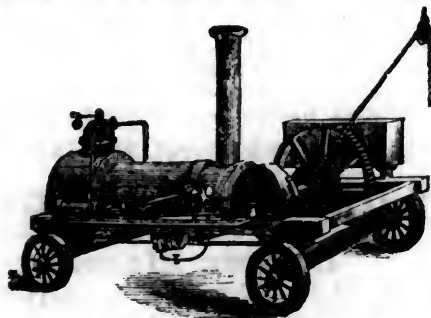


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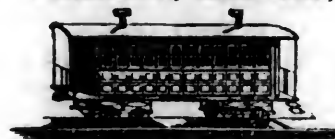


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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, July 30, 1859.

Traffic of the Pittsburg, Fort Wayne and Chicago Railroad.

There were transported over this road during the year ending December 31, 1858, 255,663 tons of freight, the revenue from which amounted to \$668,928 66. Of this amount of tonnage, there were transported eastward 143,572 tons, which yielded a revenue of \$343,777 49, of which 60,720 tons, yielding a revenue of \$132,656 69, was freight local to the road, and 82,852 tons, yielding a revenue of \$211,120 80, was through freight, emanating either from, or destined to points off the line of this road. The amount of freight transported westward was 142,091 tons, which yielded a revenue of \$323,151 17—of which 61,096 tons, yielding a revenue of \$78,270 91, was local freight, and 80,995 tons, yielding a revenue of \$246,880 26, was through freight. Therefore, 366 tons more of local freight were moved westward than eastward, and 1,857 tons more through freight moved eastward than westward. Of the total tonnage, 1,481 tons more were moved eastward than westward.

Of the revenue from local freight, though 376 tons more were removed westward than eastward, the revenue from the eastward tonnage was \$54,385 78 more than that from the westward tonnage; the tons moved one mile in the one case being 5,477,577, and in the other, 3,727,280—showing a difference of 1,750,297 tons moved one mile in favor of the westward freight.

Of the revenue from through freight, while the excess in the tonnage was in favor of the eastward freight, by 1,857 tons, the revenue yielded was \$35,759 46 more from the westward than the eastward tonnage, the tons moved one mile westward being 13,218,724, and eastward 12,744,762—showing a difference of 473,962 tons moved one mile in favor of the westward freight.

Of the whole revenue from both kinds of freight, \$20,626 32 more was received from the eastward than from the westward freight, while the tonnage was also 1,481 tons greater, and the tons carried one mile exceeded those moved westward 1,276,315.

The average revenue per ton per mile from the eastward local freight, was $02\frac{1}{4}$ cents, and from the same kind of freight westward, $02\frac{1}{10}$ cents per ton per mile; from the eastward through freight, $01\frac{1}{10}$ cents per ton per mile, and from the westward through freight, $01\frac{1}{8}$ cents per ton per mile; the revenue from the whole eastward freight being $01\frac{1}{8}$ cents per ton per mile, from the whole westward freight a fraction less than 02 cents per ton per mile, and for the total tonnage, both eastward and westward, $01\frac{1}{8}$ cents per ton per mile.

Assuming the cost of moving this freight to have been one-half the gross expenses of operating and maintaining the road, (and it is believed the estimate is nearly correct, or sufficiently so for the purpose of comparison,) it will amount to \$465,946 85, or $01\frac{1}{8}$ cent per ton per mile, leaving a profit to the company of \$202,981 81 on this branch of its business, or a fraction less than 6-10 cent per ton per mile.

The whole amount of tonnage transported during the year, compared with 1857, shows a decrease of 19,106 tons, although the revenue derived is increased \$11,242 59, exclusive of the earnings from express freight; the tons moved one mile being for 1858, 35,168,323, and for 1857, 28,893,900, showing an increase of 6,274,363 in the amount of tonnage moved one mile, the result fully demonstrating, that while a less amount of freight was transported during the past year than in 1857, the revenue produced was greater, in consequence of this less amount of freight, having been moved such a greater distance as more than equalled the loss in the tonnage.

Had there been, therefore, no decrease in the tonnage, and the revenue per ton remained the same, the earnings from freight would have been \$75,000 00 more than they now appear, or \$743,600 00.

There were transported over the road during the year, 439,040 passengers, the revenue from which amounted to \$741,222 77. Of this number, there were transported eastward 215,456, which produced a revenue of \$360,608 80, 174,549 of these, yielding a revenue of \$169,024 55, being local to the

line, and 40,907, yielding a revenue of \$191,584 25, were from, or destined to, points foreign to this road.

The number of passengers transported westward was 223,584, which produced a revenue of \$380,613 97. Of this number, 174,367, yielding a revenue of \$178,032 35, were local, and 49,217, yielding a revenue of \$202,581 62, were through passengers. There were, therefore, but 182 more local passengers transported eastward than westward, and 8,310 more through passengers transported westward than eastward, while of the total number, 8,128 more were transported westward than eastward.

Of the revenue from local passengers, while there were 182 more transported eastward than westward, the revenue from the westward passengers was \$9,007 80 more than that from the passengers traveling eastward; the number carried one mile being in the one case 5,869,768, and in the other 6,230,146, showing a difference of 360,378 more miles traveled by the westward than eastward passengers.

Of the revenue from through passengers, \$10,997 37 more were derived from those going westward than eastward, in part attributable to an increase of 8,310 in this class, but more especially to the fact, that the westward passengers traveled 1,288,777 more miles than those transported eastward.

Of the total revenue from passengers, \$20,005 17 more were received from the westward than the eastward passengers, while the number was 8,128 greater, and the number transported one mile exceeded those going eastward 1,649,155, showing not only that the preponderance of travel was westward, but that this larger number were transported comparatively a longer distance than those traveling eastward.

The average revenue from local passengers per mile traveled eastward was $02\frac{1}{8}$ cents, and westward $02\frac{1}{10}$ cents; from the through passengers eastward $02\frac{4}{10}$ cents per mile traveled, and westward $02\frac{2}{10}$ cents; the revenue from the whole number of passengers going eastward being $02\frac{6}{10}$ cents per mile traveled, and westward $02\frac{1}{10}$ cents, and for the whole number of passengers eastward and westward a fraction over $02\frac{1}{2}$ cents per mile traveled.

Assuming, as in the case of the tonnage, that it cost one-half the gross expenses of operating and maintaining the road, or \$465,946 85 to transport these passengers, the result shows the cost per mile traveled to have been $01\frac{6}{10}$ cents, and the profit to the company \$275,375 92, or a trifle less than 01 cent per mile traveled.

A comparison of the passenger traffic of the past year with that of 1857, shows a decrease of 89,228 in the number of passengers transported; a decrease of 9,238,658 in the number carried one

mile, and a decrease of \$198,107 98 (exclusive of the sum received on account of extra baggage), in the amount of revenue produced.

This large decrease in the passenger revenue, which *prima facie* would appear to be wholly the result of the decrease in the number of passengers transported, is truly in part attributable to the decrease in the average number of miles traveled by each passenger; for while in 1857 each passenger transported averaged a distance of seventy miles, those transported during 1858 averaged but sixty-six and two-thirds miles.

Viewing it as a whole, the business of the road for the past year compare favorably with that of 1857, while the restoration of business during the present year to somewhat more of its original vigor, together with the conducive effect which the completion of the road to Chicago will exert upon its revenue, will doubtless exhibit a satisfactory result to the shareholders at the close of 1859.

Green River Bridge.

This bridge is 984 feet long from abutment to abutment, and 115 feet high above the low water mark. It is divided into five spans, the two spans at the extremes being 180 feet long, and the three intervening 208 feet each from centre to centre of piers. The superstructure is entirely of cast iron, composed of two chords and joists supported by stone piers, and suspended between them by wrought iron suspensions. The system of suspension is under the bridge and composed of different sizes of iron. The main suspension, going from pier to pier, is composed of bars 4 inches by 1½ inches. The second suspension, going from each pier to the centre post, is composed of bars 4½ inches by 1 inch. The third suspension, going from the centre post to half-way from the pier and then to the pier, is composed of bars 2 inches by ¾ inch; and the fourth suspension is composed of bars 2 inches by ¾ inch. Above the superstructure, the floor-beams are fixed to receive the cross ties and rails. On each side of this track is a small side walk. This substantial bridge was designed by Albert Fink Esq., and made by Inman & Gault, of this city. It is like the bridge over the Monongahela, over which the trains of the Baltimore and Ohio road run daily at the rate of 40 miles per hour. With the exception of the Victoria bridge at Montreal, it is the longest structure of the kind in America, and we hesitate not to say that it will compare favorably with anything of the kind in the world for beauty and durability. The cars have gone over it a number of times, and its strength has been fully tested by heavy locomotives moving at a rapid rate.—*Louisville Courier*.

Chicago, Burlington and Quincy Railroad.

We have received the report of this company for the fiscal year ending April 30th, 1859. It is very full, and embraces, in addition to the report of the president and directors, statements from the superintendent, treasurer, freight agent, ticket agent, baggage agent, and purchasing agent and storekeeper—thus giving in detail the operations and business of the road for the year.

The road and appurtenances owned and occupied by the company, are as follows:

That part of the Galena and Chicago Union Railroad from Chicago to the Junction is occupied for the passage of our trains and business under a lease from that company, being in length 30 miles.
The road of this company now built commences at the Junction and extends to Galesburg, a distance of ... 138 "
The Peoria and Oquawka railroad from Galesburg to Burlington is operated under a lease from that company, and is in length 42 "

Making a total length of line from Chicago to Burlington 210 "

This company owns about twelve acres of depot grounds in the city of Chicago on the South Branch

of the Chicago river; also, one-fourth interest in the Union track, which connects the several railroads in Chicago, with some valuable lands, (necessarily purchased in securing lands for that track,) which are in part used for depot purposes by the several owners thereof. The passenger and a portion of the freight business, at Chicago, is transacted at the depot of the Illinois Central Railroad Company, under a lease or an agreement with that company.

This company own large and ample depot grounds and the necessary station buildings, at East Burlington, which are used for the business of the line.

The aggregate amount charged as cost of road, equipment and appendages remains the same as at the date of the Annual Report of last year, and is as follows:

For construction	\$5,799,882 24
" equipment	1,400,871 86
" depot and grounds at East Burlington	33,362 71
" depot grounds at Chicago	201,260 20
Union track at Chicago	33,548 91

Total

The amount of advances to Peoria and Oquawka R. R. Co. including bonds purchased under the agreement with that Co., is, \$184,158 49

Bonds of the Northern Cross, (now Quincy & Chicago) R. R. Co., purchased to facilitate the completion of said road, under agreement of January 1, 1855 .. 100,000 00

Bonds of the same Co. purchased the past year under same agreement, with subsequent stipulations with the Trustees

Quincy & Chicago R. R. Co.'s Bonds received for balance of old account, on settlement. 7,000 00

680,158 49

Total amount of construction acc'ts, including advances to other roads, \$8,149,084 41

The capital stock of the company remains the same as at the date of the last report, \$4,631,510
Less 22 shares reported as held by the Company

2,200

Total stock

The Funded Debt, May 1, 1859, was as follows:

Chicago & Aurora 1st mortg. 7 per cent. bonds, payable July 1, 1867, \$405,000

Chicago & Aurora 2d mortg. 7 per cent. bonds, payable Oct. 1, 1869 \$303,000

Less bonds canceled by sinking fund ... 138,000

165,000

Centr. Military Tract 1st mortgage 7 per cent. bonds, payable July 1, 1864 400,000

Do. 2d mortgage 8 per cent. bonds, payable May 1, 1868 281,000

Do. 8 per cent. bonds of April 1, 1854, payable April 1, '68, 17,000

Do. 8 per cent. bonds of March 1, 1856, payable March 1, '76, 62,000

Chicago, Burlington & Quincy, 8 per cent. Consolidated bonds, payable January 1, 1883 \$1,690,000

Less bonds canceled by sinking fund.. 30,000

1,660,000

Total bonds

2,990,000

Total stock and bonds

\$7,619,340

The funded debt has been reduced the past year, by the purchase and canceling of bonds for the sinking fund, to the amount of \$63,000. And, in the aggregate, to the present time, it has been reduced \$168,000. The preceding statements show an excess of investments for construction account and for advances for connecting roads, over capital stock and funded debt, amounting to \$529,744 41.

The income for the year ending April 30th, 1859, embracing earnings on 138 miles of road owned by the company, and our portion of earnings upon the 30 miles of road leased of the Galena and Chicago Union Railroad Company, has been—

For transportation of freight	\$689,737 53
" " " passengers	333,391 47
" " " mails & miscel.	21,444 63

Total earnings

\$1,044,573 63

Balance to credit of interest and exchange account

52,983 04

Total income

\$1,097,556 67

The expenditures chargeable to Income Account, for the same time, have been, for—

Operating expenses \$541,005 76
Interest on bonds 230,382 58
Taxes 21,312 02
Transfer office expenses 600 00

Rent of Peoria & Oquawka road, for 6 months ending April 30, 1858, unadjusted at date of last report

22,500 00

Excess of rent and operating expenses over earnings on Peoria & Oquawka road, for 12 months

28,380 87

Rent of Illinois Central depot

28,777 46

872,958 70

Balance of income for fiscal year \$224,597 97

Add balance of May 1, 1858 388,963 80

Total to May 1, 1859

\$613,561 77

Deducting from the above the amount charged to Improvement account, the past year

68,325 26

Leaves an actual surplus of

\$545,236 51

If from this balance be taken the amount paid for 168 sinking fund bonds, purchased and canceled up to May 1, 1859, at a cost of

147,659 44

There will remain a net surplus of ... \$397,577 07

The Treasurer's report shows that the amount of bills and accounts receivable, including the amount due from agents and connecting roads, is

\$103,009 65

The deposits in New York and Boston, and cash in the Treasury, are

84,062 12

Total of Cash Assets

\$187,071 77

The value of materials on hand for the use of the operating department, is 141,366 16

Cost of boats for ferries at Burlington and Quincy

20,479 32

Total Assets

\$348,917 25

The amount of bills payable on the 1st of May, was

\$296,459 54

Unclaimed dividends, accounts, and pay-rolls .. 13,908 12

Due agents and connecting roads

23,057 49

Total Liabilities

\$333,425 15

Balance of Assets

\$15,492 10

The expenditures for Improvement account the past year, although such as are usually charged

to construction account, have been made a charge upon Income account, believing that thereby the interest of stockholders will be better subserved than by increasing the capital account for such purposes. The following statement will show some of the reasons for, and the cost of the several expenditures charged to that account:

In the spring of 1857 it was supposed that an additional number of locomotive engines would be required in order to the accommodation of the business of the road the ensuing autumn, and, to provide for such business, an agreement was made with the Detroit Locomotive Works for the manufacture and delivery of four coal burning locomotives, at a specified date. That company failed to complete and deliver them at the time agreed upon. When subsequently completed and offered to this company, their use not then being required, we refused to receive them. Upon a full investigation, however, of the subject, during the past year, there appeared equities in the case that demanded a compromise, and it was accordingly decided to receive them at a reduced price agreed upon, and they were purchased for \$38,000.

A large amount of expense has annually been incurred in maintaining that part of the track between Mendota and Galesburg, a distance of eighty miles, for the reason that no material suitable for ballasting had been found in quantities sufficiently large near the line of the road to be available, and very little of that kind of work had been done. A gravel bed was discovered last fall near the line, about mid-way of this section of the road, which has been purchased, and from which a considerable portion of the track has been ballasted, and the remainder is now being done. The amount expended for this purpose has been \$19,559 94.

The engine house at Aurora has been extended, so as to accommodate eight more engines, at a cost of \$5,672 97.

Two passenger cars have been altered and fitted up for sleeping cars. Some improvements have been made in the passenger house at Galesburg, which, with some other small improvements, amount to \$5,092 35.

This company, with other owners in interest of the Union Track, in Chicago, together with the Michigan Southern and Northern Indiana Railroad company, have purchased the lands necessary to make a permanent business connection with that road where the Union Track crosses it. The amount that it will be necessary for this company to contribute (after disposing of some of the lands necessarily bought, but not required for the tracks), will be about three thousand dollars; eighteen hundred of which has been paid and charged to Union Track account.

The revenue of the company has been much less the past year than the Directors had expected, or could have anticipated. The causes that have produced these results are too well understood to require particular notice. It will be sufficient to say that the section of country traversed by your line of road, and that tributary to it, has suffered quite as severely the past two years from the failure of the staple articles of production as any other portion of this or the adjoining States. The earnings of this, compared with last year, show a falling off of thirty per cent. Twenty-four per cent. of this is on freight, and six per cent. on passenger earnings. The falling off of freight earnings was comparatively greater than those of passengers, being thirty-six per cent. on the former, and twenty-three per cent. on the latter. In the item of wheat and flour the falling off has been forty-five per cent., or equal to one million six hundred and fifty-six thousand bushels—in that of corn it has been twenty-eight per cent., or five hundred and seventy-seven thousand bushels. The amount of lumber transported was about one-half as much as that of the previous year, being a reduction of thirty-five millions of feet.

The preceding statements will show satisfactory reasons for the diminished earnings of the past year. Any one acquainted with the fertility of the country tributary to our line of road, and the vast business that must pass over it in years of or-

inary production and progress, will know that the present depression in the business and earnings of the road can only be transitory, and that a moderate return of prosperity to the country tributary to it, must show again its large productiveness to the stockholders.

Efforts have been made the past year to reduce the expenses of operating the road comparatively with the falling off of receipts, but it has been found impracticable to entirely accomplish this result. The heavy rains of the early summer increased materially the cost of keeping the road in order for several months, and added much to the cost of equipment repairs. That part of the road thus affected has since been graveled, and will not be subject to like expenditures in the future. The operating expenses the past year have been fifty-one and seventy-nine one hundredths per cent., while those of the previous year were forty-six and thirteen one hundredths per cent. An increased per centage of expenses must necessarily accompany any large falling off in earnings on all well-managed roads. The road and equipment has been kept in good repair and condition, and, with the improvements made the past year, is now more valuable, and in better condition to accommodate a large traffic than at any former period.

The accounts kept the past year of the performance of wood and coal burning locomotives engines, and the fuel consumed, show a saving in expense for fuel in favor of the coal burning engines, of about forty-seven per cent. By examining the accompanying statistics it will be seen that the average cost per mile run of freight engines, using wood for fuel, was nineteen and seven one hundredths cents per mile; while the cost of running engines with coal for the same service, was ten and sixteen one hundredths cents, showing a total saving in expense for fuel on 303,496 miles run by freight engines, with coal, of \$27,039 08. From this there is some deduction, probably, to be made for the increased cost of repairs on coal engines, the amount of which has not been fully determined.

Besides the four coal burning engines purchased the past year, six have been changed in re-building from wood to coal, making, with those previously in use, twenty-five exclusively coal burning engines now in service.

Two way freight and conductors' cars have been added; two coal cars have been changed to platform freight, and one baggage car has been exchanged for two platform cars. The equipment of locomotive engines and cars is as follows:

- 62 locomotive engines.
- 27 first class passenger cars.
- 4 second class passenger cars.
- 9 baggage, mail and express cars.
- 761 house freight cars.
- 19 way freight and conductors' cars.
- 125 platform freight cars.
- 38 coal freight cars.
- 38 hand cars.

In order to the proper transaction of our ferry business, at Burlington, it became necessary to provide a ferry boat of our own, or have one that could be put in the service on short notice; accordingly a suitable boat was purchased for this business. Subsequently, satisfactory arrangements were made with the ferry company for doing the ferrying of the line at that place for another year.

Efforts were made to charter a suitable boat, at a fair rate, to transact the business of our line between Quincy and Hannibal, in connection with the Hannibal and St. Joseph Railroad, on the opening of that road for business, but without success. It then became necessary for our company to purchase a boat and place in that service in order to secure the benefits of a proper connection with that road. The Burlington ferry boat was used in that trade until a more suitable boat was obtained, and its use has been continued, as occasion required, in the freighting business of the line. These boats cost about ten thousand dollars each, or, in the aggregate, \$20,479.32. Satisfactory arrangements have been made with the other

parties composing portions of the line, that will insure fair returns upon the investment.

The negotiations in progress at the time of making the last annual report, for the purchase of that part of the Peoria and Oquawka Railroad west of Galesburg, have not resulted in the purchase of that road, for the reason that the parties in interest could not make a good and sufficient title to the property. This company have continued to operate that part of the road under the lease and agreement previously made with that company. Its operation has been attended with a very large expense, owing to the frailty of its structure, want of fencing, and the incomplete condition of the road, especially that part which crosses the marsh or low bottom lands east of Burlington, the track being so low as to be subject to inundation and washing away on every considerable rise of water in the Mississippi river. These expenditures, with the interruption of business and loss of revenue attending it, will continue until the road is placed in proper order and condition, and beyond the reach of the floods of that river. In the present embarrassed state of that company, and the incomplete condition of that road for the purpose of business and revenue, the directors can see now no other way of obtaining the re-payment of their advances to that company but to sell the securities pledged and thereby enforce their payments. Action in this behalf has been delayed in the hope that some satisfactory arrangement would be made for their payment or satisfaction without resort to these measures.

The notice given by the Galena and Chicago Union Railroad Company for the termination of the amended contract, for the use of their road from Chicago to the Junction, having been withdrawn, that contract will remain in force for two years longer, or until the first of May, 1861. This having been done it was not deemed necessary or expedient to take any steps the past year initiatory to the building of an independent line into Chicago, or changing our present relations with that company. The committee appointed by the stockholders, at the last annual meeting, to investigate and present these interests for their consideration, coinciding in this opinion, have deferred attention to this subject. It will be necessary, however, at some time during the present year, to decide upon the policy to be pursued in order that there may be sufficient time to carry out the views of stockholders before the expiration of the present contract with that company.

The directors have become convinced that, under the embarrassments that continue to surround the Quincy and Chicago Railroad Company, they will not be able to meet their original engagements with this company for the repayment of advances made on their account. The last advances were made with the hope and expectation that some satisfactory arrangement would be made with the Trustees, under the sanction of the bondholders of that road, for compromising and settling the issues that have grown out of the failure of that company to reimburse the sums advanced. The terms of adjustment that were offered by the stockholders, at their meeting in New York, have been approved by the Trustees and placed before the bondholders of that company for their sanction. If they are fully advised as to the present condition and future prospects of that road they will, undoubtedly, accept of the proposed compromise.

JOHN VAN NORTWICK, President.

Memphis, Clarksville and Louisville R. R.

We learn from the Clarksville *Jeffersonian* that the Commissioner of Railroads has made a final examination of the first thirty miles of this road, and finding the road-bed complete, and fully up to the requirements of the law, has given the necessary certificate to enable the company to draw the State aid, and the President has obtained thereon the \$300,000 of State bonds to which the company is entitled on the portion completed. This puts the company in possession of about \$220,000 of cash means beyond any immediate demands.

Commerce of Canada.

(An abstract from the tables of "Trade and Navigation," exhibiting the results for the ten years ending 31st Dec., 1858, of which five years were before and five years after the enactment of "Reciprocity" with the United States.)

1. VALUE OF IMPORTS INTO CANADA.

Years.	Paying ad valorem duties.	Paying specific duties.	Entered duty free.	On goods paying ad valorem.	On goods paying specific.	Total duties collected.	Sea ports.	Inland ports.	United Kingdom.	British West Indies.	British North America.	United States.	Other foreign Countries.	Total value of goods imported.
1849	\$8,973,973	2,097,624	938,801	1,085,886	692,303	1,778,189	8,239,660	8,770,738	6,676,011	14	195,655	4,971,420	167,298	12,010,398
1850	13,185,751	2,619,784	1,176,533	1,528,435	934,148	2,462,583	8,931,872	8,060,196	9,631,921	4,432	386,620	6,594,860	365,215	16,982,068
1851	16,551,062	2,973,044	1,810,685	1,911,768	1,087,947	2,999,715	10,008,403	9,954,888	12,048,160	13,626	436,972	8,365,765	8,365,765	22,704,509
1852	15,725,116	3,513,525	1,247,851	1,760,865	1,196,189	2,957,054	11,680,974	8,605,518	10,671,132	5,618	480,954	8,477,693	651,598	20,286,492
1853	26,084,359	4,171,165	1,775,912	2,700,096	1,324,611	4,114,707	18,220,266	13,761,140	18,489,121	3,478	632,661	11,782,147	1,074,029	31,981,436
1854	32,051,198	4,764,383	2,813,734	3,360,637	1,538,368	4,899,005	20,676,429	19,852,896	22,963,330	2,673	675,115	15,533,098	1,365,109	40,529,325
1855	19,971,470	5,929,163	10,385,536	2,216,315	1,309,467	3,525,782	11,476,015	24,610,151	13,803,460	14,136	865,988	20,828,676	1,073,909	36,086,163
1856	24,048,979	7,543,641	11,991,767	2,972,971	1,535,911	4,508,882	15,305,869	27,878,518	18,212,934	17,136	865,988	22,704,509	1,073,909	36,086,163
1857	21,484,491	6,538,208	12,407,904	2,882,267	1,042,784	3,925,051	14,561,884	24,886,714	17,559,025	26,823	751,888	20,224,651	868,211	30,430,598
1858	14,903,668	8,801,245	8,876,614	2,106,429	1,274,960	3,381,339	10,735,077	18,283,450	12,287,053	5,337	423,826	15,635,665	752,088	20,078,627
Aver. 1st 5 years.	16,114,052	3,085,028	1,889,956	1,815,409	1,037,049	2,852,458	11,710,611	8,823,396	11,503,294	5,337	423,826	15,635,665	752,088	20,078,627
" 2d 5 "	22,631,961	6,915,327	9,194,513	2,707,724	1,310,228	4,048,022	14,563,055	23,178,746	16,160,160	12,219	749,372	18,985,300	1,129,210	37,741,801
" 10 "	19,373,007	4,475,177	5,292,235	2,261,567	1,188,674	3,450,241	13,136,818	16,093,571	14,184,212	8,793	588,127	13,511,838	847,448	29,140,419

* The "Reciprocity Treaty" (18 Victoria, cap. I.) went into operation in Canada on the 18th October, 1854. The value of imports from the United States of the articles enumerated therein as free of duty has since been as follows:—in 1854 (11 weeks) \$581,644; in 1855 \$7,725,572; in 1856 \$8,082,821; in 1857 \$3,642,044; and in 1858 \$5,564,615.

2. VALUE OF EXPORTS FROM CANADA.

Years.	Products of the mine.	Products of the sea.	Products of the forest.	Animals and products of animals.	V'g't'ble food and other veget. products.	Manufact' res.	Miscellan'ous merch'dise.	Sea ports.	Inland ports.	United Kingdom.	Countries of Destination.				Apparent total value of Exports.	Custom'ry Additions.	
											British West Indies.	British North America.	United States.	Other foreign countries.		For vessels built at Quebec and exported.	For under-valuation at inland ports, 20 p. c.
1849.....	23,222	5,310,152	417,244	3,286,433	120,338	152,871	5,886,076	3,424,181	5,393,696	14,368	466,328	3,429,768	6,100	9,310,260	1,362,721	684,837	11,357,818
1850.....	\$36,583	5,442,987	630,321	4,237,896	26,708	159,496	5,769,576	4,910,417	4,803,400	8,376	808,776	4,951,160	108,281	10,679,933	1,281,720	982,084	12,943,793
1851.....	86,755	2,937,296	6,063,516	887,618	3,804,421	55,127	151,887	7,069,101	4,229,146	921,401	3,912	1,037,509	4,071,544	164,144	11,298,520	1,066,200	845,884
1852.....	33,576	2,977,849	1,183,719	4,725,457	79,133	107,501	6,747,412	6,228,195	7,064,457	13,961	812,139	6,284,522	188,405	13,005,574	1,050,400	1,251,632	15,307,606
1853.....	109,357	340,003	9,421,020	1,370,525	8,086,854	140,426	63,294	10,596,114	8,945,366	8,984,658	20,183	1,380,465	8,936,382	209,791	19,530,479	2,480,760	1,789,073
1854.....	298,923	349,711	9,981,367	833,273	7,368,052	169,749	44,984	10,191,656	8,849,408	6,668,464	8,980	1,529,275	8,649,002	185,329	19,041,052	2,008,250	1,769,880
1855.....	125,835	459,920	7,947,923	1,536,184	13,030,400	176,077	68,563	11,378,834	12,325,086	5,18,896	3,749	1,023,447	17,737,277	120,633	23,703,902	1,219,545	3,265,014
1856.....	165,648	456,347	10,919,883	2,564,059	14,972,276	373,628	43,198	11,372,707	17,222,829	9,254,666	10,803	1,086,041	17,979,754	263,775	28,505,080	1,218,078	2,238,000
1857.....	286,469	540,113	11,730,387	2,107,240	8,882,825	396,821	121,120	12,873,343	11,693,632	9,718,601	875,329	13,206,486	266,699	24,006,976	1,383,444	1,556,205	27,006,629
1858.....	314,823	718,296	9,447,727	2,462,765	7,904,400	329,376	112,538	8,983,773	12,302,152	8,154,971	960,428	11,930,094	240,432	21,285,925	743,640	1,443,044	23,472,609
Average 1st 5 years.	66,568	211,284	6,563,193	897,865	4,828,212	84,346	107,010	7,211,656	5,558,509	6,181,922	12,161	901,045	5,534,675	135,362	17,765,165	1,668,358	1,110,702
" 2d 5 "	238,339	504,878	9,825,457	1,912,504	10,430,591	348,730	78,080	10,860,156	12,478,517	8,263,119	4,708	1,094,886	13,700,513	275,354	23,338,580	1,553,592	2,054,608
" 10 "	161,996	358,081	8,194,325	1,405,184	7,629,401	216,538	92,545	9,035,906	9,016,018	7,222,621	8,434	997,965	9,617,594	205,358	18,051,872	1,510,976	1,582,655

Journal of Railroad Law.

LIABILITY OF INTERSECTING ROUTES IN THE CARRIAGE OF GOODS.

A question comparatively new in relation to the liability of common carriers, has arisen by reason of a peculiarity in modern systems of travel and carriage. It is seldom that one line or company own a route extending more than a hundred and fifty or two hundred miles. But goods, especially in this country of enormous distances, have often to be transported five hundred, or a thousand miles, over two, three, four, or even half a dozen different lines, intersecting with each other. In case of a loss or injury to goods (the danger of which is frequently increased by the numerous re-shipments), who is responsible to the owner? Is each line responsible for the carriage of the goods the entire distance, or responsible only for the performance of its own duty? A merchant ships a box of goods on the Erie Railroad for Chicago. They never arrive at the place of their destination, or arrive there only after long delays and injured.

To whom is the owner to look for reparation? To the Erie Railroad? But if that road has safely carried the goods to Dunkirk, and there re-shipped them on the lake, it has fulfilled its duty. Must the owner then ascertain where the injury happened, and who is responsible for the neglect? Then every owner must travel with his goods, and trace them at every re-shipment, Justice, it seems, would be thus practically denied him. The question is not free from difficulties, and is, by no means, settled. We give our readers in this and the next week's article, four unreported cases decided at the General Term of the Common Pleas of this City, which throw some light on the question. From these cases the following principles may be deduced:

I. Ordinarily a common carrier is not responsible for injuries to goods occurring after they have passed to the custody of others, and beyond the terminus of his ordinary route.

II. But when a carrier undertakes to carry goods to a specified point for a stipulated price, he is responsible for their safe carriage the entire distance, although the place of their destination is beyond the ordinary terminus of the carrier's route.

III. To render him thus responsible, however, there must be a distinct agreement to carry the goods the entire distance. The mere expression of an opinion by the carrier's agent that they will go through right, is not enough to render the carrier so liable. Nor is the mere acceptances of freight for the entire distance, if the carrier receives it only as agent to pay over to the other carriers.

IV. The owner can, however, in all cases, hold the carrier responsible in whose possession the goods were, and by whose negligence they were injured, although his contract to carry was exclusively with another carrier, who undertook, and received freight for, the carriage of the goods the entire distance.

I. [JOSEPH J. DILLON vs. THE NEW YORK AND ERIE R. R. Co.]

This was an action to recover the value of two half pipes of brandy. They were delivered to the defendants who gave a receipt for them in these words:

"New York, 13 April, '54. Received of James Auchinclass, in good order, per New York and

Erie Railroad, two half pipes of brandy, marked Nicholas N. Knox, St. Paul, Minnesota Ter., care of B. H. Campbell, Galena, Ill."

Knox, the owner of the brandy, directed it to be shipped according to the receipt. Before shipping it, he asked the General Freight Agent of the defendants, if it was necessary to have an agent at the terminus of their road, or at Chicago, to receive it of an *attache* of the road. The agent said it would be unnecessary, the pipes would be shipped right on through. Knox then told him how they were directed, and the agent said that is all that is necessary, they will be forwarded on to you. It further appeared from a written stipulation, entered into upon the trial, that the goods were carried by the defendants to Dunkirk, the western terminus of their road, and there, in the usual course of transportation, delivered to a transportation line, or company, connected with the Erie Railroad, and engaged in transporting merchandise from Dunkirk towards the place of the ultimate destination of the goods in question, which re-shipment was according to the custom and usage in respect to the transportation of merchandise.

The opinion of the Court was rendered by

DALY, J.—There was nothing in the evidence to warrant the Court below in finding that the defendants undertook to carry the brandy to the place of destination. They merely engaged to carry it to Dunkirk, the terminus of the road, and to ship it, or forward it, from there by the usual line of conveyance to Galena, the place of destination, and this they did. Their liability as common carriers ceased at Dunkirk, and they then assumed the character of forwarders. (*Van Santvoord vs. St. John*, 6 Hill 158. *Farmers' and Merchants' Bank vs. Champlain Transportation Co.*, 16, Vorn 62; 18, *id.* 131. *Howe vs. New York and New Haven R. R. Co.*, 22, Conn. 1. *Nutting vs. Connecticut River R. R. Co.*, 1 Gray, 502. 1 *Parsons*, on Contracts, Note, p. 661.

In *Weed vs. Saratoga and Schenectady R. R. Co.*, 19 Ward, 534, the two lines were connected together by an agreement between themselves, and the defendants took the pay in advance for the conveyance of the plaintiff and his baggage for the whole distance.

Such was also the case in *Hart vs. The Rensselaer and Saratoga R. R. Co.*, 4 Seld., 37, and in *Wilcox vs. Parmlee*, 3 Sanf., 610; the defendants agreed in writing, to forward the goods of the plaintiff from New York to Fairport, to the close of the season, at a certain rate per 100 lbs., and the Court, though the word *forward* was used, held that this was an agreement, in substance, to carry the whole distance for a specified price. In these cases the carrier received, or it was agreed that he should receive the amount paid for transport to the place of destination, and thus having received, or contracted to receive, the full reward, he was bound to perform the entire service. But nothing of the kind appeared in this case. The enquiry made by Knox, showed that he knew that the defendants' road terminated at Dunkirk. He merely asked if it would be necessary to have an agent at that place, or at Chicago, to receive the goods, and was told that it would not; that the goods would be "shipped right on through," that they would be forwarded on to him, that the directions that were on the goods were all that were ne-

cessary, and what the defendants engaged to do upon the arrival of the goods at Dunkirk, they did, by delivering them to a transportation line engaged in transporting merchandise from Dunkirk to the place where the goods were directed. The reply to Knox by the freight agent that it would be unnecessary to have an agent to receive the goods at Chicago, that they would be shipped right on through, was as respects anything beyond the terminus of his own road, but the expression of an opinion, or belief, that the goods would be duly forwarded upon arriving at Chicago to the place to which they were destined, and cannot be construed as an engagement, or undertaking, on his part, or behalf of the defendants, to carry them, or to be responsible for the carriage, to the ultimate place of destination. The judgment should be reversed.

II. [LOUIS KREUDER vs. HENRY H. WOOLCOT AND OTHERS.]

In this case the facts are fully stated in the opinion of the Court, which was rendered by DALY, J., and were substantially as follows.

The firm of W. & B. Lange imported 23 cases of wine. They were taken from the vessel in which they arrived from Europe and were put on board one of the tow-boats of the Swiftsure line. When the cases were delivered on board the tow-boat, an order on the inspector of the vessel in which they were imported, in these words—

SIR—You will please send No. 44, one case to W. & B. Lange C. W. L. pier 1, N. R.—Nos. 44—63 and 65—67, twenty-three cases to the Swiftsure Line Tow-Boats, foot of Broad street, and hand the receipt to

W. & B. LANGE.

was handed to the receiving Clerk of the Swiftsure Line, and he endorsed upon it:

Rec'd on Barge M. Barnes, 23 Boxes. Sept. 6, '55.

Emilie Lange of the firm of W. & B. Lange of St. Louis, Mo., then went to the office of the defendants who are the agents of the Union Transportation line and shipped the wine from New York to St. Louis.

The defendants signed a bill of lading by which they agreed to forward the twenty-three boxes to St. Louis for a certain sum or charge for freight which was specified. E. Lange asked them who was their agent in St. Louis and they told him it was Gilbert Knapp, Jr. When the bill of lading was made out by the defendants it may fairly be presumed that the order and receipt above set forth was produced to them as the receiving clerk of the Swiftsure line testified that the bill of lading is usually made from the cart receipt.

The bill of lading is for twenty-three boxes mdse 44—63 and 65—67. E. Lange testifies that some one in the office put the name of Knapp on the bill and in the margin of the bill is the following entry—

"C. W. L." for Metzger & Lange, St. Louis, Mo., care Gilbert Knapp, Jr., St. Louis.

The boxes were shipped on the 7th of Sept., 1853, and in the fall of that year they were received and shipped by Geo. M. How of La Salle, Illinois, on board the steamer *Excelsior* plying on the Illinois river, and were brought by that boat to St. Louis. As the captain of the boat could not ascertain by whom they were shipped from New York, nor to whom they were shipped in St. Louis, for the only mark upon them was the three letters C. W. L., the captain placed them on

storage, with an auction firm in St. Louis. He made diligent efforts to find the consignees, but without success and then had them advertised for one month in a newspaper published in English in St. Louis, after which he advertised them for another month in a newspaper published in German in the same place, and no one appearing to claim them, they were sold at public auction to pay freight and charges.

W. & B. Lange sent the bill of lading received by them to E. Lange of the firm of Lange & Metzger in St. Louis, and E. Lange called several times on Gilbert Knapp Jr., in St. Louis, but learnt nothing of the goods. On the 31st of December, 1853, Knapp's clerk gave him a memorandum to the effect the boxes had arrived, and Lange transmitted it to W. & B. Lange, the consignors. After Lange had called upon him, Knapp made inquiries in relation to the boxes and ascertained that they had been sold and the proceeds after deducting the charges of the auctioneer, had been paid to the owner of the steamer that brought them to St. Louis. The plaintiff is the assignee of W. & B. Lange.

Upon this statement of facts, there can be no doubt of the plaintiff's right to recover. The agreement in the bill of lading to forward the goods from New York to St. Louis and the specification in the bill of lading of the amount of freight for the whole distance, show that the defendants undertook as common carriers to deliver the goods in St. Louis. *Wilcox vs. Parmlee*, 3 Sanf. S. C. 610. *Weed vs. the Saratoga and Schenectady R. R. Co.*, 19 Wend. 534. *Hart vs. the Rensselaer and Saratoga R. R. Co.*, 4 Seld. 37. The defendants were not forwarders but carriers. A simple engagement to forward goods at New York marked for a particular destination, is discharged by shipping the goods by the usual or most direct conveyance to the place designated, but an agreement to forward them from New York to the place of destination, the charge for freight for the whole distance being specified in the agreement, is very different. It is an agreement to carry them for that distance or to be responsible for that distance for the safe carriage and delivery at the place designated in the agreement.

The defendants told the shippers that Gilbert Knapp Jr., was their agent at St. Louis, and from their own testimony it appears that they were in the habit of consigning freight to him; by putting his name in the bill of lading they made him the immediate consignee at St. Louis, and they told E. Lange to call upon him at St. Louis to hear about the goods. Lange did so and did all that was incumbent upon the shipper to do. It was the duty of the defendants to see that the goods were duly delivered to Knapp at St. Louis or at least to have advised him in time that the goods were shipped to his care. If they had so advised it may fairly be presumed that the goods would not have been sold for the payment of charges. They engaged to carry the goods as they were marked. The initials C. W. L. in the margin of the bill of lading are placed between quotation marks sufficiently indicating the mark upon the goods, and that the defendants knew that they were not marked to Lange & Metzger or to the care of G. Knapp, Jr. If the defendants were not satisfied to carry them thus marked, they

should have said so. They, therefore, engaged to carry the boxes marked as they were and deliver them to Knapp at St. Louis, and having failed to do so are liable for the value of the goods.

The judgment should be affirmed.

Summary of the Performance and Cost of Locomotive Engines on the Baltimore and Ohio Railroad for June, 1859.

FIRST DIVISION. —No. of passenger engines.		6
Average number of miles run by each engine		2,499
Miles run to one cord wood (lighting fires).		1,304
" " quart of oil		43.2
Pounds of coal consumed per mile run		20.3
Cost of repairs per mile run		3.6c.
" fuel " "		2.5c.
" stores " "		0.5c.
Total cost " "		6.6c.
No. of tonnage engines (including switching engines)		58
Average No. of miles run by each engine		1,625
Miles run to one cord wood (lighting fires).		611
" " quart of oil		26.1
Pounds of coal consumed per mile run		54.9
Cost of repairs per mile run		8.4c.
" fuel " "		7.5c.
" stores " "		0.8c.
Total cost " "		16.7c.
SECOND DIVISION. —No. of passenger engines		4
Average No. of miles run by each engine		2,968
Miles run to one cord wood (lighting fires).		624
" " quart of oil		56.0
Pounds of coal consumed per mile run		21.7
Cost of repairs per mile run		4.4c.
" fuel " "		1.9c.
" stores " "		0.5c.
Total cost " "		0.8c.
There are also on this division three wood burning passenger engines;		
Average No. of miles run by each engine		2,161
Cost of repairs per mile run		3.5c.
" fuel " "		6.4c.
No. of tonnage engines		36
Average No. of miles run by each engine		1,687
Miles run to one cord wood (lighting fires).		1,065
" " quart of oil		30.0
Pounds of coal consumed per mile run		60.0
Cost of repairs per mile run		7.8c.
" fuel " "		5.2c.
" stores " "		0.7c.
Total cost " "		13.7c.
THIRD DIVISION. —No. of passenger engines (10 wheel engines, weighing 60,000 lbs.)		4
Average No. of miles run by each engine		2,090
Miles run to one cord wood (lighting fires).		981
" " quart of oil		27.4
Pounds of coal and coke (about equal quantities of each) consumed per mile run		59.9
Cost of repairs per mile run		7.8c.
" fuel " "		5.7c.
" stores " "		0.9c.
Total cost " "		14.4c.
No. of tonnage engines		36
Average No. of miles run by each engine		1,098
Miles run to one cord wood (lighting fires).		1,198
" " quart of oil		21.0
Pounds of coal consumed per mile run		91.6
Cost of repairs per mile run		13.0c.
" fuel " "		4.6c.
" stores " "		1.1c.
Total cost " "		18.7c.
FOURTH DIVISION. —No. of passenger engines		8
Average No. of miles run by each engine		2,280
Miles run to one cord wood (lighting fires).		1,027
" " quart of oil		37.7
Pounds of coal consumed per mile run		20.5
Cost of repairs per mile run		8.0c.
" fuel " "		2.5c.
" stores " "		0.8c.
Total cost " "		11.3c.
There is also upon this division one wood burning passenger engine;		
Average No. of miles run by each engine		3,015
Cost of repairs per mile run		7.5c.
" fuel " "		5.0c.
No. of tonnage engines		24

Average No. of miles run by each engine	1,035
Miles run to one cord wood (lighting fires).	483
" " quart of oil	22.9
Pounds of coal consumed per mile run	54.5
Cost of repairs per mile run	9.8c.
" fuel " "	3.3c.
" stores " "	1.1c.

Total cost " " 14.2c.

NOTE.—Cost of repairs includes the cleaning of engines.

The United States Patent Office—Sketch of its History.

(From the Constitution.)

To the student in pursuit of knowledge upon any branch of science and invention there is no museum or collection of material in this country at all to compare with that so beautifully and artistically arranged in the spacious halls and galleries of the Patent Office. Like the other institutions of the Federal Government, the growth of this office has increased with the development of the resources and rapid expansion of the power and population of the Republic. A glance at its history shows that such an establishment early attracted the attention of the wise and able men of the revolutionary era. Hence we find that, on the 10th of April, 1790, Congress passed an act authorizing the Secretary of State, the Secretary of War, and the Attorney-General, or any two of them, to grant patents for such new inventions and discoveries as they should deem sufficiently useful and important. This act, which originated the Patent Office, was repealed, and a new act passed on the 21st of February, 1793. Under this latter act, patents were confined to the citizens of the United States, and they were to be granted by the Secretary of State, subject to the revision of the Attorney-General. By the act of the 17th of April, 1800, the privilege of suing out a patent was extended to aliens of two years' residence in the United States, and the act of July 13, 1832, only required the alien to be a resident at the time of his application for a patent, and to have declared his intention, according to law, to become a citizen. By the act of Congress of July 4, 1836, all former laws on the subject were repealed, and the patent system re-enacted with important improvements, embodying a new organization of the office, and conferring upon it much more extensive powers than it had heretofore possessed. Under this act the establishment was organized essentially as it exists at this day, except that by subsequent acts the power of appeal was allowed from the decision of the Commissioner to either of the judges of the Circuit Court of the District of Columbia. The Patent Office occupied a part of the General Post Office building, which was destroyed by fire on the 15th of December, 1836. All its invaluable contents were lost by this sad accident; and by the act of 3d of March, 1837, Congress provided for the recording anew of patents, and assignments of patents recorded prior to the date of the conflagration, and for issuing new patents for those destroyed. The officers of the Patent Office were also directed to procure duplicates of the most interesting models destroyed, at an expense not exceeding \$100,000. The loss of the Patent Office, or rather of its contents, caused a deep sensation throughout the country, and universal regret was expressed on all hands at this untoward event. Even the ruthless Admiral Cockburn, who fired the Capitol and President's House, and other public edifices in this city, had spared the Patent Office, and yet accident in a few hours, destroyed the labors of many men for many years, which even that modern barbarian failed to touch.

This sketch of the legislation of Congress on the subject of patents, familiar as it is to the professional man, may give to the general reader an idea of the early and continuous importance attached by the law-makers to this important branch of the Government. Growing out of, and forming as it were an integral portion of, the patent system is what may be termed the patent-law branch of our jurisprudence. The minds of the most eminent of

our jurists, both on the bench and at the bar, have been taxed to the utmost by the intricacy and subtlety of the investigations of many cases which have arisen and been adjudicated upon under these laws. A legal writer justly terms the patent-law branch of our jurisprudence "the metaphysics of the law." And so it must continue to be, and to increase, because of the increasing spirit of improvement in agriculture, and manufactures, and machinery, both here and in Europe. The Patent Office is essentially and necessarily a national institution in every sense of the word, and will always remain, inasmuch as it would be impracticable for the States separately to make provision for the effectual protection of the rights secured to inventors under the patent laws.

All parties concerned in patents, whether as inventors or users of the machines for which they are granted, are fully aware of the importance of the faithful execution and enforcement of the patent laws; and there is no class of cases tried in our courts in which the community generally take more interest.

In all countries, and in all ages, inventors or discoverers of any new agent or implement useful to man in his varied pursuits, have been considered as among the most valuable citizens of the State, and deserving of its encouragement and protection. Of late years this appreciation of such men seems greatly to have increased, both in the United States and in Europe. We trust that it will ever be so, and that worth and merit, in whatever walk of life it may develop itself, may always meet with recompense and reward.

Cambria Railroad Iron—Street Rails for Passenger Railroads in Western Cities.

Wood, Morrell & Co., lessees of the Cambria Iron Works, during the twelvemonth beginning July 1, 1858, and ending June 30, 1859, manufactured 28,872 tons of iron rails. This large quantity was all made to order, for railroad companies in the West and South-western States, except a portion used by the Pennsylvania Railroad Company, in their tracks at Altoona, and elsewhere in the vicinity of the Alleghany mountain, where the character of the service performed requires that the rails shall be of the best and most enduring quality of iron.

The geographical position of the Cambria Iron Works, at Johnstown, at the base of the western slope of the Alleghany mountain—whence a line of canal *via* the river route, and a line of railroad *via* Greensburg, opens two outlets to free river navigation at Pittsburg, whence by steamboat rails can be delivered at all points on the navigable waters of the West, and by car to all inland places not accessible by water craft—enables the lessees to send their excellent rails into a vast market, upon terms mutually advantageous to the railroad companies and the iron-masters.

The reputation of Cambria rails is unsurpassed; and this fact considered in connection with the mineral resources of the immense landed estate belonging to the Cambria Iron Company, abounding with coal and ore, renders it certain that, under the efficient management of the present lessees, the Cambria Iron Works will continue to acquire new importance, and fill orders in larger amount from year to year.

For the supply of street rails for city passenger railroads in Western cities, Wood, Morrell & Co. possess unequalled facilities. And a knowledge of this truth prompted us, months ago, to allude to this new source whence orders for *Cambria rails* would be forthcoming. It, therefore, gives us pleasure to announce that a contract has been entered into with the lessees for street rails for the Pittsburg City Passenger Railroad; and soon, we have no doubt, other contracts will be made for street rails to be laid down in Cincinnati, Louisville, St. Louis, Chicago, New Orleans, and other cities. Everywhere in the cities of the West and South, is public attention called to the matter of horse railroads in the public streets, and soon the tracks will be down and the cars in motion.—U. S. R. R. & M. Reg.

Louisville and Nashville Railroad.

The Louisville and Nashville Railroad Company was chartered by the Kentucky Legislature, March 5th, 1850. Its capital stock was fixed by the act of incorporation at \$3,000,000, with the privilege of an increase to \$4,000,000. On the 17th of June of the same year, the City Council of Louisville subscribed for \$1,000,000 of the stock which was ratified by a vote of the people August 23d. On the 4th of September following, the stock books of the Co. were opened, and \$100,000 having been subscribed, a meeting of the stockholders was held September 27th, and seven directors elected. These directors chose L. L. Shreve, first President of the corporation.

L. L. SHREVE'S ADMINISTRATION.

Mr. Shreve acted as President of the company from September, 1850, to October, 1854. In June, 1851, the City Council made an appropriation of \$4,000 towards surveys for the route of the road, and authorized the employment of L. L. Robinson as engineer. Under this act of the council, Mr. Robinson began the survey at the junction of Broadway and Seventh streets, in August, 1851. On the 8th of December, 1852, the first division of the road was located by resolution of the Board of Directors. On the 13th of April the company contracted with Seymour, Morton & Co., to build the whole road in two and one-half years, and the work of construction was begun the first Monday in May of the same year.

On the 1st of October, 1852, Mr. Shreve made his first annual report to the stockholders. At that time the stock subscriptions of the company amounted to \$1,600,000, and the expenditures to \$24,598.52. On the 1st of October, 1853, he made his second report, showing a stock subscription of \$3,328,700, while the receipts of the Company had been \$146,502 70, and its expenditures \$115,861 85. His annual report, June 19th, 1854, at a called meeting of the stockholders, showed the receipts of the company to that date to have been \$1,313,394 43, and its disbursements \$817,179 46.

GOV. HELM'S ADMINISTRATION.

The Hon. John L. Helm was elected President, as successor to Mr. Shreve, October, 1854, and he still holds that position. When his first annual report was made, October 1st, 1855, the receipts of the company had been \$1,559,562 34, and its expenditures \$921,840 23. The total stock subscriptions were estimated at \$4,034,550 May 30th, 1855. His second annual report, October 1st, 1856, showed the expenditures of the Company to be \$1,467,260 26, and its total available assets were estimated at \$2,422,735 12. These assets included the second million subscribed by Louisville, which, if added to previous stock subscriptions, would make a total of \$5,034,550. His third report, October 1st, 1857, showed total expenditures \$2,589,150 19, and assets \$1,704,502 08. And his fourth and last report, October 1st, 1858, showed total expenditures \$3,384,980 07, and remaining assets \$661,714 51.

MR. GUTHRIE'S ADMINISTRATION.

In the spring of 1857, the Hon. James Guthrie left the Treasury Department of the Federal Government and came home. He was made Vice President of the company, and though nominally occupying this subordinate position, he has really been the head and front of the enterprise. The health of Gov. Helm was bad, and physical inability rendered it impossible for him to lead the enterprise. The Vice President has, therefore, been the real President, and the progress of the road since March, 1857, in spite of difficulties insuperable to almost any financial head, has shown the skill and might of Mr. Guthrie.

It will be seen by reference to the estimates, that from the act of incorporation in March, 1850, to March, 1857, a period of seven years, or from the beginning of the work of construction in May, 1852, a period of five years, the company only expended about \$1,500,000 in constructing a road that was to cost \$7,000,000. This mode of building railroads did not suit Mr. Guthrie's go ahead notions. He went to work, and in spite of the terrible financial crisis of 1857 and 1858, he man-

aged to swell the expenditures to \$2,289,150 19 by October, 1857, and to \$3,384,980 07 by October, 1858. His theory was to spend as much money as he could judiciously use in rushing the road to completion instead of letting it drag along at a snail's gallop until interest and the salaries of officers eat up the assets. He has pushed his theory right ahead with his wonted inflexible and untiring perseverance, using the credit of all the friends he could enlist to raise money, and finally bonding the company and mortgaging the road to the amount of \$2,000,000. He has sold nearly a million and a quarter of these bonds right here at home, and raised money enough to make the early completion of the entire road a fixed fact.

The main road is now being run over by daily trains of cars from Louisville across Green river at Mumfordsville, a distance of 74 miles. At the Nashville end, the cars are running over the whole distance of 71 miles between Bowling Green and Nashville, except nine miles which are now ready for the iron. There are, therefore, 136 miles of the main road, over which the cars are now running, which will leave only forty-eight miles yet to be completed. On these forty-eight miles much the greater part of the work is done, and the cars will run over the whole line, from Louisville to Nashville, before the first day of January next.—*Louisville Courier.*

Trade of San Francisco.

We copy the following from the San Francisco *Bulletin*, giving a resume of the trade of that city for six months ending June 30:

FOREIGN COMMERCE.

From domestic Atlantic ports, Great Britain, France, China and the East Indies, the aggregate tonnage for the first half of each of the three years was as follows:

1857, tons, first six months.....	83,088
1858, tons, first six months.....	81,020
1859, tons, first six months.....	126,555

The foregoing shows an increased inward tonnage movement from the principal quarters whence our supplies are derived of more than 52 per cent. the present year over 1857, and nearly 55 per cent. over 1858. A most forcible commentary upon the condition of our overstocked market is afforded by the above data.

These excessive importations are further illustrated by a comparison of the amount of freight money paid during the same period as follows:

Freights paid first six months, 1857....	\$1,465,884
Freights paid first six months, 1858....	1,275,816
Freights paid first six months, 1859....	2,355,114

As it is only in exceptional cases that vessels arrive here with anything less than full cargoes, the amount of their tonnage correctly shows the extent of our imports; but our exports are better exhibited by their market values. The following is a comparative statement of the exports, other than treasure, for the first half of each of the last three years:

First six months of 1859.....	\$2,324,734
First six months of 1858.....	1,795,445
First six months of 1857.....	2,072,012

THE QUICKSILVER TRADE.

The exports of quicksilver for the first half of the last three years were as follows: In 1857, 11,938 flasks; in 1858, 13,452 flasks; 1859, 581 flasks. This immense falling off is solely attributable to the suspension of operations at the New Almaden Works, caused by yet existing litigation as to the proprietorship.

EXPORTS OF GOLD.

The exports of treasure for the first six months of 1859, 1858 and 1857 were as follows:

First six months of 1859.....	\$23,685,562
First six months of 1858.....	23,537,575
First six months of 1857.....	23,743,489

This shows a remarkable approximation for the periods named, and together with other indications, gives rise to the opinion that the sum total of the present year will be fully up to that of either of the former, if it does not somewhat ex-

ceed them. The annual product of the mines is doubtless as great as ever, but can never be judged of accurately by the exports, as these are governed to a great extent by financial emergencies abroad.

OPERATIONS OF THE MINT.

The deposits of gold bullion at the United States Branch Mint in this city, for the first half of 1859 and 1858 were as follows:

	Ozs.
First six months of 1859.....	440,342.87
First six months of 1858.....	663,387.69

Falling off.....223,044.82

This large decline the present year is attributable to the prolonged winter, which prevented operations in many important mining sections till late in the season.

MOVEMENT OF PASSENGERS.

The movement of passengers, arriving and departing by sea, for the next six months of 1859, is denoted as follows: Arrived, 17,034; departed, 11,103; gain, 5,931. During a corresponding period of 1858, owing to the Fraser River exodus, there was a net loss of 202. During a like period of 1857, there was a gain of 4,295. The gain from arrivals by sea for the entire of 1858, notwithstanding the loss adverted to in the first half of the year, was 12,745, which somewhat exceeds the average gain of 1859. The greatly reduced prices of fare, however, which have lately depleted our population, must swell the total gain of the year, since sufficient time has not yet elapsed for us to have experienced its benefits along with its disadvantages.

Railroad Earnings.

The traffic of the Great Western Railway of Canada for the week ending July 15, 1859, was as follows:

Passengers.....	\$17,999 26
Freight and live stock.....	7,882 66
Mails and sundries.....	1,615 98

Total.....	\$27,397 91
Corresponding week of last year.....	33,904 36

Decrease.....\$6,606 45

The receipts of the Grand Trunk Railway of Canada for the week ending July 9, were.....\$39,707 94
Week ending July 10, 1858.....38,883 97

.....	\$823 96
Total traffic from July 1st.....	\$51,188 41
Same period last year.....	51,923 42

Decrease.....\$735 01

The following is a comparative statement of the earnings of the Northern Central Railway Company for the month of June:

From	1859.	1858.	Increase.
Merchandise.....	\$32,643 98	\$25,983 49	\$6,658 40
Coal.....	18,091 51	10,883 23	7,208 28
Passengers..	19,422 93	16,686 92	2,739 01
Mails.....	2,425 00	1,437 50	1,037 50
Sundries....	84 09	.....	84 09
	\$72,667 51	\$55,043 14	\$17,624 37

Eaton and Richmond Railroad.

We learn that substantial improvements have been made upon the line of this road, between Hamilton and Richmond, during the last year, and that the bridge structures and road-bed are to be renewed at various points this season. The Corners Branch culvert, 3 miles below Richmond—80 feet long, with a 20 feet span—is now completed, and is a substantial piece of masonry. All the wooden structures between Eaton and Richmond will be replaced with substantial stone work. The bridge at Somerville is to be rebuilt, and ten thousand

new cross-ties put in, as early as practicable. Two hundred tons of new iron will be laid in the track before the close of September.

American Railroad Journal.

Saturday, July 30, 1859.

Free Passes on the Erie Railroad.

We understand that the cardinal point so long made by this company to grant no free passes, has, like some other of its "rules founded upon principle," gone the way of all the earth. The dead-head system is restored. To what extent we do not care to enquire; but the principle so long contended for by Mr. Moran is completely given up.

Without going into the policy of having a *dead-head* list, we may say that the thing is considered indispensable, and is practised by our best managed roads. If it has been found politic for the Erie to return to it, it was certainly impolitic to abolish it altogether. This company pertinaciously held on to its position till all the injury was suffered that a mistaken policy could inflict. It now yields, when yielding will gain neither credit nor friends. A disposition to institute radical changes in important affairs ought always to be accompanied by a keen appreciation of their effect; so that an obnoxious point can be receded from before its injurious effects can be felt, and before the moral position of their authors can be weakened. To adhere to them till forced to yield by the pressure of necessity, implies more stubbornness than good sense, and more self-will than high principle.

"The American Railway Bureau" and "American Railway Review."

The "American Railway Bureau" is an organization recently established in this city, ostensibly for the purpose of collecting information touching the condition of our railroads; whereof Hon. Myron H. Clark is President, Charles B. Stuart is Consulting Engineer, and Samuel P. Lyman, Secretary. Of these three, Mr. Lyman is probably best known to the public. The "Review" is its organ, though the exact office it is to execute, we have not yet a very clear idea. If these gentlemen propose to spend their time and means in collecting and diffusing information in reference to our railroads, such public spirit and unselfishness cannot be too highly commended.

There is one feature connected with this enterprise, which would seem to interfere somewhat with the entire disinterestedness of the undertaking, and the reliability of the information to be made public. The president of the "Bureau" is busily engaged in bringing out new railway schemes. It is not too much to suppose that he can command for them the endorsement and support both of the "Bureau" and "Review," he furnishing, as we understand, a considerable portion of the capital necessary to their support. We presume we are not uncharitable in supposing that the "Bureau" and "Review" would turn a penny in the same way, should an opportunity offer. In plain truth, we suppose the great object of this enterprise is to put *new* schemes upon the public instead of warning it against old ones. With such objects in view, it may not be a very safe *mentor* to railway investors.

Running Roads by Contract—the Philadelphia, Wilmington and Baltimore R. R.

The only railroad in this country in which the contract system has been adopted, is the Philadelphia, Wilmington and Baltimore. The favorable results that have followed this experiment should commend it to the attention of every railroad company in the country, and should secure the adoption of a system in which the amount of compensation is made to depend upon the capability, industry, and faithfulness, of the parties employed. On this road, to quote the report of the President, "nearly all the service, excepting the repairs of bridges, the Treasury department, and that of the conductors and supervising officers, is performed by *contract* instead of fixed salaries." In commenting upon the change of system, he further says: "Nothing can more effectually secure promptness, energy, and thoroughness, than this system properly carried out in the hands of faithful contractors. *Our trains have never been run with so much regularity; our road, cars, and engines, have never been in so good order as now.* We do not mean to say that this state of things could not have been brought about under the old system—but we are certain it could not have been accomplished as cheaply, and so easily, as under the contract system. *Under proper restrictions, it will be one of the most important means to work out a radical improvement in the value of railroad property.* Public works rarely succeed under the management of State government, from a want of individual responsibility and pecuniary interest in the success of the work. Private corporations generally succeed better than State governments in the management of public works, because individual care and interest can be better called into action; but even here that keen vigilance in all departments, and particularly in the expenditure of money, which is the true element of success in private business, can rarely be attained. *If all the employees of a corporation could be made pecuniarily interested in its safe and economical management, its success would be more certain, extravagant expenditures would be avoided, and accidents much more rare. A proper contract system secures all those important objects, when faithfully carried out by competent men.*"

We commend this example not only to the directors of the Erie railroad, but to railroad companies and to the stock and bondholders in all our roads. In railway affairs there is no better authority than the gentleman who has inaugurated the contract system; no person of wider or more valuable experience. Let us see what his system has done for his road, and what it cost to operate it in comparison with other lines.

Statement showing the operations of the Philadelphia, Wilmington and Baltimore R. R. Co. for three years past.

Years.	Gross Receipts.	Current Expenses.	Ratio of net receipts to current expenses.
1856.....	\$1,105,101	\$581,835	47
1857.....	1,119,910	502,408	55
1858.....	1,075,962	456,723	58

The current expenses embrace all moneys expended in construction, and sufficient to keep the road in efficient condition.

The statement subjoined will show in detail the

cost of some of the leading items of service for the three past years:

Years.	N ^o of miles run.	Cost per mile of Locomotives.	Cost p. mile run.	Total cost of Fuel.	Cost p. mile run.	Cost of Oil and Waste.	Cost p. mile run.
1856..	459,976	\$27,282	5.9	91,029	19.8	4,463	.97
1857..	429,035	23,174	5.4	68,149	15.8	4,343	1.01
1858..	388,670	19,070	4.9	57,395	14.7	2,836	.73

Notwithstanding such results, this road is one of the most expensive to operate and maintain in the United States. Both terminations are in large cities—a fact which always adds largely to the cost of conducting a road. It has much more than the usual number of perishable structures, crossing as it does numerous and wide indentations of the Chesapeake Bay. The continuity of its track is broken by the Susquehanna river, rendering necessary the maintenance of expensive steam ferry boats as well as two distinct sets of engines and cars. With a continuous line, the road is just about of the right length, 98 miles, for running the trains with the greatest economy. Both in Philadelphia and Baltimore the passengers have to be transported, at considerable additional expense, either by steamboats, horse cars, or wagons, to the depots of other roads. Its fuel, which is almost entirely wood, costs high. Almost every circumstance connected with this road is against its being cheaply operated. Till the reforms now introduced were made, the current expenses did bear a very large ratio to the gross receipts. With them, the road now shows more favorable results than any other in the country.

The expenses for the last year, in detail, were stated as follows:—

OPERATING EXPENSES.

Repairs of road	\$46,849 16
Do. bridges	13,411 15
Do. fences, stations, b'ld'gs, etc.	10,982 87
Do. locomotives	21,688 37
Do. passenger & merch'dise cars	16,745 06
Expenses of passenger department	56,928 44
Do. freight	55,598 99
Switchmen, watchmen, etc.....	12,861 55
Gratuities, etc. to employees injured and sundry allowances to parties receiving injuries while crossing the road	1,895 33
Taxes and insurance	12,778 80
Law expenses	5,905 21
Office, salaries, etc.	20,974 88
Ferries	22,170 52
Rents	6,014 18
Wood and coal for locomotives.	57,395 77
Coal for other purposes	1,411 84
Oil, tallow, waste, etc.	8,611 67
Magnetic telegraph	3,496 26
Removing ice and snow	103 07
Miscellaneous	15,595 12

\$394,418 25

EXPENDITURES FOR NEW WORK.

New track	\$38,338 77
" bridges	409 43
" fences	188 95
" locomotives	1,606 07
" baggage cars	2,235 42
" merchandise cars ..	2,566 64
" stations, b'ld'gs, etc.	2,974 18
" engine house at Baltimore.	13,985 33

62,804 79

\$456,723 04

How has such a saving been brought about? The President in his report tells us—"By making employees feel a pecuniary interest in the safe and economical management of the road." This is the simple recipe for such marvelous results. This road is run by contract. It is consequently made the interest of every person employed to reduce expenses to the lowest limit. Yet the President tells us that "the trains have never been run with so much regularity: the roads, engines and cars have never been in such good order as under this contract system." It has restored the finances of the company. It gives the stockholders what they did not get without it, regular dividends. It gave them last year 58 per cent. of the gross earnings of a road, certainly one of the most difficult and expensive to run and maintain in the United States. The Philadelphia, Wilmington & Baltimore, would be an ideal road for many of our railroad managers. In their easy slipshod, do-nothing way, they could, with a good easy conscience, charge the whole amount of earnings to expenses, and think they had done well at that. They would have thought it an ample vindication of themselves to have pointed to the line of the road, with its track at the Susquehanna, cutting off nearly all income from freight; to its numerous bridges; to its expensive termini, and to the great cost it is at in receiving and delivering its passengers. Yet by steady perseverance, and the adoption of a proper system, all these difficulties have not only been overcome, but the road rendered one of the most productive in its receipts, of any in the country.

Now that the subject of placing the working of the Erie under a similar system is before the public, we refer the stock and bondholders of this road to the illustration given. We have not been afraid that the correctness of our arguments in favor of a similar system for the Erie, would be controverted in the abstract, but that it would be met by the ordinary argument of the incapable and incredulous, "Oh, this is all very fine to talk about, but it will never work in practice." It has worked in practice, and most favorably. Is not the example set worth trying by the stock and unsecured bondholders of the Erie? As at present conducted, is there a shadow of a chance for them? Yet if the road could be run for 60 cents on the dollar, enough would be realized to pay the interest on the entire debt of the company. Nothing is to be lost by adopting the contract system. Much may be gained by it.

Atlanta and West Point Railroad.

The following is a statement of the business of this road for the year ending July 1st:—

Receipts from passengers	\$179,876 58
From freights	161,640 63
From mails	20,543 76
	\$362,060 98
Expenditures	164,701 22
Net profits	\$197,359 76
Increase, over previous years in passengers	\$34,298 32
In freights	34,766 56
Total	\$69,064 88
Total bales cotton	63,019
Increase	25,503
Total passengers carried	66,518
—equivalent to 4,490,505 carried one mile.	

How Fast Rails Depreciate, and how much it Costs to Maintain Road-bed and Superstructure.

The annual depreciation of rails, and the cost of keeping up the track, including superstructure, has been made the subject of careful observation on the Philadelphia, Wilmington and Baltimore Railroad, for the purpose of establishing the law, or degree, of their annual depreciation, and, consequently, the amount necessary to be appropriated each year for their maintenance.

Within the past 8 years the iron on this road has been entirely re-laid. With a view of ascertaining its present condition, every bar, during the past year, has been carefully examined by an experienced inspector. The President, in his report, states that the rails manufactured in England, in the early days of railroads, were the best ever manufactured. But as the demand increased on this side, our people were more anxious to get their orders filled than careful about quality. The English manufacturer, taking advantage of our eagerness, and, perhaps, of our mode of payment, sent us iron made from cinder-beds, and from refuse of their manufacturing establishments—much of it not worth the laying down.

Of the iron now on this road, 4,500 tons, manufactured by Bailey Brothers, in 1851-2, turned out to be of superior quality. A careful inspection of this iron, as it now remains on the track, together with an account of the number of bars that have been taken out, shows an annual deterioration of 8 63-100 per cent.—showing a duration of 11 58-100 years. The rails supplied by the Montour company, early in 1851, 1,000 tons, has proved of a very superior quality, exhibiting a durability of 12 65-100 years. That furnished by the same company in 1852, 1,500 tons, proved not to be so good, and exhibits a probable durability of 9 8-10 years. A lot furnished to this road by Reeves, Abbott & Co., from the Safe Harbor Works, shows a durability of 9 8-10 years. A lot of English iron, purchased of Losh, Wilson & Bell, of New Castle, proved to be the poorest laid on the road, having an average durability of only 4 1-10 years. There are many causes beside the quality of the iron that affect its durability. Iron on a dry and well-ballasted road-bed, with adequate drainage, and with good ties and joint fastenings, and always kept in adjustment, will show a durability twice as great as when laid on a road-bed of common earth, or clay, without the proper drainage, or ties or fastenings.

The Philadelphia, Wilmington and Baltimore Railroad now use American iron exclusively, either from the Montour Mills, or from Reeves, Buck & Co., and weighing only 50 lbs. to the yard. Light rails require a more perfect drainage, better joint fastenings, and about 25 per cent. more of ties. With these conditions, the President, in his report, expresses the opinion that the rails will prove as durable as those weighing 65 lbs. to the yard. He estimates the durability of rails, based upon the experience of his road, at 10 years. This will require for this road, 100 miles long, 800 tons of new rails annually, which can be had in an exchange for the old at \$20 per ton. The average life of a cross-tie is estimated at 7 years. The number annually required on this road, with the light rail, is 35,000, costing 27½ cents each. The cost of relaying is estimated at \$400 per mile. The fastening spikes, castings, and switches, at \$600 per

mile. The total amount of all these items is \$36,450. The cost of labor in adjusting, ditching, inspecting track, is estimated at \$250 per mile for the whole road, making a total annual expenditure for the perpetual maintenance of track in a high state of efficiency, \$61,420, equal to \$614 50 per mile, annually.

Of course the degree of wear of track on any road must depend upon the number and weight of trains. The average number of miles run by the trains on the Philadelphia, Wilmington and Baltimore Railroad, is 425,000. The cost, per mile, consequently, for maintenance of road-bed and superstructure, would be 14.45 cents per mile run.

Changes on the New York & Erie Railroad.

The daily papers are filled with rumors of changes on the New York and Erie Railroad. Mr. Sloan of the Hudson River, and Mr. Campbell of the Harlem have been named in connection with the presidency of the Erie. Whether these are anything more than rumors we are unable to say. We presume the names of Mr. Sloan and Mr. Campbell have been used without any authority from these gentlemen. We do not suppose it probable that any important changes will take place on the Erie till the annual election of directors, which comes off about two months hence. At that time we presume radical changes will be made.

Keokuk, Mt. Pleasant and Muscatine R. R.

The report of this company under date of June 1, 1859, gives the following statement of the receipts and disbursements of this road to that date:

RECEIPTS.

From capital stock:	
Keokuk City bonds	\$100,000 00
Lee County bonds	150,000 00
Mt. Pleasant City bonds	50,000 00
Henry County bonds	100,000 00
Louisia County bonds (to be issued)	50,000 00
West Point Town bonds	10,000 00
Individual subscription	88,216 39
Bills payable, (due 1867)	6,000 00
Bills payable	300 00
Mortgage bonds	414,000 00
Amounts to the credit of sundry persons, being claims for settlement on final account	18,289 08
Transferable and preliminary certifs.	1,572 70
Stock due contractors on estimates	15,104 00
Domestic bonds	3,000 00
Income account	16,186 30
	\$1,022,668 47

DISBURSEMENTS.

Construction account, which includes engineering, superstructure, grading, bridging, rolling stock, discount on bonds, &c	\$741,703 18
Salaries of officers	4,000 00
Real estate	16,730 00
Right of way	14,906 16
Balance on hand	245,329 13
	\$1,022,608 47

The balance of \$245,329 13 consists of:
 Bills receivable \$400 10
 Amounts to debt of sundry persons, bonds on hand and to be issued 219,482 57
 Subscriptions in arrears 25,446 46

\$245,329 13

The road is under contract to be completed to Mt. Pleasant by Dec. 1860, and to Columbus at the point of junction with Muscatine and Oskaloosa Railroad, by 1862.

The directors are Ralph P. Lowe, William Pat-

terson, Charles Parsons, D. W. Kilbourne, Smith Hamill, J. M. Shelly, Keokuk; C. N. McDowell, John B. Lash, Robert Wilson, Laurin Dewey, Mt. Pleasant; Francis Springer, Columbus City.

OFFICERS.

LAURIN DEWEY, *President*; JOHN W. OGDEN, *Secretary and Treasurer*; GUY WELLS, *Engineer*.

Tredegar Iron Works.

We invite attention to the advertisement of Messrs. J. R. ANDERSON & Co., in another column. Since the destruction of their spike and bolt factory in April last, they have erected on the spot a large and well-adapted new brick building supplied with the most modern and improved machinery and to such effect that they can turn out twenty-five tons of spikes and five tons of bolts per day.

Although the spike and bolt manufacture form now, under these vast improvements, an important branch in the Tredegar Iron Works, still this progressive Company are at all times ready to fill in the best style possible, all orders for bar iron of all sizes, railway chairs and spikes, switches, frogs, pumps, bridge bolts, etc., freight cars, with iron or wooden truck, iron and brass castings, of all descriptions, wheels and axles, separate or fitted, locomotives, stationary and portable engines, of any desired power, saw mills, grist mills and sugar mills, cannon of all calibres, iron or brass; also, shot and shells, and every other description of iron work.

The Tredegar Works, well-known all over the Union, give work to more employees than any other establishment in Richmond. The Tredegar Iron Works Company, consists of Messrs. Joseph R. Anderson, John F. Tanner, R. Archer, and R. S. Archer.

Interest and Dividends.

The interest on the First Mortgage Bonds of the Cincinnati, Hamilton and Dayton railroad, now due, will be paid at the office of the Company, at the Sixth-street Depot, or at the Lafayette Bank.

The interest coupons on the 2d Mortgage Bonds of 1861 and Dover extension Bonds of the Harlem road will be paid at the office, corner of Twenty-sixth street.

The Connecticut River Railroad has declared a dividend of 4 per cent. on the preferred and $2\frac{1}{2}$ per cent. on the common stock, payable 1st of August next to holders of record July 20th.

The South Shore Railroad (Lake Erie) has declared a semi-annual dividend of 5 per cent.

The interest coupons on the first mortgage bonds of the Central Railroad of New Jersey, due on the 1st of August, will be paid at the office of the company on that day.

The interest coupons due August 1st, on all classes of bonds of the Michigan Southern and Northern Indiana Railroad Companies, and on the bonds of the Detroit, Monroe and Toledo Railroad Company, will be paid on that day at the Corn Exchange Bank.

Cocheco Railroad.

The following gentlemen were elected directors of this road for the current year, at a meeting of the stockholders held at Alton, N. H.: William Hill of North Berwick, President, William Hale, Joseph H. Smith, George Mathewson, Charles W. Woodman of Dover, George M. Herring of Farmington, and John McDuffee of Rochester,

Brooklyn and Jamaica Railroad.

The general account of the company is as follows:

GENERAL STATEMENT.

The capital stock of the Brooklyn and Jamaica Railroad consists of 6,000 shares at par value of \$50 per share, equal to \$300,000 00
The company own 303 shares, leaving outstanding 5,697 shares, equal to. 284,850 00
The total debt of the company amounts to 85,000 00
(Represented by 85 bonds of \$1,000 each, bearing interest at 7 per cent. semi-annually, payable on the 1st day of June, 1870).
The company holds 71 bonds of \$1,000 each, of the Long Island Railroad Company, bearing interest at 6 per cent. semi-annually, payable 1st January, 1870..... 71,000 00

ANNUAL STATEMENT.

Total rent to be received this year \$33,300 00
Interest on the \$71,000 Long Island Railroad bonds, 6 per cent..... 4,260 00
Interest to be paid on Brooklyn and Jamaica Railroad bonds, \$85,000 at 7 per cent..... \$5,950 00
Dividend of 9 per cent. on capital stock, \$284,850.. 25,636 50
Expenses, say..... 750 00
Surplus \$5,223 50

Ohio Central Railroad.

This road is now in the hands of a receiver, which practically winds it up as far as the stock and bondholders are concerned. If it pays expenses and salaries, and keeps itself in repair, this is all that can be expected from it.

The first report of the receiver gives the following result:

RECEIPTS.

Balance on hand May 1st..... \$2,813 99
Receipts prior to May 1st..... 28,305 68
Do. since May 1st—Passengers .. 12,040 03
Do. do. do. Freight 9,015 82
Do. do. do. Express 473 20
Total receipts..... \$52,648 72

EXPENDITURES.

Road department..... \$1,781 76
Transportation department..... 3,303 19
Material for shops..... 3,676 69
Wood 2,308 58
Balances due connecting roads..... 7,061 48
Taxes 1,000 00
Legal expenses 48 06
Pay roll 24,050 00
..... \$43,229 00

—showing a balance of \$9,419.

The uncollected revenues for May are as follows:—

Due from other roads on freight acc't .. \$5,069 05
Do. station agents on do. .. 8,373 82
Do. other roads on passenger acc't 4,016 46
Do. station agents on do. 2,353 99
Do. conductors on do. 182 56
Do. other roads on do. .. 2,639 76
Do. express earnings 58 39
Do. one month mail transportation 2,297 91
Total..... \$24,991 94

INVENTORY OF PROPERTY.

The receiver's inventory of property and assets of the road includes a detailed statement of

length of track, stations, dwellings, lands, workshops, tools, etc., together with the following recapitulation of the road stock:

Number of locomotives 40
Do. passenger cars..... 28
Do. baggage do. 11
Do. freight do. 469
Of the engines, 13 are coal burners and 27 wood; 11 are denominated first class freight; 18 second; 2 third, and 9 first class passenger. Of the total number, 23 are reported in good running order; 13 need repairs, and 4 need re building. Of the passenger cars, 12 are reported in good order, 8 in fair order, 2 being re-painted, and 6 need re-building.

Wabash Valley Railroad.

Subjoined will be found a circular just issued by this company. We take it that Mr. Boody acts upon the idea that the owners of the road being the bondholders, can better forego their interest for a few months than raise money by extravagant rates of interest to pay themselves.

OFFICE TOLEDO & WABASH RAILWAY Co.,
No. 54 Exchange Place,
New York, July 27, 1859.

The semi-annual interest on the First Mortgage Bonds of this Company, accruing on the 1st proximo, will not be paid on maturity, the company asking a temporary indulgence therefor for a period of three or four months. The annexed exhibit indicates the gross earnings of the road during the twelve months ending June 30, viz:—

July.....	\$75,866 48	Jan'y.....	\$39,052 10
August.....	112,341 87	Feb'y.....	39,750 88
September ..	103,491 14	March.....	61,724 34
October	96,063 57	April.....	68,918 26
November ..	63,517 39	May.....	60,068 24
December ..	41,503 46	June.....	58,481 23

Total..... \$820,778 96
Actual operating expenses for the same period 406,250 56

Balance \$414,528 40

One year's interest on the entire bonds of the company is, to wit:

First mortgage, \$3,400,000.. \$238,000
Second do. 2,500,000.. 175,000
..... 413,000 00

Balance..... \$1,528 40

From the foregoing statement it appears that notwithstanding the pervading stagnation of business and stringency of money affairs at the West, coupled with three successive seasons of short crops, the revenues derived from the road have proved amply sufficient to defray all operating expenses, and also to meet the entire interest on the bonded indebtedness of the company. It may, therefore, be regarded as demonstrated that a degree of material and financial strength and capacity inheres in the road, sufficient not only to prove it to be self-sustaining, but rewarding and remunerative to its owners, and that too under the usual disadvantages above mentioned.

The present inability of the company to promptly meet the August dividend of interest arises from the necessity of employing the means usually applicable thereto to other and indispensable objects. During the past year it was found essential to the successful operation of the road to increase its equipment of power and rolling machinery. Accordingly locomotives and cars were purchased to the extent of \$115,000; within the same period expenditures of some \$45,000 were made in graveling and fencing the road, and building grain warehouses, and superadded thereto were expenses of \$25,000 incident to carrying to successful consummation the recent compromise arrangement entered into between the various classes of creditors of the company. The extraordinary damages sustained by reason of the great freshet of last

season, by which the company lost one of its largest bridges, besides numerous culverts and other extensive structures, required an outlay of \$40,000 to restore the road to its original usefulness. These large expenditures, not likely to occur again, aggregating \$225,000, were made directly from the monthly earnings of the road, and indicate the occasion of the temporary indulgence now sought of the first bondholders.

The present and future prospects of the road were never more hopeful and encouraging. A very large crop of wheat, of unusually excellent quality, has been recently harvested throughout the Wabash Valley, and the yield of corn promises to be very abundant. Other elements of advantage and prosperity will soon be secured by the completion and opening of two important lines of tributary railways. The Logansport, Peoria and Burlington Railroad is in a forward state, the iron and superstructure is now being laid, and it is expected that it will be ready for the passage of trains early in November next. The completion of this great trunk line gives the shortest and most practicable route from Burlington and Central Iowa to all eastern States, and will draw a vast traffic upon the road of this company from one of the most extensive and richest sections of country in the West. During the present season, the Quincy and Palmyra Railroad will be in successful operation, thus filling up the only remaining link of rail communication to St. Joseph, Missouri. The completion of these great works, combined with the large incoming crops, and unmistakable indications of a general revival of business at the West, furnish substantial grounds for confidence in the future success of the road, and the belief that the interest now deferred will be promptly met at the date heretofore named. Those parties holding coupons maturing on the first prox. will be allowed interest for the period thereafter held.

A. BOODY, President.

Verdict of the Jury on the Michigan Southern Railroad Disaster.

We find in the South Bend Register a portion of the verdict of the Jury empanelled in the Michigan Southern Railroad disaster case at Mishawakio. After detailing the particulars of the case, the Jury say:

"That they are of the opinion that the embankment and culvert at the place were well and substantially built, but the culvert was not of sufficient size and capacity to carry off the water safely in time of a flood, and liable to be obstructed by drift wood, rails, trees, &c. That said culvert was 4½ feet wide, and 6½ feet high, and should have been as large again.

"The Jury further, upon their oaths, say that the foreman, Dennis Kane, was guilty of wilful neglect of duty in not examining the track on and over the embankment, after the storm on the night before the time for the arrival of the train, in accordance with the instructions and regulations of the managers of the road."

The Jury was composed of the most eminent citizens of that locality, and they devoted five days to a careful investigation of all the circumstances in the case.

Maryland and Delaware Railroad.

It is stated that a conditional contract has been entered into with a responsible party for the completion of this road, and that the probabilities are favorable to an early resumption of the work.—*Del. Gazette.*

South Side Railroad.

The earnings on the South Side Railroad for the nine months ending July 1st, 1859, amounted to \$285,163 69, a gain of 12 per cent., or \$30,723 01, over the receipts of the preceding year.

Chicago, St. Paul and Fond du Lac Railroad.

On the 6th, at Washington, two hundred and eleven thousand acres of land were certified to the State of Wisconsin for the Chicago, St. Paul and Fond du Lac Railroad, under the act of Congress of 1856.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, July 9 1859.

Car Wheel Boring Machine FOR \$400.

ONE of Wheeler's best vertical Machines, with over-head pulleys and shiftings,—cost \$700. Has been used a short time and is in perfect order, ready for use.

1m27

WILLIAMS & PAGE,
44 Water st., Boston.

FREIGHT CARS FOR SALE.

11 CARS—Have been run about one year,—viz:—

2 long 8-wheel Box Cars,
9 " " Platform Cars.

These Cars are made in the best manner, with large axles, brakes, Lightner boxes, etc., and will be sold low for cash.

26tf

WILLIAMS & PAGE,
44 Water st., Boston.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.

M. K. JESUP & COMPANY,
New York, June, 1859. 44 Exchange Place.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

6m35

NORRIS & BROTHER,
BALTIMORE,
And 17 Nassau st., New York

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COMPANY,
44 Exchange Place.

New York, 1st June, 1859.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.

New York, Aug. 1, 1859.

RAILROAD IRON.

THE RENSSLAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

BUSSING, CROCKER & DODGE,
32 Cliff St.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address

N. WILKINSON, Sec'y,
Wheeling, Va.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 Cliff st., N. Y.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at Jonestown, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA (NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight. Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz.—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N.Y.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the

ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG.,

are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL. LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL. CAR SPRING STEEL.

Far superior to the ordinary kind.

FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel. ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 Cliff st., New York.

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,
President of the Incorporation.

February, 1858.

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE. CAR AXLES. BOILER RIVETS. RAILROAD IRON. CUT NAILS and SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed. August 16, 1854.

BEERS' 'CAST IRON ENDLESS RAIL,' FOR CITY RAILROAD.

Patented August 24, 1858, and May 10, 1859.



THIS Road is constructed exclusively of **Iron**, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

BEERS' "ELASTIC IRON RAILWAY," FOR LOCOMOTIVE USE.
This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from undulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$9,000 to \$11,000; out of which \$3,000 will be saved on the first trip of equipment, and character of grading. The undersigned is prepared to construct, either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

S. A. BEERS, C. E. Brooklyn, N. Y.

A specimen of these Roads may be examined at 55 Liberty st., NEW YORK.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,

OF ALL SIZES.**STOCK CONSTANTLY ON HAND.**

The quality of the **FARNLEY IRON** is precisely the same as that of **LOW MOOR** and **BOWLING**, being from the same bed of minerals.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

JOS. R. ANDERSON,
JOHN F. TANNER,
R. ARCHER,
R. S. ARCHER.

TREDEGAR IRON WORKS,
RICHMOND, VA.

WE CONTINUE TO MANUFACTURE at these old and extensive Works, from **BEST CHARCOAL**

BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE,
CANNON AND PROJECTILES, ALL KINDS,
IRON AND BRASS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our **SPIKE AND BOLT FACTORY**, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons **SPIKES** and 5,000 **BOLTS** per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

J. R. ANDERSON & CO.**SANDERSON, BROTHERS & CO.,**

MANUFACTURERS OF THE

CELEBRATED CAST STEEL,

FOR MAKING SUPERIOR TOOLS,

SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,

Armitage's Genuine Mousehole Anvils, etc.

16 CLIFF STREET, NEW YORK.

42 BATTERYMARCH ST. Boston.

24 BANK PLACE, New Orleans.

516 COMMERCE ST. Philadelphia.

TYLER, DAVIDSON & CO., Cincinnati, O.

HISS & COLE, Baltimore, Md.

RAILROAD IRON.

CONTRACTS for **RAILS**, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,

10 Wall st., near Broadway, N. Y.

500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,

Boston, June, 1851.

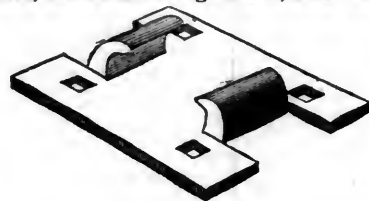
29 Central Wharf.

NEW YORK RAILROAD CHAIR WORKS.**J. B. GREEN & CO., Proprietors.**

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "New York Wrought Iron Railroad Chair Company," and also the entire machinery for manufacturing their improved **Wrought Iron Railroad Chair**, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge, so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the **best Wrought Iron Chair** now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned with the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R.R. Co., etc., etc.

Messrs. **M. K. JESUP & CO., 44 Exchange Place, NEW YORK**, are the only parties authorized to act as our Agents.

Mr. Jacob Rowe, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

IRON BOILER FLUES.**LAP-WELDED BOILER FLUES,**

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 5 inches bore, with Screw and Socket Connections, T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY

MORRIS, TASKER & CO., PASCAL IRON WORKS.

Established 1831.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

THE ROUND OAK IRON WORKS,
STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS AND BARS, of every variety of pattern.

NORRIS & BROTHER,

Agents for the United States,

12 SOUTH CHARLES STREET,

BALTIMORE.

Cm35

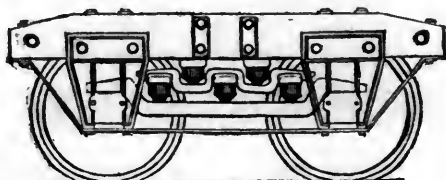
And 17 Nassau STREET, NEW YORK.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GURNEY & Co., the proprietors of the Downland Iron Works, near Carlisle, South Wales, are duly authorized to contract for the sale of their G.L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

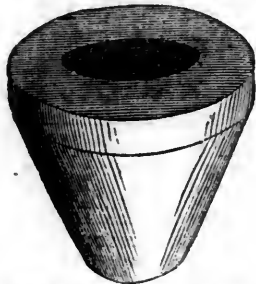
NEW YORK METALLIC CAR SPRING COMPANY,



SOLE MANUFACTURERS OF THE
CONICAL VOLUTE STEEL CAR SPRING,
OFFICE, 54 WILLIAM ST., NEW YORK.

C. PALMER, CHAS. D. GIBSON, RICHARD VOSE,
Pres't. Treas'r. Sec'y.

ELASTIC CONE SPRING CO.,
OFFICES, 20 Exchange Place, New York,
and Jersey City, New Jersey.



MANUFACTURERS OF THE PATENT ELASTIC
CONE SPRINGS for Railway Cars. This Spring is
new, and simple in its construction, and possesses superior ad-
vantages. It is manufactured from the best quality of India
Rubber prepared under the JOSLIN Patent, and is less expen-
sive, and at the same time affords more ease, than other shaped
springs. It can be fitted to all descriptions of cars without al-
teration or expense.

JAMES JEFFRIES & SONS,
MANUFACTURERS OF
LOCOMOTIVE, CAR AND TANK
SPRINGS,

PHILADELPHIA, (rear of Girard House.)

REFERENCES.

M. W. BALDWIN & CO., R. NORRIS & SON, A. WHIT-
NEY & SONS, Philadelphia, JOS. E. ANDERSON, Rich-
mond, SMITH & PERKINS, Alexandria, Va.; JNO. EDGAR
THOMSON, of Penn. R. R.; EDWARD C. DALE, of P. & G.
& N. R. R.; S. RUTH, of Rich. F. & P. R. R.; THOS. DODAMEAD
of Va. Central; URIAH WELLS, Petersburg, H. D. BIRD,
South Side R. R., Petersburg; C. O. SANFORD, of Petersburg
R. R.; JNO. R. McDANIEL, of Va. & Tenn. R. R.; JAS. P.
ROBERTSON, of Wilmington and M. R. R.; HENRY T.
PEAKE, of S. C. R. R.; S. S. SOLOMONS, of North East R. R.;
JOHN FLYNN, of Western & Atlantic R. R.; E. F. ROWARTH,
of Greenville & Col. R. R.; GEO. YONGE, of Georgia R. R.;
WM. CLARK, of Muscogee R. R.; W. W. BALDWIN, of Mont-
gomery & W. P. R. R.; WM. M. WADLEY, of N. O. J. & G. N.
R. R.; A. B. SEGER, of Opelousas R. R.; C. WILLIAMS, of
Vicksburg; ALLEN S. SWEET, of Buffalo and Erie R. R.; F.
C. ARMS, of Memphis; H. COFFIN, of Memphis; A. WOR-
RELL, of Seaboard & R. R.; UNION CAR WORKS, Ports-
mouth; WM. M. HIGHT, of Augusta; S. & R. H. RIKERS,
WHARTON & PATSCH, Charleston, and all Roads where
our SPRINGS are in use.

Will be happy to furnish a SET OF SPRINGS to such
companies as may wish to try their Durability and
Elasticity, by writing us the Length, Width, Curve over
all, and the weight which they are to bear.

Patent Reversible Baggage Check.



STEEL CAR SPRINGS,

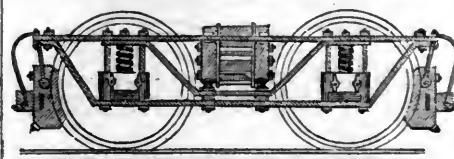
MANUFACTURED

BY THE

PATENTEE,
CARLOS FRENCH,

SEYMOUR, CONN.

THESE SPRINGS are now in use on many of the lead-
ing Railroads East, South and West.
Samples can be examined and Price Lists obtained at
No. 5 Gold st., NEW YORK.



THE HUMPHREYSVILLE
MANUFACTURING COMPANY,
(SUCCESSORS TO DWIGHTS, FRENCH & CO.)

SEYMOUR, CONN.,

ARE prepared to fill, at short notice, of the best materials
and workmanship, orders for Wrought and Cast Iron
Works, fitted ready for use, for the building or repairs of
Passenger and Freight Cars, complete or in part.
A sample wrought iron truck can be seen at our office.
No. 5 Gold st., NEW YORK.

We also manufacture—

BEST FAGGOTTED CAR AXLES,
SALISBURY IRON CAR WHEELS,
WROUGHT IRON BOLTS, NUTS AND WASHERS,
RAILROAD JACK SCREWS, ETC.

RAYMOND FRENCH, President, Seymour, Conn.
WM. H. MARSHALL, Treasurer, No. 5 Gold st., N.Y.

SAFEGUARD INSURANCE COMPANY.

OFFICE, 12 Wall st., NEW YORK,
409 Walnut st., PHILADELPHIA.
CAPITAL, \$200,000.

THE SAFEGUARD INSURANCE COMPANY
having retired that portion of the Capital Stock which was
based upon Securities out of this State are now prepared to
continue the Insurance business, and will insure against loss or
damage by Fire, on Houses, Merchandise, Leases and the risks of
Inland Navigation, on as favorable terms as other Companies

DIRECTORS.

JACOB N. KEELER, CHS. F. WATROUS, EDWARD WILER,
WILLIAM FORBES, JOHN PRENTICE,
MATHEW KELLEY, P. E. BIRKHEAD,
FRANCIS BLACKBURN, THOS. S. B. CUSHING,
O. B. ENGLISH, ELIJAH J. BALDWIN,
J. A. H. HASBROCK, JOSHUA M. BEACH,
A. C. LAWRENCE, BENJAMIN F. STILES,
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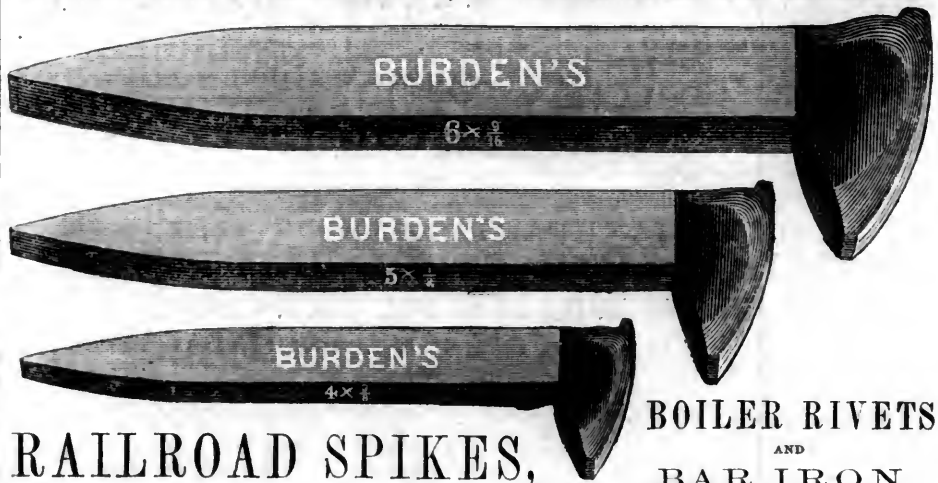
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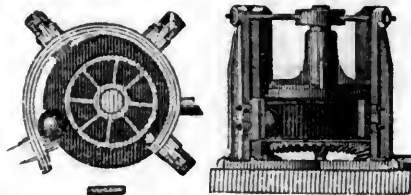
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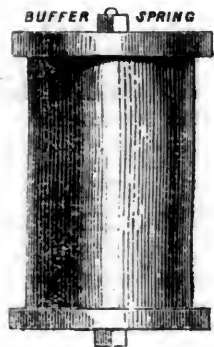
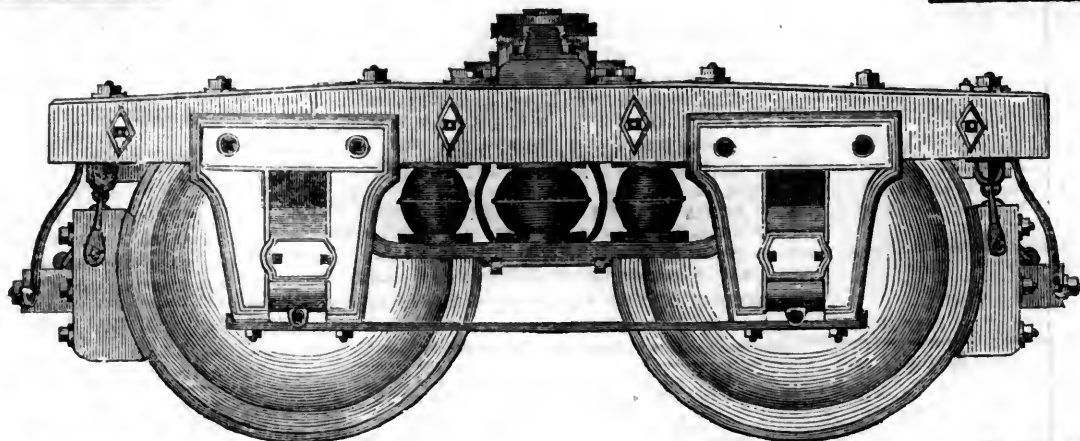
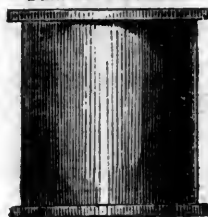


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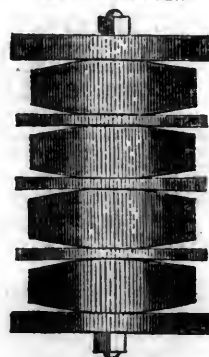


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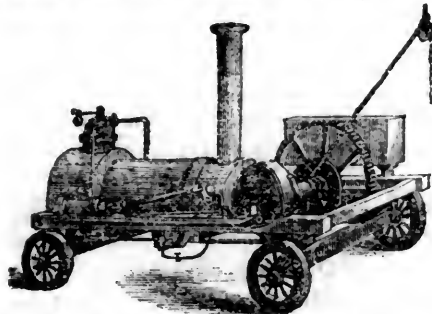
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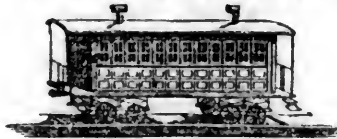
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[WHOLE No. 1,216, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, August 6, 1859.

Mail Routes between New York and New Orleans.

We copy from the Philadelphia *American* the following article in reference to the transportation of mails between New York and New Orleans. We have reason to suppose the article to be of semi-official character. As such, it has possessed much interest for the railway and commercial public.

Efficient measures are to be taken here to insure more reliable and speedy mail communication between the great commercial cities, from New York to New Orleans, in which Philadelphia is equally interested with any other. The present arrangements are not only discreditable, so far as expedition and certainty are concerned, but they are positively injurious to the trade of all these important communities. Regularity is the exception, at least in the mails, and there is hardly such a thing known as faithful observance of the schedule time required by the contracts. There are now two daily lines connecting these commercial termini. The Atlantic, or old route, runs from New York, via New Brunswick, Philadelphia, Baltimore, Washington, Richmond, Petersburg, Weldon, Wilmington, Kingsville, Augusta, Millin, Macon, Columbus, Montgomery, and Mobile, to New Orleans. The whole distance is 1,644 miles, and the pay per

annum \$436,949. The schedule time for the performance of the through trips is five and a half days.

The other, or South-western route was put on last year by Gov. Brown, commencing service from the 1st of July, 1858. It runs from New York, via New Brunswick, Philadelphia, Baltimore, Washington, Richmond, Lynchburg, Bristol, Knoxville, Dalton, Chattanooga, Stevenson, Grand Junction, Water Valley, Miss., Goodman's Depot, and Canton, to New Orleans. The whole distance is 1,635 miles, and the pay per annum \$388,902 50. The schedule time for the through trip is five days. It will be observed that the railroad connection from New York to Richmond is common to both routes. The reason assigned for opening this South-western communication was greater speed and certainty, which has not been sustained by experience.

An investigation of the results on both these routes, for the last nine months—from 1st July, 1858, to 31st March, 1859—discloses some interesting facts, which may be useful for reference and comparison, and furnish a basis for new estimates. During this period, 271 mails were carried on the Atlantic route, between New York and New Orleans, only 156 of which were within the schedule time. Of the remaining 115, there were 92 delays of one day each, 17 of two days, four of three days, one of five days. Of 254 mails conveyed between Washington and New Orleans, for the same time, but 128 were within the schedule time, leaving 126 which took from $5\frac{1}{2}$ to $12\frac{1}{2}$ days.

By the South-western route, 250 mails were carried from New York to New Orleans, during the period named; only 16 were within the schedule time. Of the remaining 204, there were 89 delays of half a day, 54 of 1 day, 27 of $1\frac{1}{2}$ days, 20 of 2 days, 8 of $2\frac{1}{2}$ days, 2 of 3 days, and one each of 7, 8, 9, and 10 days. Of 246 mails between New Orleans and Washington, 98 were in schedule time, ($4\frac{1}{2}$ days), and 6 in 5 days, (the time required by the other line), leaving 142 which took from $5\frac{1}{2}$ to $13\frac{1}{2}$ days. On both these routes Charleston and Savannah are entirely thrown off their main connection, and much to the disadvantage of those cities, as important depots of cotton and rice.

The whole number of mails received at New Orleans from New York, by both lines, from the 1st July, 1858, to 31st March, 1859, was 491. The average time between these termini by both, for each month, is ascertained to be as follows: July, 1858, 6 days, 4 hours; August, 5 days, 14 hours; September, 5 days, 17 hours; October, 5 days, 14 hours; November, 5 days, 20 hours; December, 5 days, 16 hours; January, 1859, 6 days, 10 hours; February, 7 days, 1 hour; March, 6 days, 14 hours. Average for the whole period, 6 days, 1 hour; for the winter months, 6 days, 4 hours. The whole number of mails received at New York

from New Orleans by both lines, during the same period, was 495. The average time was as follows: July, 1858, 6 days, 7 hours; August, 5 days, 12 hours; September, 5 days, 13 hours; October, 5 days, 11 hours; November, 5 days, 15 hours; December, 6 days, 3 hours; January, 1859, 7 days, 2 hours; February, 6 days, 13 hours; March, 6 days, 21 hours. For the whole period, 6 days, 2 hours; for the winter months, 6 days, 6 hours.

At the recent mail lettings a bid was accepted for a daily communication by steamers from Charleston to Fernandina, Florida, and thence connecting with Cedar Key, on the Gulf of Mexico. There is already a daily mail by steamers from Cedar Key to New Orleans, and the same party proposes to connect weekly with Havana, for the postages. So that there is but a small gap to fill up to make a complete and continuous route from New York to New Orleans by steam all the way. There is railroad service already employed from New York to Wilmington, on the Atlantic route. Now the question is, can a new line be established, to substitute one of the two now in use, which will afford better facilities, without materially increasing the expenditures? A plan has been organized and submitted here, intended to carry out this general idea, which contemplates one schedule and contract for the whole service, instead of separate arrangements, and divided responsibility—such as now exists in both the present routes. It is proposed to call it the Grand Trunk line, which is to be run according to the programme referred to, as follows: From New York, via New Brunswick, Philadelphia, Baltimore, Washington, Richmond, Petersburg, Weldon, Wilmington, Florence, Charleston, Fernandina, and Cedar Key, to New Orleans. The whole distance is 1,611 miles, and the pay per annum \$385,269, of which more than one half is paid under existing contracts for railroad service from New York to Florence, South Carolina. The schedule time to be a fraction over four days.

The basis of this proposition rests upon the remarkable reliability of the service between New York and Charleston, and the assurance of that from Cedar Key to New Orleans. About the other link there can be little doubt, if the projectors desire, as it will obviously be their interest to make this line the main artery from North to South. The Postmaster-General, in order to ensure fair competition, will put up a through connection, to the best bidders in point of time and economy. An advertisement to this effect will be issued, so that all the routes will have an equal chance, and success will depend entirely upon the considerations stated of uniting the great commercial cities, North and South, by the most expeditious and certain communication.

This object has been long desired, and the public are interested in seeing it carried out practically. The most experienced and enlightened men

connected with the Post Office Department believe the mails can be carried from New York to New Orleans, and *vice versa*, inside of four and a half days, and with guaranties for the performance of the service, which will save the vexatious delays and expense heretofore incurred, and with very imperfect and unsatisfactory results to the commercial community.

Richmond and Petersburg Railroad.

At the 24th annual meeting of the stockholders in this road held at the company's office in Richmond on the 31st of May last, Peter V. Daniel, Jr., Richard Barton Haxall, Charles Ellis, and Dr. Charles S. Mills, were chosen directors on behalf of the stockholders; and Francis E. Rives and Roscoe B. Heath announced as having been appointed directors on behalf of the State, for the ensuing year.

The committee of examination, appointed at the previous meeting, reported the road, and the branch to Walthall, in excellent order. The James river bridge, the most important structure upon the whole line, was found as firm in all respects, and in as good condition as on the day of its completion. The work-shops, depots and machinery were well and economically arranged, and every locomotive on the road in perfect running order.

The income of the company from operations of their road for the fiscal year ending April 30, 1859, was:—

From passengers	\$83,226 63
" freight	59,460 77
" mails and miscellaneous	14,854 76
	<hr/>
	\$157,542 16

And the expenses were:—

Repairs of road, bridges, buildings, locomotives, cars, etc....	\$26,609 71
Conducting transportation,	9,564 78
Depot expenses	8,985 69
Salaries of officers	5,750 04
Miscellaneous	24,146 59
	<hr/>
	75,056 81

Leaving as net receipts

—or 52½ per cent. of the gross.

To which add:—

Cash on hand April 30, 1858	7,788 15
Received from capital stock	1,500 00
Debt due by the company	9,543 66
	<hr/>
	\$101,317 16

Disbursed as follows:—

Dividends	\$48,805 00
Interest	13,735 99
New cars and buildings	4,075 21
Debts due the Company	19,696 29
Reconstruction of road	1,439 24
Cost of road and property,	52 35
	<hr/>
	87,804 08

Cash on hand April 30, 1859.

\$13,513 08
In reference to the controversy which had arisen between this company and several others on the main Atlantic route, for the through travel between the north and south, and which resulted in a discontinuance of the through ticket system during the greater portion of the year, with the companies north of Washington and south of Weldon, the report says:

To this cause mainly, if not solely, is attributable a diminution of 4,911 in the number of through passengers passing over this road during the last year, as compared with the number passing over it the preceding year. Nevertheless, the revenue derived from this diminished number exceeded by \$3,537.74, at least, the revenue derived from the same source during the preceding

year, when those through tickets, at the reduced rates, against which this company remonstrated, were in use. Thus was the course of this company, in insisting on rates that were more remunerative, fully vindicated by the experience of the past year; for, although the opportunity was not lost, but fully improved by the ocean steamers and every competing route, to avail themselves of the advantages presented to them by a disturbance of the facilities of through tickets on the Main Atlantic Inland Route, and every effort on those competing routes was made by increased facilities and greatly reduced rates, to divert and retain the travel from ours to theirs; yet the result to this company from this disturbance and disruption of the through ticket system, was a temporary decrease of only about one-eighth of its through travel, with an increase of nearly 11 per cent. in its revenue from the through travel, which would not be diverted from it, arising from the more remunerating rates of fare received for what remained. That this principle and practice of excited, reckless and unlimited competition between rival routes by greatly reduced rates of fare, provoking mutual retaliation, has been in many cases carried to extremes very detrimental to the interests of the companies engaged in it, is fast becoming the conviction of other companies, as it has long been that of ours. It is gratifying to be able to announce, that those disturbances have within a few months past ceased to exist, and that there is now, and has been during that time, in operation a much more extended system of through tickets over this route from New York to New Orleans, Mobile, Charleston, Savannah and Havana, and at more remunerative rates of fare than has ever been before in operation over this road, and that its effects have already been encouragingly experienced in a considerable and steady increase of both passengers and revenue. Thus, with the restoration of all our former through travel, and with the additions to it resulting from the large extensions of the through ticket system, by connections with other new roads—all yielding to this company rates of fare more remunerative than former rates—a considerable increase in its revenue from this source may be reasonably expected.

The completion of the Norfolk and Petersburg railroad has already restored to us at more remunerative rates much of the travel formerly brought to this road by the steamers to Port Walthall, without any additional expense to this company.

GENERAL STATEMENT.

Capital stock	\$836,100 00
Dividend bond to the State	33,408 00
Coupon bonds due July 1, 1875	24,500 00
" " " June 1, 1875	143,500 00
Certificates and debts for dividends	23,054 89
Bills payable	9,504 12
Unclaimed interest and dividends	2,122 69
Open accounts	4,309 13
Profit and Loss	173,686 66
	<hr/>
	\$1,250,186 49

Cost of main line	\$922,822 39
Do. road to Port Walthall	45,639 09
Reconstruction of road	219,587 50
Real estate	18,954 33
Bills receivable	18,220 66
This company's stock taken for debt	5,376 06
Open accounts	6,173 38
Cash on hand	13,513 08
	<hr/>
	\$1,250,186 49

The officers are:

PETER V. DANIEL, *President.*

JAMES B. MACMURDO, *Treasurer.*

THOMAS H. WYNNE, *Superintendent.*

Mississippi and Tennessee Railroad.

Track-laying below Panola Depot, on the Mississippi and Tennessee Road, is progressing slowly, but surely. Some five thousand or six thousand bars of iron are on hand, and more on the way. The track will be laid to Yockna Depot by September next.

(From the London Mechanics' Magazine.)

On the Successful Working, by Locomotive Power, over Gradients of 1 in 17, and Curves of 300 feet radius, on Inclines in America. By Mr. T. S. Isaac.

It was stated that the road which had decidedly taken the lead in the United States, in the application of locomotive power to steep gradients, and had been generally the pioneer of improvements, was that extending from Baltimore, on the Chesapeake Bay, to Wheeling, on the Ohio river, a distance of 380 miles, through a region of considerable difficulties, especially in the various ranges of the Alleghany Mountains. This company was incorporated in 1827, being the first chartered in America, and a portion of the road was opened in May, 1830. At first it was worked by horses, but locomotives were employed as early as August, 1830—prior to the opening of the Liverpool and Manchester Railway. It was not until 1851 that the great incline over the main range of the Alleghany was completed and worked by locomotives. It had an inclination of 1 in 45½ for 11 continuous miles, and, after winding amongst the summits of the mountains for 20 miles, it descended, on the western side, with an inclination of 1 in 45½ for 9 continuous miles. The passage of this mountain chain involved altogether sixty miles of railway, twenty miles of which had a gradient of 1 in 45½, and nine miles of 1 in 50, both worked by locomotive power, at a speed of from fifteen to twenty miles per hour for passenger trains. The curves were frequently 600 feet radius. Although it was one of the main thoroughfares of American commerce, no extra provision was made for working these inclines, beyond increasing the number of the engines. The engines had eight wheels, all coupled, the diameters of the cylinders being 17 inches, the length of the stroke 2 feet, and the diameter of the wheels 4½ feet. The engines weighed 24 tons each, and the tenders 13 tons each.

In 1852 difficulties were encountered at two different tunnels, which rendered temporary inclines necessary, in order to accomplish the passage of the trains. This system was frequently adopted when it was required to surmount hills where the tunnels were incomplete, in order to enable the iron and other materials for the permanent way to be delivered along the line. There was a maximum gradient over the Kingwood tunnel of 1 in 10, and this incline was in operation for several months, the iron and other materials for upwards of forty miles of line, and the United States mails have been conveyed over it by locomotive power. The same engine that was used on the other parts of the line was employed, and it drew a loaded car weighing 13 tons, and a tender weighing 12 tons, or a total weight of 25 tons, at the speed of 8 to 10 miles per hour. Over the Board Tree tunnel there was a series of zigzag inclines, on which the upward motion of the train was alternately reversed, the engine at one time pulling, and at another pushing the cars. There were three of these inclines on the Eastern, and five on the Western slope of the hill. The total length was nearly two miles and one-third, and the gradients varied from 1 in 18 to 1 in 15½, with a minimum radius of curvature of 300 feet. The ordinary freight consisted of two loaded cars, weighing, together with the tender, 37 tons. Mr. Latrobe, the chief engineer of the line, said, in his report for 1853, that as many as fifty cars, containing 400 tons, and two passenger trains, had been taken over this hill in a day by four first class locomotives; and that, during five months, there had been no accident involving more than a trifling detention. These two inclines, although unprovided with engines especially adapted for the purpose, fully demonstrated the feasibility of traversing gradients, altogether unprecedented, by the locomotive alone. The experience gained in working them not only established the fact, that a rise of 300 feet per mile, and curves of 300 feet radius, could be worked with comparative facility, but seemed to point also to a limiting gradient, beyond which it was impossible for the locomotive to go, with any useful effect, even for a temporary purpose.

Sleep gradients and sharp curves had since been adopted on the Virginia Central Railroad, on a more extended scale, and had been in successful operation for upwards of four years. The Mountain Top incline on this road crossed the Blue Ridge Mountains at Rock Fish Gap, in Virginia.

The author believed that the resistance of the curves had been under-rated in America. On the Mountain Top incline it was proved that the resistance of the curve exceeded $25\frac{1}{2}$ lbs. per ton of engine and train. Mr. Latrobe had calculated that the resistance to traction, on a level, was doubled by a curve 400 feet radius; and he assumed 13 lbs. per ton as the additional friction of the train, on a curve of 300 feet radius, whence the additional friction of the engine, due to such a curve, must have exceeded 49 lbs. per ton of its own weight. Two expedients had been resorted to for diminishing this friction. On the Baltimore and Ohio incline, for a speed ten miles per hour, the outer rail had been gradually raised; on a curve of 300 feet radius, from 2 inches, the height given by the ordinary formula, to 9 inches. On the Mountain Top Track inclines, for a speed of 8 miles per hour, the outer rail had an elevation of $6\frac{1}{2}$ inches; and a sponge, saturated with oil, was kept in contact with the flanges of the two forward wheels of each engine. These expedients had so far reduced the friction on the latter road, as to cause no perceptible diminution of speed on leaving a straight portion of the track, with a gradient of 296 feet per mile, and entering a curve of a radius of 300 feet, having a gradient of 238 feet per mile.

The Virginia Central Company had also constructed a shorter decline, about 100 miles further west, which was one mile and a-half in length, with gradients varying from 250 to 300 feet per mile, and curves of a minimum radius of 400 feet. Over this incline, which had been in successful operation for two years, the common freight engines, on eight wheels, four of which were coupled, giving 16 tons for adhesion, had taken a load of 36 tons, at a speed of five miles per hour.

The ordinary performances of the engines on the Mountain Top Track, showed an exertion of $181\frac{1}{2}$ horse power, including the engine in the load, or 118 horse power not including the engine; giving, in the latter case, 4.8 horse power per ton of motor, the resistance due to the speed and the gradient being 121.64 pounds per ton.

On one or two occasions, on the incline of 1 in 10, on the Baltimore and Ohio line, the weight of the engine being four and three-quarter times the resistance of gravity and the friction of the load, when the rails were very greasy, the engine and train slid backwards with locked wheels, from near the top to the bottom of this incline, without damage. The wheels of these engines had chilled tyres, a circumstance which considerably decreased their adhesion. The engines on the Mountain Top Track, with an ordinary train, exercised an adhesive power of one-sixth of their weight, and this could always be maintained, in the severest weather, by the use of a fine clean sand.

In conclusion, the author remarked, that there were probably few mountain passes that could not be overcome by the introduction of gradients of 1 in 17, and experience had satisfactorily proved, that the locomotive could draw a load nearly double its own weight up such a gradient, at a speed of eight miles per hour. The working of the Mountain Top Track furnished additional evidence to that already gained from other sources, of the superiority of light engines with light loads, over heavy engines with heavy loads.

Discussion.—It was explained that on the Baltimore and Ohio Railway the ordinary good engines had cylinders of 19 inches diameter, with a stroke of 22 inches; they had eight driving-wheels, of 3 ft. 7 ins. diameter, all coupled. The passenger engines principally employed, on the inclines of 1 in $46\frac{1}{2}$, had cylinders of 19 inches diameter and 22 inches stroke, with six driving-wheels, 4 feet 2 inches diameter, all coupled, and a leading truck or "bogies" on four wheels. Peculiar arrangements were made for facilitating the passage

over curves of small radius; the centres of the front and hind wheels were only 11 feet 3 inches apart, and the intermediate wheels were without any flanges—the springs being so adjusted as to equalize the weight.

It was stated, that the adhesion of driving wheels had been shown, from experience in the United States, to be beyond the limits usually assigned. Instances were known where the effective adhesion had been as much as two-fifths of the nominal weight on the driving-wheels; it being assumed that this varied much when running, as compared with the actual weight ascertained by the weighing machine when at rest.

On the Cleveland and Pittsburgh Railway, on the 1st August, 1857, a train of fifty loaded wagons, each on eight wheels, and weighing, with the engine and tender, 800 tons, was drawn up a continuous incline, two miles in length, of 1 in 132. The engine weighed 26.8 tons, with only 19.2 tons on the six coupled wheels. The gravity of the entire train would be 13,575 lbs., whilst the friction, which could not average less than 5 lbs. per ton, would increase the amount to 17,575 lbs., or to more than two-fifths of the weight upon the driving-wheels.

In making a series of trials for the New York and Erie Railway, Mr. Zerah Colburn drove a train of eighty wagons, each on eight wheels, weighing, with the engine and tender, 1,270 tons, up a continuous incline of about 1 in 480, with curves of 1,145 feet radius. The gravity being 6,000 lbs., and the other resistances 8,300 lbs., the entire resistance was 14,300 lbs. The weight on the driving-wheels of the engine, at rest, was 40,500 lbs.; hence the adhesion was 0.35 of the insistent weight.

An engine, when on a severe incline, changed its position so much as to alter materially its running condition, which should be provided for in building engines expressly for working inclines.

It was stated that, at the time of construction of the Mountain Top incline, it was found necessary to place a tank on the eastern slope, on a gradient of 1 in 18.87. During the first two or three summers, the ascending trains were in the habit of stopping daily, and the engines were able to start again without difficulty. There was one engine on the mountain on eight wheels, all coupled; the cylinders were 18 inches in diameter, with a length of stroke of 22 inches; the wheels were $3\frac{1}{2}$ feet in diameter, and the gross weight of the engine was 27 tons. This engine had crossed the mountain six times in one day, with a load of 49 tons each time; making the trip in one hour from Turntable to Greenwood, and in one hour and a quarter from Greenwood to Turntable; although it was very rigid, and was not adapted to the curves. One of the lighter engines had taken a load from Turntable to Greenwood in half an hour. Mr. Ellet had published a statement of the cost of working, based on the fuel and oil consumed, and the wages of the workmen. Fuel on the mountain cost two dollars per cord. It was difficult to make a just comparison of the various fuels, and to obtain correct information as to the water evaporated. The same cause that prevented the experiments on the resistance of curves, prevented comparative experiments on fuels, and accurate statements of the water evaporated. At first pine was used, but oak had been extensively adopted latterly. The effective pressure of the steam, above that of the atmosphere, usually amounted to from 100 lbs. to 120 lbs.

It was remarked that, whereas, on most English railways, the results of experience showed a resistance of 12 lbs. per ton gross on a level, yet some of the statements which had been made as to the working of railways in the United States, seemed to indicate a resistance of not more than 5 lbs. per ton gross, after allowing for gravitation on the incline; whilst the permanent way of American lines was notoriously inferior in all respects to that of the English lines. The first of the results named in the paper showed a traction resistance of about 150 lbs. per ton gross. In contrast with this, it was stated that, on the Great North of Scotland Railway, near Aberdeen, the Kitty Brewster In-

cline of 1 in 59, and full of quick curves, had been worked for the last three years by two tank locomotives, having cylinders 15 inches diameter, with a length of stroke of 24 inches, and four wheels coupled, each $4\frac{1}{2}$ feet diameter, at a steam pressure of 150 lbs.; the load on the driving wheels being 15 tons, on the leading wheels 10 tons, and the gross weight, in working order, 25 tons. The trains were started from the foot of the incline. One of these engines could take up nineteen wagons, weighing, when loaded, about 11 tons each—making a total gross weight of train, behind the engine, of 200 tons—at 10 miles per hour. The greatest load that had been taken was twenty-one wagons, of a gross weight of 230 tons, at five miles per hour. The average ordinary train taken up the incline, consisted of eighteen wagons, each weighing 8 to 11 tons gross; the total weight being, say, 160 tons gross, at 10 miles per hour; but excursion trains of loaded carriages, weighing, when empty, $5\frac{1}{2}$ tons each, and $7\frac{1}{2}$ tons when loaded, making a gross load of, say 200 tons, had also been taken up. The resistance of the train indicated on the piston, after allowing for gravitation on the incline, amounted to 13 lbs. per ton gross of engine, tender, and trains, which contrasted favorably with the estimated traction resistance of 150 lbs. per ton gross on the American incline.

With reference to the influence of curves upon resistance, it had been found that, at a speed of 45 miles per hour, the traction resistance was greater, by 20 per cent., on a line having curves under one mile radius, at the rate of one curve in $2\frac{1}{2}$ miles, than on a practically straight line.

It was remarked that the Whitstable branch of the South-Eastern Railway, on which there was a gradient of 1 in 30, had originally been worked by stationary engines and rope traction; but as the traffic was intermittent, it had been determined, some years ago, to substitute locomotive power, and this application had been quite successful. Bury's four-wheel coupled engines, having cylinders 14 inches in diameter, with a length of stroke of 24 inches, the wheels being 4 feet 6 inches diameter, were still in use on this branch. Four trucks of coal were taken up the incline of 1 in 30,—the gross weight, including the engine and tender, being about 50 tons.

On the Folkestone Branch of the same line, which had an inclination of 1 in 30 for upwards of three-quarters of a mile, four-wheel tank engines, constructed on Mr. Crampton's plan, were employed. The four wheels of $4\frac{1}{2}$ feet diameter were all coupled; the cylinders were 16 inches diameter, with a length of stroke of 24 inches; the weight of the engine was $26\frac{1}{2}$ tons, and the pressure of the steam was 120 lbs. per square inch. These engines had taken up the incline a load of fourteen carriages, equal to a gross weight of 100 tons, including the engine.

It was believed that the peculiar construction of the engines and carriages in the United States, tended to lessen the resistance of curves. It was well known that, in New York, and in other American cities, the railways were brought into the streets—horse power being then employed—and that the trains were conducted round the turnings of streets with great facility. As to the cost of construction of American railways, it appeared from official returns, which had been carefully compiled, that in the State of Massachusetts, the cost of the principal lines had amounted to £10,599 per mile, or £9,489 per mile, exclusive of rolling stock. In the State of New York these figures were respectively £11,200 and £9,762 per mile. It should be stated that a large proportion of the American railways consisted of single way, and that their cost ranged between £5,000 and £14,000 per mile.

The Manchester, Sheffield and Lincolnshire Railway, with a gradient of 1 in 130 for upwards of 22 miles, was mentioned as a case of a main trunk line, upon which there was a large traffic, necessitating the employment of heavy engines. Ordinary inside cylinder engines were employed,—the cylinders being 18 inches in diameter, with a length of stroke of 24 inches; the wheels being

5 feet in diameter, all coupled. They weighed, when in working order, 31 tons, were worked at a pressure of 130 lbs. to the square inch, and would draw a load of forty wagons, weighing 130 tons, independent of the weight of the engine and tender.

The great feature in the paper under discussion was thought to consist in the statement, that two-fifths of the weight of the engine had been obtained as adhesive capability; whereas, in this country, one-fourth had been considered as much as could be relied on, in all states of the rails. On the West Cornwall Railway, loads of about 13 tons had been conveyed up an incline of 1 in 13, for a distance of from a half to three-quarters of a mile. The engine had four wheels coupled, and cylinders 13 inches in diameter. This plan had been considered preferable to the employment of stationary power. On the South Devon line there were gradients varying from 1 in 41 to 1 in 51, with S curves of 15 chains radius. As a practical fact, it might be recorded, that the engines would take seven loaded wagons up an incline of 1 in 41, on straight portions of the line; but when they came to curves of 15 chains radius, one of the wagons had to be removed.

It was stated that on the Lickey Incline of 1 in 37½, an engine had been allowed to attain a speed of thirty miles in descending, and it was then brought up in 30 seconds, by the application of a peculiar kind of brake to the wheels of the engines.

With regard to zigzag inclines, for traversing mountains, it was stated that the late Mr. George Stephenson had suggested their adoption, thirteen years ago, on a line in Spain. Mr. Drane had also recommended that this method of crossing high mountains should be adopted in Ceylon; and more recently, as was well known, Mr. I. J. Berkley, M. Inst. C. E., had carried out the system successfully on the Great Indian Peninsular Railway, for ascending the Bhoire Ghaut. It was thought that they were only desirable under special circumstances and in peculiar positions, where it was impossible to make a continuous line except at a great cost, or by the introduction of excessively sharp curves.

Probably the steepest gradients in this city over which a large traffic was conveyed, were on the line between Manchester and Oldham, a distance of seven miles. For a mile and a quarter there was an inclination of 1 in 48 or 1 in 50. The line was then tolerably level, until, on approaching Oldham, gradients of 1 in 30 and 1 in 39 were encountered, and for about a mile and a quarter 1 in 27. This latter incline had originally been worked by stationary power and rope traction; but about five years back the locomotive had been substituted, and no difficulty was found in taking up considerable loads.

In closing the discussion, the circumstances under which inclines could with propriety be adopted, were considered; and it was remarked that, as a mechanical question, there was no difficulty in apportioning the power of the engine to the amount of adhesion required to traverse a particular gradient. But inclines of 1 in 10 or 1 in 17, or even 1 in 40, would only be resorted to from necessity, as such gradients were attended with a heavy cost for working expenses. On a branch of the Stockton and Darlington Railway, where there was an exceptional gradient of 1 in 40, although the traffic was all down hill, the whole of the receipts of that portion of the line, taken at one penny per ton per mile, were absorbed by the working expenses. If the loads had been up hill, it was believed that the working expenses alone would have amounted to three pence per ton per mile, and, with gradients of 1 in 17, it was thought that this must reach one shilling to eighteen pence per ton per mile. In fact, it was questionable, under such circumstances, whether horse power and carts would not beat the locomotive in point of economy; though, of course, on a long line of railway, it would be most undesirable to introduce a break of gauge. It was undoubtedly more economical to employ locomotive power on the Whitstable branch, where the amount of traffic was so

inconsiderable. On the Oldham incline, the necessity of preserving an unbroken communication was the justification for the use of the locomotive, the cost of which, in such a case, must be considerable. On the incline of 1 in 26, near Liege, a perfect system of stationary engines had been in use for many years. The Belgian Government, feeling the inconvenience of that system, had abandoned it, and substituted the locomotive; but such was the uncertainty of the power, in meeting the inequalities of the incline, that the stationary engines had been again resorted to.

British Steam Marine.

The following figures mark the progressive increase of the number and tonnage of mercantile steam vessels registered in the several divisions of the United Kingdom and its colonies—the statistical periods being 1820, 1830, 1840, 1850, 1857:

ENGLAND.			
Years.	Steamers.	Tons.	Aver. tons.
1820	17	1,639	96.3
1830	203	18,831	92.7
1840	560	50,491	90.1
1850	905	109,861	121.5
1857	1,379	297,849	215.9
SCOTLAND.			
1820	14	1,127	80.5
1830	61	5,687	93.2
1840	129	19,497	151.1
1850	169	30,928	183.0
1857	294	80,934	275.2
IRELAND.			
1820	3	252	84.0
1830	31	5,491	177.1
1840	79	17,551	222.1
1850	114	27,685	242.8
1857	151	38,683	256.1
COLONIES.			
1820	9	1,225	136.1
1830	17	3,106	182.7
1840	53	7,879	148.6
1850	143	19,157	117.5
1857	308	36,500	118.5
RECAPITULATION.			
1820	43	4,243	98.7
1830	312	33,114	106.1
1840	821	95,418	116.2
1850	1,350	187,631	139.0
1857	2,132	453,966	212.9

The general collective increase in the steam marine in the Kingdom and the Colonies, year by year since 1839, or since the repeal of the navigation laws is shown in the following figures:

Year.	Steamers.	Tons.
1839	770	86,731
1840	821	95,418
1841	856	104,845
1842	906	118,930
1843	942	121,455
1844	988	125,675
1845	1,012	131,202
1846	1,070	144,784
1847	1,154	156,557
1848	1,253	168,078
1849	1,296	177,310
1850	1,350	187,631
1851	1,386	204,654
1852	1,414	223,616
1853	1,534	246,336
1854	1,708	326,484
1855	1,910	408,280
1856	1,950	417,717
1857	2,132	453,966

—which figures prove that there has been a three-fold increase in the number of vessels and more than a five-fold increase in the tonnage of the British mercantile steam marine since the event alluded to. The tonnage given is exclusive of engine room.

The progress of steam navigation as applied to the foreign commerce of the United Kingdom is shown in the following tables from 1853 to 1858—

Entered with Cargoes.

Years.	British, tons.	Foreign, tons.
1853	1,091,850	158,786
1854	1,358,524	176,309
1855	1,247,611	193,280
1856	1,610,931	290,665
1857	1,963,557	386,230
1858	1,756,664	358,388

Cleared with Cargoes.

Years.	British, tons.	Foreign, tons.
1853	1,091,000	160,749
1854	1,303,667	181,512
1855	1,285,366	186,484
1856	1,679,688	314,891
1857	1,924,690	392,895
1858	1,727,727	394,843

The total entries and clearances of steamers at ports of the United Kingdom in 1857, either with cargoes, in ballast, or with passengers only, amounted to 14,188 vessels, registering 4,667,372 tons, of which nearly 4,000,000 tons were British. The only foreign nations that took any considerable part in the steam carrying trade were—Hamburg 160,280 tons, Holland 164,289 tons, the United States 103,605 tons, Belgium 90,892 tons, Hanover, France, Spain, and some other nations having also a small share in the tonnage employed.

The sailing vessels that entered from abroad were 22,447 British, 4,943,702 tons and 29,989 foreign, 4,253,679 tons or a total of 52,436 sailing vessels and 9,197,381 tons.

Italian Confederation.

The extent and population of the Italian Confederation according to the programme of the Treaty of Peace concluded at Villafranca between the Emperors of France and Austria on the 11th July, 1859, will be as follows—

STATES, ETC.	Area, sq. m.	Population.
Kingdom of Venetia (Austrian)	9,216	2,493,968
Kingdom of Sardinia	36,803	8,177,047
viz. Piedm't, etc.	19,237	4,590,260
Lombardy	8,331	3,009,505
L. of Sardinia	9,235	577,282
Principality of Monaco	58	8,200
Duchy of Parma	2,382	499,835
Duchy of Modena	2,332	604,512
Grand Duchy of Tuscany	8,546	1,793,967
Pontifical States	15,883	3,124,668
Regency of S'n Marino	21	7,800
Kingdom of the two Sicilies	41,019	9,117,050
viz. Naples	31,120	6,886,030
L. of Sicily	9,899	2,231,020
Total	116,260	25,827,047
And there is no reason why France should not become a member of the Confederation with the Italian island of "Corsica"		
Nor England with the "Maltese Islands".	219	128,361
	119,810	26,195,591

Mississippi Central Railroad.

The Grenada *Republican*, of the 9th ult., says:

The cars on the Mississippi Central Railroad have been running several days within two miles of this place. Track-laying continues to progress; the brick work across the river goes bravely on; and it is now thought, by those engaged in the different departments of the work, that the cars will enter Grenada about the 1st of September.

Journal of Railroad Law.

LIABILITY OF INTERSECTING ROUTES IN THE CARRIAGE OF GOODS.

(Concluded from our last.)

We gave in our last week's article four rules to assist in determining the question of the liability of intersecting routes for the safe carriage of goods over a distance covered by several independent routes. And we gave a report of two cases sustaining and illustrating a part of those rules. We give to-day the two other cases promised, the rules then laid down being deduced from the four cases taken together. Our article, therefore, of to-day must be read in conjunction with, and as a conclusion of our article upon the same subject of last week.

III. [FRANKLIN W. HUNT vs. THE NEW YORK AND ERIE R. R. Co.]

On the 5th of April, 1854, the plaintiff delivered to the Northern Indiana Railroad Company certain property to be forwarded to Bergen, N. J. On the 3d of May the goods were received at the depot of the N. Y. & Erie R. R. Co., and on the 10th May, were delivered by the company to the plaintiff, he, at that time, paying the defendants for transportation on their own road, as well as the charges for transportation on the other roads. The goods were injured by wet, but no proof was given to show where the injury took place, nor at what time. The evidence only showed by the opinion of a witness that the injury had happened at least a fortnight previous to the delivery of the goods to the plaintiff. The Justice dismissed the complaint.

INGRAHAM, F. J.—The evidence was insufficient to fix any liability upon the defendants. They had made no contract of transportation with the plaintiff, and as carriers they were only liable for damage done to the goods while in their custody. There is no principle of law by which the defendants would be held liable for the negligence of other carriers who had previously been in charge of the plaintiff's goods. It is not shown that any such damage was done while the goods were in the defendants' possession; on the contrary, where the evidence shows, as in this case, that from the appearance of the goods, the injury had occurred, at least, a fortnight previous to their final delivery; the fair presumption is, that it had happened before the defendants received them—and the plaintiff's admission is proven that in his opinion the damage had not taken place while the goods were in the charge of the defendants.

It is not necessary for the decision of this case, to inquire into the extent of liability of the company with which the contract was made. If either of the carriers is liable for the whole route it could only be the one who made the contract for transportation. Those who subsequently received and forwarded the goods, can only be liable for damage done by themselves, and not for injuries occurring before the goods came to their custody. This point was discussed in *Van Santvoord vs. St. John*, 6 Hill, 157; *Mallory vs. Burritt*, 1 E. D. Smith, 234; and *Erne vs. The N. Y. & Erie R. R. Company*; New York Common Pleas, General Term, June, 1855, in all of which the liability of carriers is limited to injuries sustained while the goods are in his possession, and not occurring after they had passed to the custody of others beyond the route for which the carrier is by law authorized to transport them.

It is said the defendants received the freight for the whole distance, and, therefore, are responsible, but it is apparent from the receipt that they received such freight only as agent for the other lines, while the charge for their freight is separate and distinct from the other charges.

Judgment affirmed.

IV. [BENJAMIN WING AND ANOTHER vs. THE NEW YORK AND ERIE R. R. Co.]

The opinion of the Court in this case was rendered by JUDGE BRADY, and contains a full statement of the facts in the case, and is as follows:

The plaintiffs delivered to the Buffalo, Corning and New York Railroad 144 barrels of potatoes, to be transported from Rochester to New York, at the same time paying the price of such transportation. That road unites with the defendants' road to Piermont from thence. The route of the defendants terminates at New York, although the terminus of their rail is at Piermont. No particular arrangement exists between these companies, except that defendants deliver to, and receive freight from, the Buffalo, Corning and New York road at Corning, and have a fixed fare thereto and therefrom.

There was no agreement of any kind between plaintiff and defendants proved, and no agreement limiting the liability of either defendants or the Buffalo, Corning and New York Company as common carriers. The potatoes were received at Corning, as freight is usually received there by defendants, and when they arrived in New York were frozen. And it is alleged that they were so frozen by the negligence of the defendants. They arrived at Piermont on Saturday evening, December, 1855; but the way bill of the car in which they were carried was not sent with it, or brought with it, and the potatoes were necessarily detained until it could be procured to ascertain their destination. They way bill was sent for, and was received on Tuesday following the arrival of the potatoes at Piermont. Whether the defendants, or the Buffalo, Corning and New York road, were responsible for the omission to bring on the way bill, does not distinctly appear. The testimony is, that the conductor did not bring it, but whether that conductor was the servant of the defendants or the other company, is not stated. On Tuesday, the potatoes were put on the barge of defendants, at Piermont, to be sent at 4 P. M., of that day, to New York, and Mr. Kimball examined one barrel while the defendants were loading them on the barge. The potatoes in that barrel did not appear to be frozen, and the agent there told Mr. Kimball that a number of the barrels which had been unheaded, were not frozen. On Wednesday morning, at about 5 o'clock, that being the day succeeding the day on which the potatoes were put on the barge, they arrived in New York. Mr. Kimball saw them during the morning of that day, and they were frozen badly.

It seems from this statement of the facts that the delay at Piermont was not the immediate cause of the damage to the potatoes, and justifies the conclusion that on their transit from that place to New York they were frozen. The defendants insist that they are not liable because there was no contract expressed or implied between them, and the plaintiff and that in any aspect of the case the Buffalo, Corning and New York road are alone responsible to the plaintiffs. But if it should be

held that they are liable directly to the plaintiff, then that they are so only for the omission of due diligence in the delivery of the potatoes, there being no agreement limiting the time for such delivery. And further, that the potatoes having been frozen, the loss resulted from the intervention of the *vis major*, which, in any event, discharges them from inability.

A great variety of questions growing out of the relations of the companies and the plaintiffs to each other have been presented by the appellants with great ingenuity, and discussed ably and elaborately by appellant and respondent. It will not be necessary, however, to consider many of them, because the right of the plaintiffs to sue the defendants directly seems to be settled by several well adjudicated cases. (*New Jersey Steam Navigation Co. vs. Merchants' Bank*, 6 How., N. S. Rep., 380; *Sanderson vs. Lambertson*, 6 Benney, 129; *Green vs. Clark*, 2 Kernan, 343; 2 Greenleaf Ev. section 210.)

The potatoes were perishable and had been kept at Piermont nearly three days. They were not injured by that delay, however, and the attention of the employees of the defendants, or one of them, was called to both of these circumstances. When placed on the barge, they were put upon the upper deck, which was enclosed, it was true, but there was nothing to prevent their being placed below deck. The only excuses offered for not putting them there are that they were put in the usual locality, and it would have taken some time longer to do it. The fact that they were perishable imposed upon the defendants more than ordinary care and diligence as mere bailees, and the obligation to deposit them most securely against cold. That it would take longer to do it does not relieve them of the duty. The intensity of the cold created also the obligation of additional vigilance, and what was usual, has not the consideration. What was necessary to be done under all the circumstances is the true criterion. "The freezing of our canals and rivers has indeed been held such an intervention of the *vis major* as excuses the delay of the common carrier by water. But still he is bound to exercise at least ordinary forecast in anticipating the obstruction; to exert the proper means for overcoming it; and to exercise due diligence in accomplishing the transportation as soon as it ceases to operate. In the meantime he must not be guilty of negligence in taking care of the article detained." (*Bourman vs. Teall*, 23 Wend., 310.)

We have no doubt that the defendants did not take the care which the law exacts from carriers in the discharge of their duties, and that as we have stated, the plaintiffs' property was damaged by their negligence.

Judgment affirmed.

Sumbury and Erie Railroad.

Good progress is making on the work at the depot grounds of this road in Erie; a freight depot is to be put up shortly. A locomotive for the passenger trains is expected at Erie in a few days. The work at the "Sink Hole," on the line of the road, near Waterford, will, it is expected, be permanently surmounted in a few days. Immediately thereafter the rails will be laid over it, and carried forward with all possible speed to Union Mills and Warren. When the former place is reached, a passenger train will be put on. The road, as far as made, will compare favorably with any in America.

The Winans Steamer.

This vessel made another experimental trip down the bay on Saturday last, with the happiest results. Every trip yet made has been in pursuance of a plan laid down in the beginning, looking to the accurate ascertainment of all the points involved in the novel principles in course of development, with a view to arriving, not at merely satisfactory results, but at the very best results attainable under any possible state of circumstances. The form of the vessel, the pitch of the screw, the number of the blades, their size and proportions, the application of steam, the quantity of fuel, the number of revolutions, have been all, in their turn, experimented on; sometimes giving more favorable results, sometimes merely indicating the direction in which improvement was to be looked for. It was one of these experiments, with a change in the pitch of the screw, and looking to the consumption of fuel, which was tried on Saturday, the vessel proceeding to Annapolis, and lying for a short time off the Naval School. The result was in every respect eminently satisfactory. A uniform speed of fifteen miles an hour, carefully timed by the buoys, was attained with thirty-six revolutions per minute, the boilers working to about one-third of their capacity; and it being, even to the inexpert in these matters, apparent that they were playing with their work. As the experiment was mainly directed to the question of fuel, under certain circumstances, no effort was made looking to speed alone, but quite enough was done to remove all doubt as to the ultimate and triumphant success of the principles involved in the propeller, and the power acquired to attain the maximum of speed in this new form of naval architecture. The results in a sea way are yet, of course, to be tested.—*Balt. American, Aug. 1.*

Safety of Railroad Traveling.

Notwithstanding deplorable accidents occur on railroads, it is by far the safest of all kinds of locomotion. In support of this statement the following quotation is made from the report of the English Railway Department:

It appears that of 139,160,126 persons were conveyed over 9,314 miles of railroad, only 51 passengers were killed, and 437 wounded. The servants of the companies appear to have suffered the most; 131 of them were killed, and 101 wounded. 94 persons were killed, and 18 wounded, who were neither passengers nor servants. Of the passengers, 26 were killed, and 419 injured from causes beyond their own control, while 25 were killed, and 18 injured, from their own misconduct or want of caution.

The same distinction is to be observed in regard to railway servants, many of whom are improvident, and even reckless. In other cases, men have lost their lives by imprudently walking on the rails, or falling down upon them when drunk. In such cases, the Directors, of course, are exonerated from all blame; but some circumstances are pointed out in which they are culpable in not taking proper precautions at level crossings, from which negligence several deaths have occurred to persons neither passengers nor servants. Six such cases are reported by the inspecting officers during last year, and to prevent them in future, the report recommends that all important roads should be crossed by bridges, especially if the traffic on the railway is of much importance. It is also noticed that many accidents have occurred to the railway servants while shunning trains; in performing this operation, 16 were killed, and 7 injured, in the year 1858, they being either run over or struck. In this way, every fact is considered, and all that can be done by pointing out the causes of accidents, and suggesting intelligent remedies against their recurrence, is done by the English Railway Board of Engineers.

Long Island Railroad.

The work on the new track from Jamaica to Hunter's Point, was commenced at the former place on the 25th. It will be pressed forward to completion with all possible dispatch.

Railway Business in England.

The cash instalments for railway capital in England, for the month of July, are stated to be £2,148,000. The enormous business of the leading English Railways is indicated by the annexed summary, over £261,000 for one week, equivalent to sixty-nine millions of dollars per annum for seven roads only:

	Miles open.	One week.	Equal to per an'm.
Great Western.....	466	£35,900	\$9,300,000
Eastern Counties.....	489	27,500	7,150,000
Great Northern.....	283	23,100	7,000,000
Lancashire.....	290	27,800	7,700,000
London & N. Western.	810	71,500	18,600,000
Midland.....	614	34,000	8,840,000
North Eastern.....	824	41,690	10,800,000
Seven roads....	3,776	£261,500	\$69,390,000

CONTINENTAL.

Austrian.....	828	£38,000	\$9,880,000
Northern, of France..	602	40,500	10,530,000
Paris and Lyons.....	841	85,000	22,100,000
Paris and Orleans.....	922	50,000	13,000,000
Paris and Strasburg..	1,000	42,000	11,000,000
S. Aust. & Lombardo..	738	50,000	13,000,000
West & N. W., France	716	36,700	9,540,000
Seven roads....	5,653	£342,200	\$89,050,000

Minot's Ledge Light-House.

The work has now risen to the height of thirty-eight feet above the original rock, and is, at present, an imposing object, though yet to go sixty feet higher. It is constructed of heavy blocks of granite, each dove-tailed into the other, in each course, laid in cement, and bolted together with heavy iron bolts. The courses are two feet in thickness, and up to the height of forty feet the work is to be perfectly solid (not with a well-room in the center, as some of the newspapers state), with a heavy iron post in the centre, firmly imbedded in the original rock below. Above the forty feet, where the diameter will be about twenty-seven feet, are to be six apartments, one above the other, with the lantern, twelve feet in height, surmounting the whole. Its appearance is, and will be hereafter, that of an immense granite post, in mid-ocean, sustaining the lantern on its top. The view from the work, at its present elevation, is not materially different from that from a vessel in the same neighborhood. The sea was running pretty high at the time all around the structure, and dashing with some violence against its base. The iron shaft which comes up through the centre of the work, is used as a hoisting apparatus, and the American flag was waving from its top. The cost of the entire structure, with shore arrangements complete, will probably amount to nearly half a million of dollars. The light-house, it is expected, will be finished during the next year, and, as a work of science and skill, will compare favorably with any similar structure ever erected.—*Boston Hill Aurora.*

Iron Rail for Street Railroads.

At the last meeting of the Council, we saw a specimen of an iron rail which the use of street railroads has brought into market. It is designed to dispense entirely with wooden cross-ties, and can be put down at much less expense than the ordinary way. The rails are joined together and made continuous by means of a splice wedge inserted in cleets about ten inches long, cast with the rail. Trenches are opened in the pavement, eighteen inches wide, and from eight to twenty inches deep, the bottom compacted by the use of the rammer; and the rail put in. At the ends and in the middle of each rail, a block of plank, about ten inches surface, is laid crosswise of the track; the gravel is then replaced, and the pavement closed in. The weight of the rail is from eighty to one hundred pounds per yard, and the cost per mile, when laid, from \$6,000 to \$8,000. This is the result of the labors of Mr. S. A. Beers, Civil Engineer of Brooklyn, N. Y., and is now in use there, and also in Philadelphia.—*Cin. Gazette.*

Grand Trunk Railway of Canada.**RESIGNATION OF THE GENERAL MANAGER.**

We learn from the Montreal *Pilot* that Mr. GEORGE REITH, who, some six months since, succeeded Mr. Shanly in the General Management of this road, has resigned. The *Pilot* says:

The cause of this resignation is not before the public; but, we believe, Mr. Reith, finding he could not carry things all his own way, thought it best to retire from an office, in executing the duties of which he found many difficulties. Mr. Reith is an Aberdonian; and left a very lucrative situation on the North of Scotland Railway to undertake the management of the Grand Trunk. He was engaged for a term of three years, at £2,000 per annum sterling. He has consented to accept \$4,000 in full of all demands against the company. Some of our contemporaries complain of this, but we think without cause. Mr. Reith came out here under the impression that he could carry out any necessary reforms, and retrench and economize in every possible way. He did not know the elements he had to contend with; nor anticipate the obstacles that have been thrown in his way. His recommendation to reduce the salaries of the employees, made him very unpopular among them; and the Directors refusing to carry it out, he found his efficiency for good impaired, and hence, we suppose, the step he took. In filling up the vacancy thus created, we hope the Directors are satisfied by this time that there is talent enough in the country to do the needful, without resorting again to the other side of the Atlantic. On any of the home railroads we have no doubt Mr. Reith would have managed admirably, and been well sustained. Here, a man has to serve an apprenticeship in the country before he can creditably fill any situation—so as to get acquainted with its customs, and the character and habits of the residents in it. We do not think the company could do better than promote to the vacancy the present assistant manager, Mr. Henry Bailey. He has been a faithful servant of the company ever since the line was opened; and is as great a favorite with the employees as with the public at large. Under Mr. Bidder he could not have been so long without acquiring a vast amount of practical knowledge; and the department in which he has always acted, is the very one that now wants a head. We trust to see Mr. Bailey in that position. It would be an encouragement to other officers to industry and perseverance; and a fitting reward to deserving merit. If Mr. Bailey cannot, creditably to himself, the company and the public, fill the office, we venture to say no one else can. The Directors should take his services into consideration; and reward him as we have said. New importations are not only expensive but useless. They are luxuries for which the stockholders have largely to pay, and by which they derive anything but a proportionate amount of good. Experience, if dearly bought, is sometimes very beneficial; in this case, we sincerely hope, so it will turn out.

Railroads in Missouri.

Missouri has loaned her credit to her railroads to the extent of \$20,101,000, and has agreed to issue bonds to the further amount of \$4,849,000. This we learn from the Auditor's Report under the date July 18th. The table below exhibits the amount of credit granted to each road, and the amount drawn to that date. The State debt proper is \$602,000. This, and the amount granted to roads, \$24,950,000, leaves of the \$30,000,000 limit \$1,448,000 unapplied.

Name of Company.	Amount authorized.	Amount Issued.	Am't remaining.
H. & St. Jos. RR.	\$3,000,000	3,000,000	.....
Pacific R. R. Co.	7,000,000	7,000,000	.....
S. W. Br. Pac. Co.	4,500,000	1,900,000	2,600,000
N. Missouri R.R.	5,500,000	4,350,000	1,150,000
St. Louis & I. M.	3,600,000	3,501,000	99,000
Cairo & Fult. Co.	650,000	350,000	300,000
Platte Vall. R.R.	700,000	.....	700,000

\$24,950,000 20,101,000 4,849,000

New York Central Railroad.

OPERATING AND REPAIRS EXPENSE FOR MAY, 1859.

SPECIFICATIONS.	Albany Division. (17.0 m.)	Troy Division. (20.8 m.)	Eastern Division. (130.4 m.)	Middle Division. (183.8 m.)	Western Division. (315.6 m.)	Total Road. (667.6 m.)
<i>Total Number of—</i>						
Miles run.....	52,279	9,173	75,292	80,637	120,058	337,439
Engines on Division.....	37	7	50	55	63	212
Cords of wood consumed..	1,456	174	2,003	1,851	2,462	7,946
Pints of oil used.....	2,815	539	4,403	3,288	5,262	16,307
<i>Number of—</i>						
Cars drawn.....	10,732	2,091	Not stated.	9,235	14,438	.....
Trips made by engines....	694	262	Do.	815	1,825	.....
Cars (aver.) drawn each trip	15½	8	Do.	11½	8	.....
<i>Cost (\$) for—</i>						
Wood.....	5,095.13	609.88	7,010.50	6,480.25	8,617.00	27,812.76
Oil, lard and waste.....	427.54	73.10	611.83	559.19	638.67	2,310.33
Engineers, firemen, etc....	2,743.53	630.33	3,120.13	4,077.08	6,261.26	16,832.53
Labor for repairs.....	1,279.70	117.37	1,820.06	2,510.92	2,693.12	8,421.17
Materials for repairs.....	1,353.86	25.45	1,521.75	1,374.29	1,838.63	6,113.98
Total (running and repairs)	10,899.76	1,456.13	14,084.27	15,001.73	20,048.68	61,490.57
<i>Average number of—</i>						
Miles run by each engine..	1,584	1,310	1,637	2,067	2,001	1,719
Miles run to 1 cord of wood	35.9	52.6	37.5	43.5	48.7	43.6
Miles run to 1 pint of oil..	18.6	17.0	17.1	24.5	22.3	19.9
<i>Average cost (cents) per mile for—</i>						
Wood.....	9.75	6.65	9.31	8.03	7.18	8.19
Oil, lard and waste.....	0.32	0.79	0.81	0.69	0.53	0.64
Engineers, firemen, etc....	5.25	6.37	4.14	5.06	5.22	5.22
Repairs (labor & material)	5.30	1.56	4.43	4.82	3.77	3.98
Total (running & repairs) .	20.85	15.37	18.70	18.60	16.70	18.04

Running Roads by Contract—the Philadelphia, Wilmington and Baltimore R. R.

We remember when S. M. FELTON, Esq., was placed at the head of this road, the difficulties which were thrown in his way; and the censure which his efforts to reform the then extravagant system of working the road, brought upon him; and we should not be at all surprised if his establishment of the contract system had its origin in these very difficulties. No man who has not undertaken to reform abuses, where a large number of operatives has to be managed, knows what herculean efforts are necessary; and not one in a thousand succeeds in eradicating them. Mr. Felton resorted to the only remedy which could prove effectual, and it must be extremely gratifying to his friends, to know that these efforts have placed him in the very front rank among the numerous railroad Presidents of the country. The services of such a man to such an extensive corporation as the Erie Railroad Company, would, could he bring about the same results that have attended his efforts here, be worth millions of money. And that he could do it we do not doubt. He has not thus distinguished himself by stinting labor and grinding down the workmen; but by paying well for extra efforts in perfecting the machinery of the road, and imparting to every man an incentive to turn his undivided attention to his duty; and thus have accidents been avoided, and one of the hardest roads in the country to manage without accident, been made as free from danger as the one-horse carriages of our great grandmothers. Mr. Felton is one of the most liberal Presidents the road ever had; and we presume from the statistics with which the late reports of the road have been filled, that he has expended more money upon mental efforts to produce reform than any other Railroad President in the United States; and should other roads be thus led to adopt successfully the system he has so effectually proven to be the safest and best for his road, he will be entitled to be held in the light of a public benefactor.—*Wilmington, Delaware Gazette.*

Platte Valley Railroad.

At a late meeting of the Board of Directors of this road, the following officers were chosen:

Wm. Osborn, President; Richard A. Parke, Secretary and Treasurer; John S. Kellogg, Auditor; and John Severance, Chief Engineer. By-laws were adopted, and the President authorized to let the whole or a portion of the road.

City Railroads in Cincinnati.

The City Council of Cincinnati have awarded the right to construct railroads through the streets of that city. The *Commercial*, of 30th ult., says:

Routes Nos. 1, 2, 4 and 5, were all awarded upon the same terms, viz: to pay an annual license of \$30 per car, one cent per passenger, and to issue 25 commutation tickets for one dollar. There were no bidders originally for Route No. 3, but last night Wilson & Co. were allowed to withdraw their bid for Route No. 2, and to enter a proposition for Route No. 3, viz: to pay \$25 license, per annum, per car, and after the expiration of ten years to pay half per cent. per annum per passenger carried. This route is regarded indifferently, but the yoke imposed upon the company is light.

The securities offered by each are good, and the ratification of the contracts will probably be recorded at the next meeting of the council. Each company is obliged to begin the construction of its road within thirty days after the contracts are ratified, and to complete them within twelve months.

Steam on Red River.

The St. Paul *Pioneer* says that the steamer Ans. Northrup, which has already made one trip from Fort Abercrombie to Fort Garry, has been purchased by a new company, and will, after the 1st of August, make weekly trips to and from Fort Garry, connecting, at the American terminus on Red River, with the coaches of the Minnesota Stage Company, thus opening regular communication by steamboat and stage between St. Paul and the British colony on Red River. On his recent visit to St. Paul, Sir George Simpson contracted with the owners of the Ans. Northrup for the transportation annually for five years of 500 tons of freight between St. Paul and Fort Garry. The district of Hudson's Bay Company territory, intended to be supplied by way of St. Paul, comprises the Red River Valley and the valleys of the Saskatchewan and its branches.

Directors of the Genesee Valley Railroad.

At the election for Directors of that road, held in Mt. Morris, the following persons were elected:

Directors—Henry P. North, E. R. Hammatt, John R. Murry, Hiram P. Mills, Chas. H. Carroll, George Hastings, Geo. S. Whitney, Henry Swan, Harvey Woodford, Henry E. Rochester, Wm. Kidd, M. F. Reynolds, Samuel Wilder.

Inspectors of Election—Reuben Sleeper, Chas. L. Bingham, Norman Seymour, Jr.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending August 1, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6s	84
Covington and Lexington, 2d Mortgage... ..	7s	83
Do. Income.....	10s	12½
Ohio & Miss. E. D. Construction.....	7s	23
Cinc., Ham. and Dayton, 2d Mortgage.....	7s	85
Indianap. & Cincinnati, do. do.	7s	88
Do. do. Dividend.....	80	
STOCKS.		
Cincinnati, Hamilton & Dayton.....	64½	
Columbus and Xenia.....	82	
Indianapolis & Cincinnati.....	52	
Little Miami.....	83	

Railroad Earnings.

The traffic of the Great Western Railway of Canada for the week ending July 22, 1859, was as follows:

Passengers.....	\$17,495 71
Freight and live stock.....	7,921 41
Mails and sundries.....	1,460 49

Total.....	\$26,877 64
Corresponding week of last year.....	31,556 74

Decrease.....\$4,679 10

The receipts of the Grand Trunk Railway of Canada for the week ending July 16, were.....\$39,401 78
Week ending July 17, 1858.....36,682 17

Increase.....	\$2,419 61
Total traffic from July 1st.....	\$90,550 19
Same period last year.....	88,906 60

Increase.....\$1,644 59

The earnings of the New York and New Haven Railroad for July, 1859, were:—

For Passengers.....	\$100,319 94
For Freight.....	12,250 00

Making.....	\$112,569 94
Less due other roads.....	32,341 51

Leaving.....	\$80,228 43
Do. for July, 1858.....	63,972 68

Increase.....\$16,255 75
The earnings of the Hudson River Railroad, for July were:—

1859.....	\$125,304 67
1858.....	114,731 28

Increase.....\$10,573 34

Cumberland Valley Railroad.

Eight hundred thousand dollars worth of the old stock of the Cumberland Valley Railroad, which was owned by citizens of Philadelphia, has been purchased by the Pennsylvania Railroad Company. As every share of this stock has a vote, its new owners will have control of, and will hereafter manage the affairs of the Cumberland Valley, and of course will require our forwarding men to run their freight cars to Philadelphia on the Pennsylvania Central, instead of the Lebanon Valley, as they do at present. It is supposed that new officers will be selected to manage the Cumberland Valley road, and new energy employed in conducting it.—*Harrisburg Patriot.*

This road is 52 miles long. It extends from Harrisburg to Chambersburg. By its last balance sheet, it cost \$1,292,326, and earned net in 1858, \$79,372—equal to 6.47 per cent. upon its cost.

Springfield, Mt. Vernon and Pittsburg Road.

We learn from reliable authority that a contract for the purchase of the iron for the completion of the Springfield, Mount Vernon and Pittsburg Railroad has been perfected in England, and that it will be shipped about the 1st of August. This is the road running from Delaware, Ohio, to Mount Vernon, to Gambier, and so Easterly, crossing the

line of the Cleveland and Zanesville Road, below Millersburg, its present point of completion.—*Mount Vernon (O.) Banner.*

Locomotive Department on the Illinois Central Railroad.

The cost per mile of running and maintaining the Locomotive Department of the Illinois Central Railroad for the month of June, was as follows:

No. of miles run.....	180,579
Average No. of cars per train.....	8.73
Lbs. waste used.....	2,274.5
Gallons oil.....	1,456
Cords of wood used.....	3,491
Tons of coal.....	815.50

Wages of engineers and firemen.....	\$7,145.75
Repairs of engines.....	10,077.04
Value of waste, tallow, and oil.....	1,397.24
Value of wood and coal.....	16,235.63
Cleaning engines.....	1,135.30

Total cost.....	\$36,010.96
Cost of oil, waste, and tallow, per mile.....	77
“ wood and coal.....	8.99
Wages of engineers and firemen.....	3.96
Cost of repairs.....	5.38
“ cleaning.....	64

Total cost per mile.....	19.94
Average miles to pint of oil.....	15.50
“ cord of wood.....	43.81
“ ton of coal.....	34.53
Estimated value of wood.....	4.16
“ coal.....	2.10

SAMUEL J. HAYES, Supt. of Machinery.

American Railroad Journal.

Saturday, August 6, 1859.

Analysis of Railroad Reports.

An analysis of the reports of railroad companies, for the purpose of showing the comparative rates at which the different branches of service are performed by different roads, would be interesting and instructive, could the necessary data be obtained, or could such as are given in the published reports be at all times relied on. There is a great lack in both particulars. Take the *track* of a railroad for instance. There is a regular percentage of wear or depreciation each year. But hardly a single company pretends to give any estimate as to its amount, or appropriate an equal sum for the purpose of making it good, whether the same may be required for present or future emergencies. With new companies this is especially the case. Their iron and equipment being new, can be run for several years without extensive addition, or repairs. Without making any provision for the wear and tear constantly going on, every cent not actually required year by year in keeping the trains running, is appropriated for dividends or interest. This goes on till the iron and equipment is so far gone as to require a thorough renewal, which with other extraordinary expenditures, absorb the entire earnings, leaving nothing for dividends, and often nothing for interest—thus rudely awaking the unlucky stock and bondholders from their fancied security. So when roads have been well maintained by extraordinary expenditures, then arises a commercial revulsion which destroys, or greatly reduces their business. A corresponding reduction of expenditures is made to appear in their published reports. But these we fear either do not give accurately the expenses actually accrued; or if

they do, the amount actually expended upon the road and its machinery is so reduced that both are neglected and allowed to run down, to be brought up again by extraordinary expenditures, largely increased from the very fact that they were not made at the right time. As an illustration, we give the following statement showing the cost of repairs of locomotives on the Michigan Central Railroad for the past five years and also the cost of fuel, and of oil and waste for the same period.

	1855.	1856.	1857.	1858.	1859.	Total & averages.
Length.	288	288	288	288	288	7,024.776
Number of engines.	64	81	92	98	98	382,268
Number of miles run by all the trains.	1,292,739	1,676,871	1,679,178	1,288,044	1,187,938	\$832,268
Cost of repairs of locomotive engines.	\$194,631	174,865	228,606	162,179	72,098	11.84
Cost of repairs per mile.	15.15	11.09	13.61	12.59	6.07	\$891,096
Cost of Fuel.	\$142,671	269,469	273,050	86,006	122,901	12.73
Cost per mile run.	11.08	17.09	16.26	6.67	10.34	\$209,777
Cost of oil and waste.	\$35,226	44,489	48,745	56,715	21,602	2.98
Cost per mile run.	2.72	2.82	2.84	4.40	2.08	

The above statement is an extraordinary one both for the high cost of repairs, fuel and oil, and for the remarkable difference in the amount expended therefor in different years. In 1855, the cost of repairs of machinery equalled 15.15 cents per mile. In 1859 the cost of repairs was only 6.07 cents per mile, or two and a-half times less. So with wood. The cost of fuel, per mile run, in 1856, was 16.26 cents, in 1857, the year following, 6.67 cents, or two and a-half times less! The difference in the amount of oil used for different years is equally great. But the saving in fuel for seven months of 1857 was much greater than that stated.

The Report of 1857 states that the company ran 814,781 miles during the past seven months of that (fiscal) year for \$24,332; or at the rate of 2.98 cents per mile. This statement to be sure is an inference, but a necessary inference from the Report. The total cost of wood used for the year was \$86,006. For the first five months of this year, the Report tells us that to run 473,264 miles, wood of the value of \$61,674 was used. This sum deducted from the cost of the wood used for the year leaves \$24,332 for the last seven months, in which the trains were run 814,781 miles.

Now are we to accept the statements of the company as presenting a true account of the cost of operating the road from year to year? For in-

stance. Did it cost the company 12.59 cents for repairs of locomotives for 1858, and only 6.07 for repairs in 1859? If so, is the last, or the first figure, to be the standard for the future? Can \$100,000, and more, be saved each year in repairs of locomotives alone? If so, here is the beginning of a dividend for the stockholders, of nearly two per cent. on all the stock issued. So with wood. Can the cost of this article be brought down to 6.07 cents per mile, instead of 16.26? If so, here is \$150,000 more for the stockholders,—making 4½ per cent. for them in these items alone. A corresponding saving was effected in oil and waste, in 1859 over 1858, the cost of these articles being reduced to 2.08, instead of 4.40 cents per mile. In this small item \$32,000 was saved.

We take it, however, that the figures copied do not, unfortunately, express the actual state of affairs for the year when the extraordinary savings were claimed to have been effected. We suppose that there was not used on the road in 1857, wood of the value of \$273,000, and in the following year, of the value of only \$86,000. The explanation for the wide difference we do not presume to account for in any other way than that the extraordinary falling off of receipts compelled the company to cast about them to see if corresponding reductions could not be made on the other side of the ledger. The charge for wood for the previous year was docked \$157,000: the cost of machinery \$90,000 for the succeeding year. Some reduction, of course, would be made for reduced mileage and for a better economy which individually prevails, but over and above this a portion of the difference must have been arbitrarily stated to meet the emergency. If 6.67 cents per mile were sufficient to keep the engines in wood for 1858, certainly there must have been a great waste in 1857, when it took 16.26 for the same duty. So with locomotive repairs. We cannot imagine how, with good management for previous years, the cost of repairs could have been reduced in a single season 60 per cent. Such reductions were not probably made, either in wood or repairs; and the amounts given do not express the rates at which, for the future, the same kind of service is likely to be performed, although we think it possible that with the system now at work on the Philadelphia, Wilmington and Baltimore railroad, the cost of repairs of engines on the Central might be reduced to 6.07 cents per mile run. The cost of wood should be permanently brought down from 12.73 to 8 cents per mile run. No road is better situated than the Central for cheap fuel. The New York Central are now running their trains at about the latter rate.

There is an omission in the late report of the Michigan Central worthy of note. In the preceding reports are statements showing the amount of material on hand at the close of each year. Such a statement is an important item of evidence to show whether the road has been allowed to run down, and whether the current expenses have been reduced by consuming the supplies on hand, instead of purchasing new. The omission may have been accidental, though the circumstances are against such an inference.

The cost (including that of the steamboats owned by the company) of this road with its

earnings and expenses for six years past have been as follows:

Years.	Cost.	Gross earnings.	Current ex-penses.	Net earnings.
1854 ..	\$9,272,947	\$1,579,412	\$903,944	\$675,468
1855 ..	10,644,027	2,215,283	1,335,627	879,656
1856 ..	11,418,172	2,800,442	1,571,817	1,228,625
1857 ..	12,160,715	3,161,887	1,872,894	1,288,993
1858 ..	13,158,957	2,417,915	1,890,557	527,358
1859 ..	13,158,957	1,838,129	1,072,732	765,397
	69,813,575	14,013,068	8,647,571	5,365,497

Increase of capital account in six years, \$3,886,012.

Ratio of expenses to net earnings, 61½ per cent.

The expenses for several years were undoubtedly largely increased by the high speeds at which the road was run in connection with the Canada and New York Central lines. For the future the road is not likely to suffer so largely from similar causes.

New Jersey--Railroad to Boonton.

A railroad following the valley of the Passaic, connecting with Paterson, and, perhaps, with Newark, and extending to Boonton, or, rather, to the Morris and Essex Railroad, three miles west of that place, has long been a mooted project. There now seems good reason for believing that it will speedily be realized. There is an interest to be benefited by it, sufficiently large to justify the undertaking, and to furnish means adequate to its construction and support. The line to be built runs through a very excellent farming country, while the valley of the Passaic is studded with manufacturing establishments, which require, and would contribute largely to the support of a railroad. Upon the river is a vast amount of water power still unused. The Iron and Nail establishments at Boonton employ 500 operators, all males, who form the nucleus of a village of 2500 people. At this place the entire process for making nails is performed. The ore being converted into pig; the pig into puddled iron; which is rolled into plates, and cut into nails—all almost under the same roof. At this place 30,000 tons of coal are consumed annually. It is three miles from Boonton to its nearest point on the Morris and Essex railroad. The extension of the latter road from Hackettstown to Easton, which is soon to be undertaken, and the construction of the road proposed, would bring the whole valley of the Passaic into direct connection with the coal fields, and afford a uniform supply of coal the year round. Paterson must consume 75,000 tons annually. Indeed, there would seem to be no want of an ample business, should the road be built. The proximity of the territory traversed to New York City would render all its products immediately available, and would afford a lucrative business, as experience has proved to be the case on other roads running into New York.

A few days since a party of gentlemen numbering some 35, the major part of them being leading citizens of Paterson, made an excursion over the line of the proposed road as far as Boonton. The trip fully confirmed them in their previous opinion as to the feasibility of the route and its business capacities, and must have been an important step in raising the necessary means. The party returned home highly pleased with their excursion, and determined to make it the commencement of active operations on this important enterprise.

An organization of a company is to be effected immediately, for which a charter has been obtained. This is to be followed by an effort to raise the means necessary to its construction. As the railroads of New Jersey have, with one exception, proved successful undertakings, and as no roads of a similar character promised better results than this, and as there are ample means in and upon its line for its construction, we regard this event as certain at an early day.

Tredegear Iron Works.

In our last issue we referred to the Tredegear Iron Works, an establishment capable of manufacturing a greater variety of articles than any other known to us.

In the manufactory and delivery of locomotives and other machinery, this company possess peculiar advantages, inasmuch as a locomotive built by them, can be run through on the railroads, at very small cost, to any portion of the southern country, even as far as New Orleans, when the Mississippi Central road is completed, which will be very soon. The manufacture of locomotives and other machinery is under the supervision of THATCHER PERKINS, Esq., a gentleman probably possessing as much information on that subject as any known to us, having for many years been the able master of machinery on the Baltimore and Ohio Railroad.

New York and Erie Railroad.

We copy the following in relation to this road from the New York Times of the 30th ult.:

The shares and bonds of the Erie Co. are, (as they have been for some days past,) held rather firmer under a quiet impression, which is gaining ground among the old friends of the line, that something effectual will be done to oust the present executive of the company at the October election, if not sooner. It is intimated to us, to-day, from a well-advised source, that a majority of the present Directors are heartily tired of the misrule of Mr. Moran, and the demoralization to the credit and business of the line, which his ill-advised and blindly obstinate course, for nearly two years, has brought upon this great property. And we understand that these gentlemen—in view of the early fall business which promises to be a remunerative one, but which, to be properly inaugurated, must be taken hold of earnestly, and under whatever change of policy is to be made, before the annual meeting of the stockholders can ensue, and, if possible, before the opening of the fall business—have determined to take the control into their own hands. That they have deferred too long to the rule of Mr. Moran—which by common consent has proved a dead failure, practically and financially—they now feel well satisfied, as they should have been, and acted upon the conviction, long ago. And without seeking or meaning to court their own re-election in October, we hear that they mean to insist upon a series of reforms—beginning, perhaps, with the \$25,000 salary of the President—and of other practical measures, with the purpose, first to infuse, at least and at once, some show of life to the prostrate credit and dishonored obligations of the company—including even the first mortgage of \$300,000—and to place the executive management of the property itself in a position and under a control to command the portion of the business of the country which should of right belong to it. And the suggestion is certainly not an untimely one, since it involves little or no difference of opinion among the old friends and creditors of the line, outside the Board, that if a new policy can possibly be initiated, in anticipation of the Fall business, the sooner the better. The delay until after the election would, of course, be in the highest degree injurious, and we are pleased to hear that a majority of the present Directors begin at length to feel it to be so, since

it would involve continued demoralization and confusion on the line through full six or eight weeks of the most active season of the year. We may as well add that the utmost confidence is not yet felt in the back-bone of these gentlemen, after having been so long passive under domineering misrule and lamentable discredit, but we hear to-day that their pluck, as well as sense of duty long neglected, is actually rising.

Worcester and Nashua Railroad.

The earnings of this road for the fiscal year ending November 30, 1858, were:

From passengers	\$85,510 74
" freight	92,043 72
" mails, express and rents	7,573 19
	\$185,127 65

And the expenses were:—

Fuel	\$20,801 91
Repairs of road	19,026 99
Do. locomotives	6,492 41
Do. cars	5,261 67
Do. b'd'gs, bridges, etc.	6,081 62
Passenger expenses	13,042 07
Freight do.	13,849 17
General do.	10,676 62
Miscellan's do.	6,045 82
	101,278 28

Leaving net earnings	\$83,849 37
Less interest paid	\$11,235 31
" dividends "	60,888 00
	72,123 31

Balance of earnings of the year	\$11,726 06
Surplus net dividend last year	32,618 88

Total surplus

.....	\$44,344 94
Compared with the previous year, the expenses show a decrease of	\$24,512 16
And the earnings a decrease of	22,200 96

Showing a net increase of

.....	\$2,311 20
The debts of the company, as per annexed statement, are \$231,210; and the assets \$87,657 31—showing liabilities over assets to the amount of \$143,552 69.	

GENERAL STATEMENT.

Construction	\$1,328,897 63
Cash	\$28,678 31
Bills receivable	1,012 95
Wood lots	6,171 84
Lumber	3,006 64
Sundry accounts	1,555 97
Materials	47,231 60
	87,657 31

\$1,416,554 94

Capital stock	\$1,141,000 00
Bonds due May 1, 1860	\$200,000
Unclaimed dividends	766
Dividend due Jan. 1, 1859	30,444

231,210 00

Reserved income	44,344 94
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\$1,416,554 94

The officers are:

GEO. T. RICE, President.

GEO. W. BENTLEY, Superintendent.

T. W. HAMMOND, Treasurer.

Interest and Dividends.

The coupons of the City of Rock Island, Illinois, due Aug. 1, issued to the Rock River Bridge Company, will be paid on presentment at the office of Halsted & Gilman, bankers, No. 47 Exchange Place. The coupons due August 1, on the Extended Income Bonds of the Bellefontaine and Indiana Railroad Company, will be paid on presentation at the American Exchange Bank. The

Naugatuck Railroad Company has declared a dividend of 3 per cent., payable 15th inst. The Pennsylvania Coal Company has declared a semi-annual dividend of 3½ per cent., payable 16th inst.

The Marine Bank has declared a dividend of 3 per cent. payable 8th inst. The half-yearly dividend of the Ocean Bank is 3½ per cent. payable Aug. 10. The Long Island B'k has declared a semi-annual dividend of 5 per cent., payable on demand. The Bank of the Republic, a semi-annual dividend of 5 per cent., payable August 8. The Bank of the Manhattan Company has declared a semi-annual dividend of 5 per cent., payable on the 16th inst.; the Oriental Bank 3½ per cent., payable on the 10th inst.

The City Fire Insurance Company has declared a dividend of \$7 per share, payable on the 9th inst. The New York Life Insurance and Trust Company, a semi-annual dividend of 5 per cent. on the capital stock of the Company; also a surplus dividend of 5 per cent. The Irving Fire Insurance Company has declared a semi-annual dividend of 7 per cent., payable on demand. The St. Marks Fire Insurance Company has declared a half-yearly dividend of 10 per cent.

Illinois Central Railroad.

Mr. Cobden who while in this country recently made a careful examination of the Illinois Central Railroad, in which he is largely interested, has addressed the following letter to the foreign agents of this road.

The letter appears to have produced a much improved confidence in the shares as well as the bonds of the road:

LONDON, July 5, 1859.

Messrs. Robert Benson & Co., Gresham House.

DEAR SIR:—On the occasion of the visit which I lately paid on my own account to the United States, many of the shareholders of the Illinois Central Railroad Company forwarded me their proxies through your house. I think it only an act of courtesy to send a few remarks upon what fell under my observation, leaving you to deal with this letter as you may think proper. I shall not go into any details respecting the statistics, finances, etc., of the concern, which may be found accurately stated in the last annual report of the directors, and in the reports of Mr. Fisher, and of Messrs. Wheeler and Smith. I paid two visits to Illinois, had free access to every department of the land office and the railway, traveled over every mile of the line by daylight, and made several excursions into the interior among the farmers. The railway appeared to me to be under the management of competent and trustworthy persons; but I have had no practical experience in railroad matters, and therefore my judgment could add little weight to what has been said by others. I was told there is rolling stock ready for double the present traffic, and Captain McClellan, the Vice President, was looking forward to the result of the present harvest, and to the opening of the through line of railroad to New Orleans for a large increase in the earnings during the ensuing autumn. I have no doubt that in a few months his expectations will be realized, but in the meantime, it would be useless to speculate on the matter. My attention was directed principally to the land department, which constitutes the peculiar feature and the chief value of the undertaking. The company had a grant of about 2,600,000 acres of land, bordering on the railroad, of which nearly one-half has been sold on credit to emigrants, and the most important question for the shareholders is, "Will this land be paid for?" On inquiry, I found that the settlers amounted in number to 10,000, and that their average purchases were about 120 acres each. Being the first comers, their farms were, of course, near to

the railroad and the stations. This circumstance, together with the improvements which had taken place—such as the breaking up and fencing the land, and the erection of houses or other buildings—had certainly added fifty per cent. to their value. There seemed, therefore, to be no reasonable motive for quitting the land. On looking over the correspondence in the Land Office during the past year—which has been a period of great suffering in Illinois and the whole north-west of the United States and Canada, owing to a calamitous failure in the crops in 1858—I found that the settlers, almost to a man, expressed anxiety to remain on their land; and while asking, as they did in the great majority of cases, for an extension of credit, they promised to fulfil their engagements after they had gathered in the ensuing harvest. On inquiring from those who had the greatest experience in selling land in Illinois, I found them unanimously of opinion that the company's land would be paid for. Not so much importance seemed to be attached to the punctual payment of promissory notes given for land as to the regular discharge of the interest; while the most essential condition of all was, that the purchasers should be occupying and improving the land, which under such circumstances was estimated to double in value in five years. I may add, that it is the deliberate opinion of the gentlemen at the head of the Land Department in Chicago, that not 3 per cent. of the company's settlers would throw up and abandon their purchases. The only question then remaining was, whether these farmers, who were generally men of small capital, would have it in their power to pay for their farms? The terms on which they were purchased allowed five years for payment, in instalments of 20 per cent. I was told that upon soil so rich as to require no manure for many years, and where no outlay of capital or labor was necessary for clearing the forest or removing any other obstruction from the surface, it was easy, with ordinary seasons, for the farmer to raise enough produce to pay for his farm in five years. The greater part of the Western lands had, I found, been purchased out of the proceeds of the labor of the immigrants, who had generally started with very little capital. The result of my inquiries was, that I came away satisfied, both with the willingness and ability of the company's settlers to pay for their land. It is not easy for an Englishman to realize, excepting from the evidence of his senses, the nature and extent of the prairie soil of Illinois. For hundreds of miles you pass over a slightly undulating surface without seeing a hill, or rock, or ravine, or an acre of barren or broken ground to obstruct the progress of the plow. After examining the landed property of the company, I came to the conclusion that, although the cost of the railway will, including loss of interest, exceed the first estimate by fifty per cent., the land will surpass the value originally put upon it to a still greater extent, and will, if judiciously managed, ultimately defray the whole expense of the railway.

I remain, dear sir, yours faithfully,

R. COBDEN.

State Aid to Minnesota Railroads.

The total amount of State railroad bonds issued up to date, by Minnesota, is as follows:

Minnesota and Pacific Railroad	\$600,000
Cedar Valley Railroad	600,000
Southern Minnesota Railroad	375,000
Transit Railroad	500,000

Total

Under the ruling of Governor Sibley, accepted by the companies, but \$2,500,000 of the bonds, or \$625,000 to each of the four companies, will be issued upon the grading of the road beds. The remainder of the bonds, the Governor decides, shall not issue to the company until the cars are running on their respective roads. They will then be issued at the rate of \$10,000 per mile, and the

entire issue of bonds will not be absorbed until there is in actual operation in Minnesota 250 miles of railroad. But \$425,000 remain to be issued on account of grading, of which amount the Minnesota and Pacific road will receive \$25,000; the Cedar Valley, \$25,000; the Southern Minnesota, \$250,000; and the Transit Company, \$125,000.

The Magnitude of Our Public Works.

A writer in the New York Times, provoked by the disparaging estimate of our public works in comparison with those of Europe, gives the following interesting account of those in which we have excelled. The fact that we have so many superior and magnificent works of utility, strikes us with new force, when brought together into a single view. He says:—

The Julian aqueduct of Rome is two miles longer than the Croton aqueduct of New York, built by John B. Jervis and Horatio Allen, but the Croton carries more water than all the seven aqueducts of Rome put together, and more than any other aqueduct in the world, and is longer than any one excepting the Julian. The Illinois Central Railroad, built by Col. Mason, is the longest line ever constructed by one company, and in point of workmanship is equal to any European road. The National roads over the Cumberland Mountains, built by the U. S. Engineer corps, is more extensive and durable than the Appian way. The stone arch over Cabin Jack's Creek, on the Washington aqueduct, built by Capt. Meigs, is about fifty feet greater span than any other stone arch in the world, and is more beautiful in proportion than the arch over the Oca, so long celebrated for its magnificence. The tunnel built by Mr. Haupt, on the summit of the Pennsylvania railroad, was a more difficult work than the tunnel under the Thames. The structures on the Baltimore and Ohio Railroad at Harper's Ferry, and beyond the summit, built by Latrobe, and the Starocea viaduct, on the New York and Erie Railroad, built by Julius Adams, are equal in magnificence and excellence of workmanship to anything Brunel ever did in England, or Moran in France. The Suspension Bridge over the Niagara river at Lewiston, built by Serrell, is 1,042 feet 10 inches in one span, and is 43 feet greater than any other single span in the world, being nearly twice as great and quite as strong as Telford's celebrated bridge over the Menai Straits in England.

The United States dry-dock at Brooklyn is the largest dry-dock in the world by many feet. The workmanship, done under the direction of Mr. McAlpine and Gen. Stuart, is equal, if not superior, to anything of the kind anywhere. The plates of iron used in the dock are the largest that had ever been made up to the time they were rolled. The flight of combined locks on the Erie Canal at Lockport, built by the State Engineers, are equalled only in one other place in Christendom—[Sweden.] The Railroad Suspension Bridge built by Røbling over the Niagara is within a few feet twice the span of Stephenson's great tubular bridge in England, the largest structure of the kind. It is 800 feet in one span, and is two stories high, the railroad being above the public highway. Nothing like this exists anywhere else. The lighthouse on Minot's Ledge, being built by Capt. Alexander, is in a more exposed situation, and as far as proceeded with, is more securely bolted together than the famous Eddystone Lighthouse in England. The bridge at Wheeling, built by Charles Ellet, is exceeded only in span by the Lewiston Bridge, and is heavier than it; it is the second largest span in the world, and is much more beautiful than the Fribourg bridge, its European rival.

In carpentry we are unexcelled in the world. Such structures in timbers as the dry-docks at San Francisco and Philadelphia—McCallum's and Col. Seymour's bridges on the Erie Railroad and branches, the timber viaducts on the Cattawissa Railroad, built by Standeg, Col. Long's bridges on the various New England railroads, and Howe's

russes at Harrisburg, have not their equals across the Atlantic.

Connecticut and Passumpsic River Railroad.

At the half-yearly meeting of the stockholders in this road, held at Newport, R. I., on the 28th ult, the following gentlemen were elected directors for the ensuing year, viz: Henry Keyes, of Newbury; Josiah Stickney, of Boston; Erastus Fairbanks, of St. Johnsbury; Elijah Cleveland, of Coventry; William Thomas, Emmons Raymond, B. P. Cheney, of Boston; John Gilman, C. E., Albert Knight, C. E., of Stanstead; E. B. Chase, of Lyndon; Benjamin Pomeroy, C. E., of Compton; Thomas Upham, of Boston.

President—HON. HENRY KEYES, of Newbury.

Vice President—JOSIAH STICKNEY, of Boston.

Secretary—ELIJAH CLEVELAND, of Coventry, Vt.

Treasurer—N. P. LOVERING, of Boston.

The 14th annual report for the fiscal year ending May 31, 1859, was submitted, from which we learn that the receipts during that time were \$192,122 51
And the expenses 110,121 75

Leaving a net balance of \$82,000 76

—showing a net increase over those of the previous year of \$12,528 38. The tonnage for the year was as follows:

Downward to Boston, Concord, and Montreal, and Northern roads... 28,981,763 lbs.
Upward from Northern, and Boston, Concord and Montreal roads. 13,843,215 lbs.
To and from Vermont Central road. 15,442,999 lbs.
Lumber down Connecticut River... 4,787,620 ft.

The number of passengers carried during the year was:

Local, up and down 33,725
To and from Northern Railroad 11,587
" " Vermont Central Railroad 9,584
" " Boston, Concord & Mont. R. R. 2,084
" " White Mountains Railroad 731

Total 57,711

Although the panic of 1857 severely effected the business of the road, and its lingering effects have been felt by the business community along its line during the present year, yet a handsome net income, and an advance upon any former one is shown in the results of its business. In the settlement of unadjusted accounts between the lower roads, several thousand dollars were necessarily charged to the earnings of the past year, a large portion of which properly belongs to previous years.

The interest on the bonds has been promptly paid semi-annually, and sixteen thousand dollars annually paid to the Trustees towards the Sinking Fund for the ultimate redemption of the bonds.

The Stanstead, Sheffield and Chamblay Railroad Corporation have completed the westerly portion of their road, and it is now open for use from Farnumville to St. Johns, about fifteen miles; the next division, from Farnumville to Waterloo, about twenty-five miles, will be completed next autumn, leaving only twenty-five miles more to build to reach Lake Memphremagog.

With the local increase which we have a right to expect, and the probability of a connection with Canadian roads, making our line a through route, and with its present amicable arrangements with all connecting roads, we cannot but reiterate our belief that ultimately our road will pay dividends.

A GENTLEMAN who has upwards of 26 years experience in conducting an extensive machine manufacturing business, (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation. Satisfactory evidence of business capacity and integrity will be furnished.

Address No. box 992 Baltimore Post Office.

4132

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, July 9, 1859.

FREIGHT CARS for SALE.

11 CARS—Have been run about one year, viz:—
2 long 8-wheel Box Cars,
9 " " Platform Cars.

These Cars are made in the best manner, with large axles, brakes, Lightner boxes, etc., and will be sold low for cash.
WILLIAMS & PAGE,
281 44 Water st., Boston.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
BOSTON, June, 1851. 29 Central Wharf.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 CHURCH ST., N. Y.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.
New York, Aug. 1, 1859.

RAILROAD IRON.

THE RENSSLAER IRON COMPANY,
TROY, N. Y.,

OFFER RAILS of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS
received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:
RUSSELL, CROCKER & DODGE,
33 CHURCH ST.

MORRIS & JONES & CO.,

IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL
IN ALL THEIR VARIETIES.

ROILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
CUT NAILS AND SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.

CAR SPRING STEEL.

Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.

ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 CHURCH ST., New York.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are therefore prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz:—25, 30, 36, 40, 45, 50, 60, 64, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. Y.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the

ESTON, MIDDLESBRO', and WITTON PARK
IRON WORKS, YORKSHIRE, ENG.,

are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or ex ship at ports in the United States.

M. K. JESUP & COMPTON,
44 Exchange Place.

New York, 1st June, 1859.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JONESTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA, NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO,

MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to
ALBERT G. SMITH,
President of the Incorporation.

February, 1854.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address

N. WILKINSON, Secy,
WHEELING, VA.

JOS. R. ANDERSON,
JOHN F. TANNER,
R. ARCHER,
R. S. ARCHER.

TREDEGAR IRON WORKS, RICHMOND, VA.

WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL METAL—

BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE.
CANNON AND PROJECTILES, ALL KINDS.
IRON AND BRASS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our SPIKE AND BOLT FACTORY, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

The Machinery Department of our Establishment is under the supervision of THATCHER PERKINS, Esq., for 13 years the Master of Machinery on the Baltimore and Ohio Railroad, and late of the concern of SMITH & PERKINS, Locomotive Builders, Alexandria, Va.

R. ANDERSON & CO.

SANDERSON, BROTHERS & CO., MANUFACTURERS OF THE CELEBRATED CAST STEEL, FOR MAKING SUPERIOR TOOLS, SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,
Armitage's Genuine Mousehole Anvils, etc.
16 CLIFF STREET, NEW YORK.

42 BATTERY MARCH ST. Boston.
24 BANK PLACE, New Orleans.

516 COMMERCE ST. Philadelphia.
TYLER, DAVIDSON & CO., Cincinnati, O.
HISS & COLE, Baltimore, Md.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPANY,
44 Exchange Place, New York,
SOLE AGENTS for the UNITED STATES and CANADAS.

BEERS' 'CAST IRON ENDLESS RAIL,' FOR CITY RAILROAD.

Patented August 24, 1858, and May 10, 1859.



THIS Road is constructed exclusively of Iron, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

BEERS' "ELASTIC IRON RAILWAY," FOR LOCOMOTIVE USE.
This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from undulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$9,000 to \$11,000; out of which \$3,000 will be saved on the first cost of equipment, and character of grading. The undersigned is prepared to construct, either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

S. A. BEERS, C. E., Brooklyn, N. Y.

A specimen of these Roads may be examined at 55 Liberty st., NEW YORK.

RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

Opp

NORRIS & BROTHER,
BALTIMORE,
And 17 Nassau st., New York.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.

New York, June, 1859. M. K. JESUP & COMPANY,
44 Exchange Place.

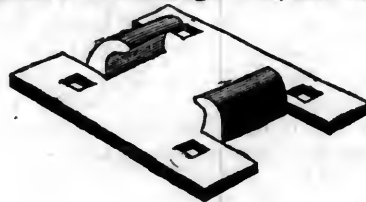
NEW YORK RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "New York Wrought Iron Railroad Chair Company," and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned with the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R. R. Co., etc., etc.

Messrs. M. K. JESUP & CO., 44 Exchange Place, NEW YORK, are the only parties authorized to act as our Agents.

Mr. JACOB ROWE, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 3 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY

MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Downish Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
M. SHEETS, HOOPS and BARS, of every variety of pattern.

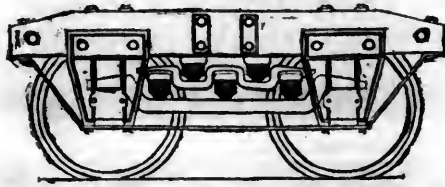
NORRIS & BROTHER,

Agents for the United States,
12 SOUTH CHARLES STREET,
BALTIMORE.

Opp

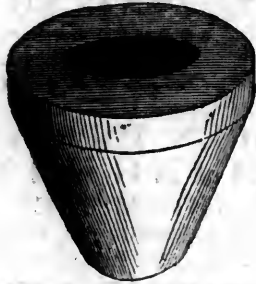
And 17 Nassau Street, NEW YORK.

NEW YORK METALLIC CAR SPRING COMPANY,



SOLE MANUFACTURERS OF THE
CONICAL VOLUTE STEEL CAR SPRING,
OFFICE, 54 WILLIAM ST., NEW YORK.
C. PALMER, CHAS. D. GIBSON, RICHARD VOSE,
Pres't. Treas'r. Sec'y.

ELASTIC CONE SPRING CO.,
OFFICES: 20 Exchange Place, New York,
and Jersey City, New Jersey.



MANUFACTURERS of the **PATENT ELASTIC CONE SPRINGS** for Railway Cars. This Spring is new, and simple in its construction, and possesses superior advantages. It is manufactured from the best quality of India Rubber prepared under the JOSLIN Patent, and is less expensive, and at the same time affords more ease, than other shaped springs. It can be fitted to all descriptions of cars without alteration or expense.

JAMES JEFFRIES & SONS,
MANUFACTURERS OF
**LOCOMOTIVE, CAR AND TANK
SPRINGS,**
PHILADELPHIA, (rear of Girard House.)
REFERENCES.

M. W. BALDWIN & CO., R. NORRIS & SON, A. WHITNEY & SONS, Philadelphia; J. S. R. ANDERSON, Richmond; SMITH & PERKINS, Alexandria, Va.; J. N. EDGAR THOMSON, of Penn. R. R.; EDWARD C. DALE, of P. & N. R. R.; S. RUTH, of Rich. F. & P. R. R.; THOS. DODAMEAD of Va. Central; URIAH WELLS, Petersburg, H. D. BIRD, South Side R. R., Petersburg; C. O. SANFORD, of Petersburg R. R.; J. N. McDANIEL, of Va. & Tenn. R. R.; JAS. P. ROBERTSON, of Wilmington and M. R. R.; HENRY T. PEAKE, of S. C. R. R.; S. S. SOLOMONS, of North East R. R.; JOHN FLYNN, of Western & Atlantic R. R.; E. F. ROWARTH, of Greenville & Col. R. R.; GEO. YONGE, of Georgia R. R.; WM. CLARK, of Muscogee R. R.; W. W. BALDWIN, of Montgomery & W. P. R. R.; WM. M. WADLEY, of N. O. J. & G. N. R. R.; A. B. SEGER, of Opelousas R. R.; C. WILLIAMS, of Vicksburg; ALLEN S. SWEET, of Buffalo and Erie R. R.; F. C. ARMS, of Memphis; H. COFFIN, of Memphis; A. WOREL, of Seaboard & R. R. R.; UNION CAR WORKS, Portsmouth; WM. M. HIGHT, of Augusta; S. & R. H. RIKERS, WHARTON & PATSCH, Charleston, and all Roads where our SPRINGS are in use.

Will be happy to furnish a SET OF SPRINGS to such companies as may wish to try their Durability and Elasticity, by writing us the Length, Width, Curve over all, and the weight which they are to bear.

Patent Reversible Baggage Check.



EDMUND HOOLE,
100 William st., N. York,
SOLE MANUFACTURER.
BAGGAGE CHECKS
of every description at the shortest
notice. Also, Oil, Wood and Coal
TICKETS OF BRASS.

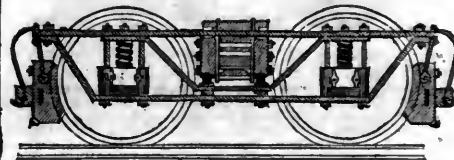


STEEL CAR SPRINGS,



MANUFACTURED
BY THE
PATENTEE,
CARLOS FRENCH,
SEYMOUR, CONN.

THESE SPRINGS are now in use on many of the leading Railroads East, South and West.
Samples can be examined and Price Lists obtained at
No. 5 Gold st., NEW YORK.



**THE HUMPHREYSVILLE
MANUFACTURING COMPANY,**
(SUCCESSORS TO DWIGHTS, FRENCH & CO.)
SEYMOUR, CONN.,

ARE prepared to fill, at short notice, of the best materials and workmanship, orders for **Wrought and Cast Iron Work**, fitted ready for use, for the building or repairs of **Passenger and Freight Cars**, complete or in part. A sample wrought iron truck can be seen at our office.
No. 5 Gold st., NEW YORK.

We also manufacture—
**BEST FAGGOTTED CAR AXLES,
SALISBURY IRON CAR WHEELS,
WROUGHT IRON BOLTS, NUTS AND WASHERS,
RAILROAD JACK SCREWS, ETC.**
RAYMOND FRENCH, President, Seymour, Conn.
WM. H. MARSHALL, Treasurer, No. 5 Gold st., N. Y.

SAFEGUARD INSURANCE COMPANY.

OFFICE: 12 Wall st., NEW YORK;
409 Walnut st., PHILADELPHIA.
CAPITAL, \$200,000.

THE SAFEGUARD INSURANCE COMPANY having retired that portion of the Capital Stock which was based upon Securities out of this State, are now prepared to continue the Insurance business, and will insure against loss or damage by Fire, on Houses, Merchandise, Leases and the risks of Inland Navigation, on as favorable terms as other Companies.

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WILLIAM FORBES, JOHN PRENTICE,
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JOURNAL

OF THE

American Geographical and Statistical
SOCIETY.

The Sixth Number of this Journal is now ready.

Subscription Price, \$3.00 per year, or 25 cents per copy.
Letters relating to the business of the JOURNAL are to be addressed to the Publishers

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9 Spruce st.,
NEW YORK.

FINANCIAL.

BANKING and COMMISSION AGENCY.

A. G. JAUDON,
No. 54 Wall street, NEW YORK.

AGENCIES of a financial nature connected with Railroads
Manufacturing and Commercial Business, and Banking
operations generally, receive special attention.
**STOCKS, BONDS, NOTES and PILLS OF EXCHANGE
BOUGHT and SOLD on orders.**

THOMAS GEORGE WALKER, DAVID TWEEDIE,
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Business Paper and Bills of Exchange negotiated.
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BANKERS,
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STOCKS and BONDS Bought and Sold on Commission.
Mercantile Paper and Loans negotiated.
Advances made on all approved Securities.
COLLECTIONS MADE throughout the United States and
Canada.

CINCINNATI STOCK EXCHANGE.

KIRK & CHEEVER,
Stock Brokers and Railroad Agents,
NO. 83 WEST THIRD STREET,
CINCINNATI, OHIO.

Railroads Stocks, Bonds, &c., bought and sold on commission.
Regular sales at public auction at the MERCHANTS' EXCHANGE.

R. H. RICKARD,
MINING AGENT & STOCK BROKER,
Office No. 21 Nassau st., NEW YORK.

**BUYS and sells MINING SHARES, MINES and
MINERAL LANDS** on commission, will examine
Mines and Mineral Lands in any part of the United States, and
report on their value, &c., etc.

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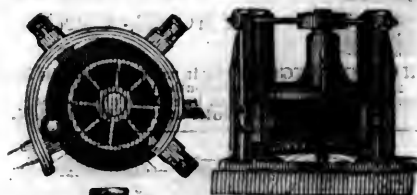
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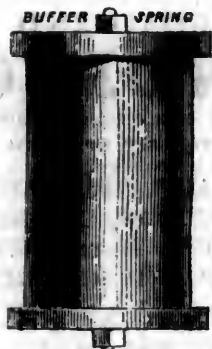
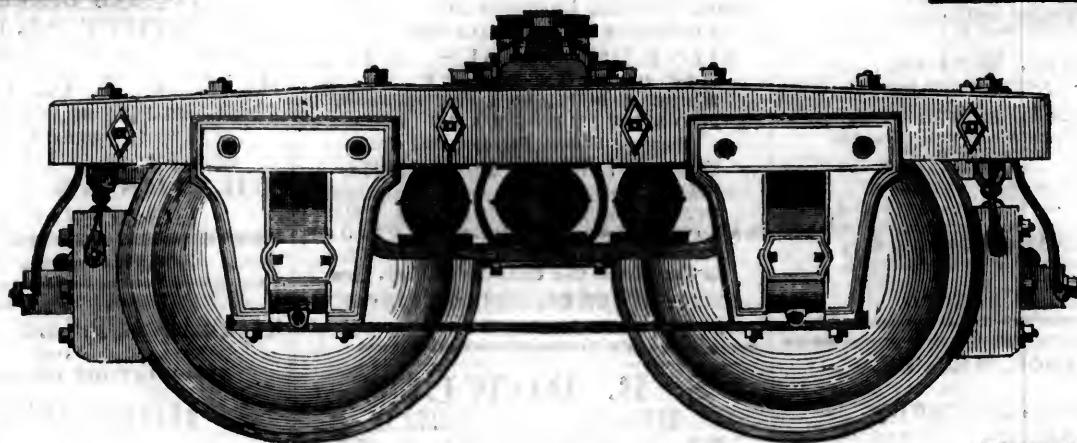
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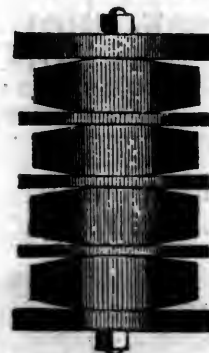


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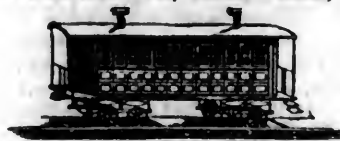
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 33.]

SATURDAY, AUGUST 13, 1859.

[WHOLE No. 1,217, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, August 13, 1859.

New York and Erie Railroad.

That our readers may properly understand the present legal relations of this company, we annex a copy of the decree of the Court for the appointment of a Receiver.

SUPREME COURT—BROOME COUNTY.

James Brown and John C. Bancroft Davis, Trustees, and Daniel Drew, a Bondholder, Plaintiffs, *agt.* The New York and Erie Railroad Company, Defendants.

At a Special Term of the Supreme Court of the State of New York, held at the Court-House, at Norwich, and in the County of Chenango, in said State, on the 2d day of August, in the year 1859.

Present: The Hon. CHARLES MASON, Justice.—A motion by the plaintiffs in this suit for the appointment of a Receiver of the property and franchises of the New York and Erie Railroad Corporation founded upon the sworn complaint herein, and upon the affidavits of Daniel Drew and J. C. Bancroft Davis, and it appearing that due notice of such motion has been served, and due service of the summons and complaint made upon said Corporation, and said Corporation now appearing upon said motion by Selah Squires, Esq., as its counsel, and A. S. Diven appearing on behalf of the plaintiffs for said motion, and it further appearing that the mortgage mentioned in the complaint, and dated the 25th day of August, 1857, and known as the 4th mortgage of said Corporation, was duly executed and delivered by said Corporation, as alleged in said complaint, and was, thereupon, recorded and filed, and became a valid

lien on property therein mentioned, and upon all the corporate estate, property, effects, franchises, easements, and other things therein described or conveyed; and that a large number of bonds have been issued by said company, which are secured by said mortgage, and the same are outstanding and unpaid; that the interest upon a portion of the said bonds is due and unpaid since the first day of April last now past, and that the said Corporation has not the means of paying said interest, and that the proceeds and profits of said mortgaged property that should of right go to pay said interest is likely, but for the protection of a Receivership, to be diverted to other purposes; and further, that the Trustees have been required to institute this proceeding, and that the institution of the same, and this motion, was necessary for the proper application of the income of said mortgaged property, and securing the payment of said interest. And it appearing that the said, the New York and Erie Railroad Company, is in a condition of insolvency, and that the mortgaged premises are a scanty security for the mortgaged debt.

And further, that the plaintiffs pray, among other things in said complaint, for a Receiver of all the effects, property, and franchises, of the said Corporation, to operate and run the said railroad pending this suit.

Now, on motion of Mr. Diven, of counsel for the plaintiffs, it is ordered that a Receiver be appointed of said Corporation, and of the railroad, and real and personal property of the New York and Erie Railroad Company, and of all the property appertaining, privileges, franchises, and power, on which said 4th mortgage is a lien, or which is covered thereby, and of the rents, tolls, and income of the same, and of the powers and franchises of said Corporation, and of its title deeds and leases, and rights thereunder, wheresoever any or all of the aforesaid property, income, tolls, rents, powers, and franchises, may be situated, collected, exercised, or enjoyed, and whether in the State of New York, Pennsylvania, or New Jersey, subject to the laws of said last two named States, and that said Receiver be authorized to run and operate said road, and exercise said authority and franchises, and to preserve said property in proper condition and repair, so that it may be safely and to the most advantage used, and to protect the title and possession of the same, and to employ such persons and make such payments and disbursements as may be reasonably needful or proper in so doing, and for advice about his duties and that said Receiver be authorized to demand possession and control of all property and franchises, documents and rights assigned to him, or of which he is appointed Receiver, and to collect the income, tolls and profits of the same, and to make the requisite payments therefrom. And that he pay the expenses of this application and the reference

hereby appointed, and, also, the arrears now due and maturing, and to arise and mature to the employees upon the said railroad, and the amounts due and maturing, and to arise and mature, or material and supplies about the operation and for the use of said road; and that he pay the rents and taxes due and to grow due from said Corporation, and the sum due and to grow due for the rights, franchises, and property of said Corporation in the State of Pennsylvania to said State.

That the Receiver open new accounts of the money received and paid out by him, under the immediate supervision of competent agents, and cause to be entered therein all the moneys received and paid out in the discharge of his Receivership, and that all surplus moneys beyond his current expenditures be deposited in some secure bank or banks in the City of New York, and not to be drawn therefrom except on his order. And upon the accumulation of any sum exceeding \$75,000, the same to be deposited by the Receiver in the United States Trust Company, and that the same be drawn thence only on the order of said Receiver pursuant to an order of a Justice of the Supreme Court, made on petition therefor.

That the said Receiver make up his accounts monthly of all the moneys by him received and paid out, and that he, thereupon, file the same in the office of the Clerk of the County of New York.

That he receive and pay out all moneys, and hold and protect all property to him assigned, and operate said road in his name as Receiver. And it is further ordered that, in the discharge of his duties, said Receiver have authority to do all acts and things, and to make all payments proper and reasonably requisite to the honest and efficient discharge and exercise of the powers and duties by this order, and the laws and practice of this Court conferred upon him.

That he be authorized to employ such agents, assistants, and counsel, as may be reasonably needful and proper.

That he be authorized to settle and adjust and arbitrate all claims for damages, injuries, and loss, to persons and property, or otherwise, that may arise or be claimed against him as Receiver in the operation of said road and the discharge of his trust as Receiver, and that he be authorized to pay such sums, from the property of his Receivership, on adjustment of such claims.

The said Receiver be authorized to institute and defend such suits connected with the property and duty of his Receivership as in his judgment, and by the advice of counsel, should be proper, and for the advantage of the property and rights to him committed, and to pay the proper expenses of the same and any judgment recovered against him as such Receiver in any such suit.

That said Receiver shall be authorized in all cases in which he has any reasonable doubt as to

his duty, to apply to a Special Term of this Court, or to a Justice thereof, by petition or otherwise, for instruction and directions as to the matters to which such petition shall relate.

That in and about the discharge of his duties, such Receiver shall not, without an order or authority of this Court, dispute the validity of any of the mortgages of the said Corporation.

That said Receiver, upon entering upon the discharge of his duty, cause an inventory of all property by him received to be made and filed in the office of the Clerk of the County of New York.

And the Hon. William Mitchell of New York is hereby appointed a Referee to name and appoint the Receiver herein directed to be appointed. That said Referee is further required to ascertain and determine what will be reasonable and proper security, as to the amount and responsibility, for such Receiver to be named to give for the faithful discharge of his duty, and settle the form and attend to the execution of the same, and to cause said security in the form of a bond to be filed in the office of the Clerk of the County of Broome.

And it is further ordered, that upon such appointment being made, and the bond as security indorsed, with the approval of a Justice of this Court, being filed with the Clerk of the County of Broome, that said Receiver enter upon the discharge of his duty as such Receiver, and that from the date of such filing, and by virtue of this order and such designation and appointment of said Referee, said Receiver be, and he is hereby declared to be then clothed with all the foregoing rights, powers, and authority, as such Receiver.

And it is further ordered, that said Referee require the property of said company, herein directed, to go to said Receiver from said Company, to be passed and assigned before him, and according to his directions.

And it is further ordered that the directors, clerks, attorneys, and other agents and servants of the said Company, and each and every one of them, and said Company under the direction of the said Referee, and when said Referee is so qualified, disclose and deliver over, on oath, all the moneys, property, and effects of the said Company in their possession, or within their power, or under their control, or in their possession, or in the power or under the control of any or either of them, or in which the said Company have any interest, including all real property and the title deeds thereto, and all books, papers, and memoranda; and all evidences of or securities for any debts or claims due, owing or belonging to the said Company, or in which the said Company have any interest, and that they also assign or deliver over to said Receiver, under the direction of said Referee, all public or private stock or stocks belonging to the said Company.

And it is further ordered that the said Referee have power to compel the appearance of, and to examine, under oath, witnesses touching the property, funds, claims and effects of the said Company, and to compel the production of all books, papers, memoranda, and vouchers, in anywise relating to or touching the same.

That said Referee report a reasonable sum for services, and the proceedings before him to be paid by the Receiver to be appointed, out of the funds to be by him received, as the same may be approved by this Court, and a reasonable compensation to said Referee.

Mississippi and Tennessee Railroad.

During the year ending with the 1st of July ult., the operations of this road were as follows:

Receipts from passengers.....	\$66,636 41
" " freights.....	104,704 76
" " Adams Express for period of nine months.....	747 33
" " for mail service.....	4,425 00

Total receipts.....\$176,513 50

The number of passengers carried over the road in the same period was 60,642, of which number 30,312 went south, and 30,330 came to this city.

Finances of New York City.

The amount of cash on hand Dec. 31, 1857, was as follows:

To the credit of the Corporation.....	\$1,865,776 37
To the credit of the Com. of the Sinking Funds.....	1,670,741 59

Total surplus from 1857.....	\$3,036,517 86
Received on city account in 1858..	17,152,473 19
Received on Sinking Funds account in 1858	1,801,722 34

Total resources for year ending 31st Dec. 1858	\$21,990,713 39
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The total disbursements during the year 1858 were as follows:

On city accounts, including specie and trust funds.....	\$15,497,563 86
On account of Sinking Funds.....	2,312,870 21

Total disbursements, 1858.....	\$17,810,434 07
Balance on hand 31st Dec., 1858..	4,180,279 32

—of which amount \$3,020,685 70 stood to the credit of the City Treasury, and \$1,159,593 73 to the credit of the Sinking Funds.

The sources of the revenue are thus stated:

On City Account.

Taxes and arrears collected.....	\$8,535,615 87
Interest on taxes etc., collected....	166,625 91
Fees and commissions of courts....	44,646 94
School moneys from State Treasurer	54,603 90

Revenue Bonds, 1858.

Loans in anticipation of the taxes..	6,811,350 00
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On Trust Accounts.

Assessments, intestate estates, etc..	990,643 33
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On Special Accounts.

Tompkins Market, Central Park, etc.	536,348 38
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Total.....	\$17,152,473 19
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—but to get at the actual expenditures of the city there must be deducted from this sum the amounts of revenue bonds redeemed.

The capital of the Sinking Fund for the redemption of the city debt on the 31st Dec. 1858, amounted to \$2,698,021 19 And of the Sinking Fund for the payment of interest to..... 2,579,534 12

Making a total of	\$5,277,555 31
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—all of which, by an act of the Legislature since obtained, has been appropriated to the redemption of the city debt, the means to meet the current interest being otherwise ample, and the fund for that purpose has been abolished. The charges to be made against the consolidated fund, prior to the year 1870, amounts only to \$3,071,098.

The entire indebtedness of the Corporation, exclusive of the floating debt, (which is usually denominated "arrears") amounted, on the 31st Dec. to the following specifications and total.

1st. Permanent or stock debt, redeemable from the Sinking Fund.....	\$14,399,998
2nd. Stock debt, redeemable from taxation	1,224,000
3rd. Stock debt, redeemable from assessment for the opening of Central Park	1,600,000
4th. Temporary or bond debt, as follows:	
—Redeemable from the taxes of 1858.....	\$4,368,700
—Redeemable from assessments	1,095,700—5,464,400

Total municipal debt.....	\$22,689,298
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The total valuation and amount of taxes for the years 1857 and 1858, for City, County and State expenses, was as follows:

1857.....Val.	\$520,559,482	Tax.	\$8,086,566
1858....."	531,194,290	"	8,621,091

But notwithstanding the constant yearly in-

crease in the amount of taxable property, there has been a still larger proportionate increase in the ratio of taxation. The gross amount of taxes for all purposes for the year 1858, as shown above was.....\$8,621,091 And for the year 1853..... 5,069,650

Showing an increase in the six years of \$3,551,441—being about 70 per cent., while the increase in valuation for the same period is only 28 per cent.

A large portion of this great increase of taxes is beyond the control of the local authorities, and as follows:

	1853.	1858.
State tax.....	\$103,408 23	\$1,172,644 31
Common Schools for State.....	129,971 91	390,408 96
Almshouse.....	385,009 00	605,000 00
Board of Education for City, C., and S.	604,000 00	1,226,013 00
Total.....	\$1,222,380 14	\$3,394,066 27

The practical operation of the State Free School Law is very onerous upon the city, and takes from it large amounts every year for the benefit of the interior counties. The following statement shows the amount of taxes imposed upon and paid by New York for State schools during the last five years, the sums apportioned thus for the city, and the amounts retained for distribution to the counties in other parts of the State:

Years.	Tax paid.	Returned to City.	Distrib'd to Count's.
1854.....	\$257,616	\$95,643	\$161,968
1855.....	271,639	89,258	182,382
1856.....	383,805	152,345	231,460
1857.....	390,409	160,069	330,339
1858.....	398,417	153,583	244,334
Total.....	\$1,701,886	\$650,903	\$1,050,933

The Comptroller thinks that it is high time that this state of affairs should be remedied, and advocates a system of a separate levy for the city, and its total separation in this report from State interference and taxation.

The expenses of opening, grading and paving streets and avenues, constructing sewers, flagging sidewalks, etc., are, except in a few cases, provided for by an assessment upon the property in the vicinity supposed to be benefitted by such improvements.

The cost of the lands taken for the Central Park, provided by various laws, were as follows:

Awards for damages	\$5,073,428 70
Expenses of Commissioners.....	54,345 10
Paid for Arsenal build's and grounds	275,000 00
Incidental expenses.....	3,405 09

Total.....	\$5,406,178 89
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And the means of paying for the lands, etc. taken, were derived from the following sources:

Assessments.....	\$1,661,395
Less collection expenses.....	3,000—1,658,395
Central Park Fund (5 p. c.) red. 1858..	400,200
6 per cent. stock, redeemable 1887....	2,382,900
6 per cent. stock, " 1898.....	275,000

Total.....	\$4,716,495
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And under existing laws and ordinances, such further issue of stock as may be necessary to complete the payments for the Park are authorized to be made.

The valuation of the State at large in 1853 was \$1,266,666,190; in 1854, \$1,364,154,625; in 1855, \$1,402,849,307; in 1856, \$1,430,334,696; in 1857, \$1,483,309,713; and in 1858, \$1,404,907,679.

The valuation of the city was—in 1853, \$431,-

631,432; in 1854, \$462,237,553; in 1855, \$487,060,838; in 1856, \$511,746,492; in 1857, \$520,545,289; and in 1858, \$531,194,290.

New York Central Railroad

The business of the road during the six months ending with July, 1859, is as follows:

Earnings.....\$2,735,857 71
Less Expenses.....1,463,136 70

Balance.....\$1,272,721 01
Six months' interest and sinking fund.....538,047 50

Balance.....\$734,673 51
Amount of a 3 per cent. dividend.....720,000 00

Balance.....\$14,673 51

New York as a Coal Market.

The large trade that New York now enjoys directly with the coal fields of Pennsylvania, and the immense importance of this trade to its commercial and manufacturing interests has induced us to present a brief statement of the extent of this trade, and a description of the various works by which it is supplied, and the provisions that are and may be made for its future increase.

The Southern, or Schuylkill region extends east and west about sixty miles, nearly on the parallel of New York, is distant from this city in a direct line of about 80 miles, and embraces an area of about 104,960 acres. The eastern markets are reached chiefly through the Philadelphia and Reading railroad and the Schuylkill canal, which are fed by numerous tributaries from the mines.

The Reading railroad follows the valley of the Schuylkill from Mt. Carbon to Laurel Hill with a slightly descending grade, and thence, crossing the summit between the Schuylkill and Delaware rivers with a grade of 38 feet for two miles, terminates at Richmond, having a length of 94 miles. The route of its coal to New York is as follows:—From the wharves at Richmond to Bordentown, by river, 26 miles; thence to New Brunswick by the Delaware and Raritan Canal, 43 miles; thence by tide water 34 miles, making a total distance to New York of 103 miles, all of which except the 43 miles of canal is free navigation. The locks of the canal are 24 by 220 feet, with 7 feet depth and pass boats of 400 tons. The total distance from Mt. Carbon to New York by this road is 197 miles.

The Schuylkill Canal, composed partly of canal and partly of slackwater navigation, extends from Port Carbon, by way of the Schuylkill valley to Philadelphia, 108 miles, with a capacity (locks 18 by 100 feet and 6 feet deep) for coal boats of 190 tons. From the outlet lock into tide water at Fairmount Dam to Bordentown, the distance is 43 miles;—thence by the Delaware and Raritan Canal to New Brunswick, 43 miles;—thence to New York by tide water, 34 miles, making a total from the mines to New York of 228 miles, the boats being brought through without transshipment.

The coal trade of the Schuylkill region commenced in 1822. From this period to 1841, the Schuylkill canal was the only outlet for this region: in the latter year, the Reading railroad commenced operations. The quantities deposited at Philadelphia by both lines have been as follows:—

	By Canal.	By Railroad.	Total.
1822.....	1,480	.....	1,480
1832.....	209,271	.....	209,271
1842.....	491,602	49,902	540,892
1852.....	800,038	1,650,912	2,450,950
1853.....	888,695	1,582,248	2,470,943
1854.....	907,354	1,987,854	2,895,208
1855.....	1,105,263	2,213,292	3,318,555
1856.....	1,169,453	2,088,903	3,258,356
1857.....	1,275,988	1,709,692	2,985,680
1858.....	1,323,804	1,542,646	2,866,450
Tot.(1822-58)	15,358,388	22,261,257	37,619,645

We have no means of determining what proportion of the tonnage of the Schuylkill coal reaching Philadelphia comes to New York. Only an inconsiderable amount comes by the outside route—the Delaware and Raritan canal being the great avenue. But a portion of its coal tonnage is made up of coal from the Lehigh mines. The total coal tonnage of the canal in 1858 was 1,050,000 tons. It is much larger the present year and rapidly increasing.

The Middle or Lehigh District covers an area of 73,600 square miles, and has its outlets chiefly by the Lehigh Valley railroad and the Lehigh canal.

The route by the Lehigh Valley railroad, or Lehigh canal from Mauch Chunk to Easton is about 46 miles. Easton may for this region be considered as the distributing point, and the coal thence is transported to New York over the several lines—

1st. By the Central railroad with which Easton has an immediate connection, and which extends to Elizabethport 63 miles; the distance thence by water to New York being 12 miles further. The total distance from Mauch Chunk by this route is 121 miles.

2nd. By the Morris canal from Easton to Jersey City, 103 miles. This distance added to the Lehigh Valley line, gives a total between Mauch Chunk and New York, of 149 miles, all by water without transshipment; or partly by railroad and partly by water.

3rd. By the way of the Delaware, and the Delaware and Raritan canals. This route is composed of the Lehigh navigation, 46 miles; the Delaware canal from Easton to Bristol, 60 miles; the Delaware river to Bordentown, 9 miles; the Delaware and Raritan canal to New Brunswick, 43 miles; and from New Brunswick by tide water to New York 34 miles; making a total distance from Mauch Chunk to New York of 192 miles.

4th. By the route leaving the Delaware canal at New Hope and entering the Delaware and Raritan feeder at Lambertville, and thence via Trenton, etc., to New York. From Mauch Chunk to Easton, 46; to New Hope and Lambertville, 80; to Trenton, 96; to New Brunswick, 133, and to New York, 167 miles.

5th. By the Belvidere Delaware railroad and the Delaware and Raritan canal, or the Camden and Amboy railroad. From Mauch Chunk to Easton, (railroad or canal,) 46 miles; by railroad to Trenton, 51 miles; by canal or railroad to New Brunswick, 37 miles; and by tide water to New York, 34 miles—total, 168 miles. By making use of the New Jersey railroad, a continuous route by railroad may be formed from New York to the coal fields.

The total quantities of coal brought from the Lehigh region to the Delaware by the Lehigh navigation and the Lehigh Valley railroad—by

the first route since 1820, in which year 365 tons formed the total product of this region, and of all Pennsylvania, and since 1855, when the railroad was opened from Mauch Chunk to Easton.

	By Canal.	By Railroad.	Total.
1820.....	365	.....	365
1830.....	41,750	.....	41,750
1840.....	225,318	.....	225,318
1850.....	690,456	.....	690,456
1851.....	964,224	.....	964,224
1852.....	1,072,136	.....	1,072,136
1853.....	1,054,309	.....	1,054,309
1854.....	1,207,186	.....	1,207,186
1855.....	1,275,050	9,063	1,284,113
1856.....	1,186,230	165,740	1,351,970
1857.....	900,314	418,236	1,318,550
1858.....	908,800	471,930	1,380,730

Total, 1820-58, 15,062,458 1,064,969 16,127,428

(From the Lehigh region the following amounts have been carried direct to Philadelphia by the Lehigh Valley railroad from Mauch Chunk to Bethlehem, 34 miles, and by the North Pennsylvania railroad to Philadelphia, 54 miles—88 miles in all—in 1857, 43,036, and in 1858, 66,133 tons.)

The following amounts have been brought down the Lehigh canal from the Wyoming region to Easton, namely in—

	Tons.	Tons.	Tons.
1846....	5,886	1851....	25,072
1847....	10,466	1852....	41,890
1848....	10,425	1853....	26,235
1849....	19,590	1854....	39,232
1850....	32,156	1855....	50,209
Tot. 1846-58, 413,042			

The Northern district including the Wyoming and the Lackawanna regions is reached from New York by the Delaware and Hudson Company's canal and railroad, the Pennsylvania railroad, and the Delaware, Lackawanna and Western railroad. This district comprises an area of 75,520 acres and forms an elongated basin, the western portion of which occupies the beautiful valley of Wyoming, and the Eastern that of the Lackawanna. It is chiefly the latter which is tributary to New York, and for which the lines of transportation above mentioned form the outlets.

Carbondale, Scranton and Pittston are the chief points from which the coal of this region is sent to the New York market.

The Carbondale and Honesdale railroad and the Delaware and Hudson canal were completed in 1829, the first having a length of 18 miles and the latter of 108 miles. They bring the coal of the Carbondale region to the Hudson at Rondout, which is 91 miles distant from New York by the Hudson river, making a total distance of 217 miles. The railroad is a succession of 14 inclined planes, with intermediate levels worked by gravity, and overcome a total ascent and descent of 2,123 feet. The amount of lockage in the canal is 1,126 feet. The quantity of coal brought forward by this line since its opening, thirty years ago has been as follows:

	Tons.		Tons.
1829.....	7,000	1839.....	122,300
1830.....	43,000	1840.....	148,470
1831.....	54,000	1841.....	192,270
1832.....	84,600	1842.....	205,253
1833.....	111,771	1843.....	227,605
1834.....	43,700	1844.....	251,005
1835.....	90,000	1845.....	273,435
1836.....	103,861	1846.....	320,000
1837.....	115,387	1847.....	388,203
1838.....	78,207	1848.....	437,500

Aver. 1st 10 y's, 73,153 Aver. 2d 10 y's, 256,605

	Tons.
1849.....	454,240
1850.....	441,403
1851.....	479,078
1852.....	497,105
1853.....	494,327
1854.....	440,944
1855.....	565,460
1856.....	499,650
1857.....	480,677
1858.....	347,873

Average 3d 10 years..... 470,075

—being an average for the 30 years of 266,611 tons per annum.

The Pennsylvania Coal Company's railroad extends from Pittston to Hawley 45 miles, overcoming in ascent and descent about 2,550 feet, by 22 inclined planes with gravitating grades between. At Hawley, 99 miles from the Hudson, the coal is transhipped to boats on the Delaware and Hudson canal and thence carried to Rondont and New York. The total length of the line of transportation is 235 miles. The following table will exhibit the results of the operations of this company since the completion of its works, in 1850:—

Tons.	Tons.
1850.....111,014	1853.....512,659
1851.....316,017	1854.....496,648
1852.....426,164	1855.....504,803

Aver. 1st 3 y'rs, 284,398 Aver. 2d 3 y'rs, 504,703

Tons.	Tons.
1856.....	612,500
1857.....	543,873
1858.....	630,056

Average 3d three years..... 595,476

—or a yearly average for the nine years, embraced of 461,526 tons brought to tide water of the Hudson.

The northern section of the Delaware, Lackawanna and Western railroad was brought into operation in 1851. From Scranton southward the road was not in working order until the latter part of 1855 and in that year only 217 tons were shipped in the direction of New York. The year next succeeding brought the Warren railroad into operation, and a third track was added to the Central Railroad of New Jersey for the accommodation of the wide cars of this company, to tide water at Elizabethport. The quantity of coal brought forward was in—

Tons.	Tons.	Tons.
1856...121,113	1857...295,953	1858...538,247

—making a total from the opening of the southern section of the line of 955,247 tons. The total length of this line is 145 miles, viz, Southern Division of the D., L. & W. railroad from Scranton to the Delaware, 65 miles; Warren railroad from the Delaware to Clarksville Junction, 22 miles; Central railroad from Clarksville to Elizabethport, 46 miles, and from Elizabethport by water to New York, 12 miles.

The total quantity brought from the Lackawanna region by these three lines for the years 1856, 1857 and 1858 or since the whole were in working order, has been as follows:—

1856.	1857.	1858.	Total, 3 years.
Delaware and Hudson...499,650	612,500	121,113	1,233,262
Penn'a Coal...480,677	543,873	295,953	1,320,503
Del., Lack. and Western...347,873	630,056	538,247	1,516,176

The following table exhibits the amount of coal

received at New York from the Delaware by the Morris and the Delaware and Raritan Canals, and Central Railroad of New Jersey; and also the amount received direct from the Lackawanna region by the Delaware and Hudson Canal, fed by the railroads from Carbondale and Pittston, and by the Delaware, Lackawanna and Western Railroad, for the ten years ending with 1858:

	1849..	1850..	1851..	1852..	1853..	1854..	1855..	1856..	1857..	1858..	Estimated
Morris Canal.	114,017	104,323	148,282	190,277	285,805	284,606	209,682	311,925	298,011	345,725	1,050,000
Delaware and Raritan Canal.	100,000	111,014	316,017	426,164	512,659	496,648	504,803	612,500	543,873	630,056	4,153,686
Pennsylvania Company's Railroad.	454,240	441,403	479,078	497,105	494,327	440,944	565,460	499,650	480,677	347,873	4,700,757
Delaware and Hudson Canal.	217	217	217	217	217	217	217	217	217	217	2,170
Del., Lackawanna & Western & Central.	217	217	217	217	217	217	217	217	217	217	2,170

We thus see that the trade as connected with New York, has risen from 668,257 tons in 1849, to 2,908,861 tons, in 1858, giving an increase in the 10 years of 2,240,604 tons, or 350 per cent. The amount of coal that will be brought to New York the present year from the Pennsylvania coal fields, through its own avenues, will exceed 3,500,000 tons—an amount much more than adequate to the domestic supply of the city, and affording a large surplus for exportation. It is needless to enlarge upon the importance, to such a city as New York, of becoming the centre of a coal trade, adequate not only to its own wants, but capable of affording for exportation large quantities, at the lowest cost of production. It is highly desirable that vessels bound to this city, either from foreign or domestic ports, should always be certain of being able to obtain a freight of coal, should nothing better offer.

A great advantage gained within a few years is access to the coal fields at all seasons of the year. Till within a very short time, winter laid an embargo upon the New York coal trade, excepting such scanty supplies as might be received by the outside route. When winter set in, the price invariably rose largely, imposing a serious burden upon the poorer classes, and upon manufacturing establishments. The price now rules at pretty much the same figure the year round, and is not ever likely to exceed largely the cost of mining, and a fair profit on its carriage.

The present supply can be very largely increased without any addition to the capacity of the several works already constructed and described. The Central Railroad of New Jersey can easily increase its tonnage to two millions of tons. The capacity of the Delaware and Raritan Canal is almost unlimited. Should there be an active demand the Camden and Amboy Railroad can, through the Belvidere Railroad, become an important avenue to New York. On the North, the amount at present received through the Delaware and Hudson

Canal can be largely increased. It has been long proposed to connect the Erie Railroad with the Pennsylvania Coal Company's road, forming a direct connection from its mines to the Hudson river. A new avenue would thus be found capable of being used at all seasons of the year, and of supplying a very large quantity. It is also proposed to extend the Morris and Essex Railroad from Hackettstown to Easton, a distance of about 17 miles, which would open an additional line of railroad from New York to the mines.

Thus, while New York now possesses routes to the coal fields, which supply to her the present year, 3,500,000 tons of coal, and which are capable of supplying with an increase, simply, of equipment, of twice this tonnage; this amount may be indefinitely increased by the new works proposed. New York henceforward is to add to her other resources that of a vast trade in coal, received in her harbor direct from the mines, and at rates that will enable her to compete with other centres of this trade, for the supply of domestic and foreign markets. A constant supply of this indispensable article, at the lowest rates at which it can be mined, and sent to market, must give a great additional stimulus to her commercial and manufacturing interests.

In conclusion, we annex a statement showing the total number of tons of coal from the Schuylkill, Lehigh, and Wyoming coal fields, received at Philadelphia and Easton, from the commencement of mining operations to the present time.

	At Philadelphia. Schuylkill.	At Easton. Lehigh.	Wyoming.	Total in Tons.
1820..	.....	365	.....	365
1821..	.....	1,073	.....	1,073
1822..	1,480	2,340	.....	3,720
1823..	1,128	5,823	.....	6,951
1824..	1,567	9,541	.....	11,108
1825..	6,500	28,393	.....	34,893
1826..	16,767	31,280	.....	48,047
1827..	31,860	32,074	.....	63,934
1828..	47,284	30,232	.....	77,516
1829..	79,983	25,110	.....	105,093
1830..	89,984	41,760	.....	131,734
1831..	81,854	40,966	.....	122,820
1832..	209,271	70,000	.....	279,271
1833..	552,971	123,000	.....	675,971
1834..	226,692	106,244	.....	332,736
1835..	339,508	131,250	.....	470,758
1836..	432,045	148,211	.....	580,256
1837..	523,152	223,902	.....	747,054
1838..	433,875	213,615	.....	647,490
1839..	442,608	201,025	.....	663,653
1840..	452,291	225,318	.....	677,609
1841..	565,540	143,037	.....	728,577
1842..	540,892	272,546	.....	813,438
1843..	677,295	267,793	.....	945,088
1844..	839,934	377,002	.....	1,216,936
1845..	1,083,796	429,453	.....	1,513,249
1846..	1,237,002	517,116	5,886	1,760,004
1847..	1,533,374	633,507	10,466	2,227,347
1848..	1,652,835	670,321	10,425	2,333,581
1849..	1,605,126	781,656	19,590	2,406,372
1850..	1,712,607	690,456	32,156	2,434,619
1851..	2,184,240	964,224	25,072	3,173,536
1852..	2,405,950	1,072,136	41,890	3,519,976
1853..	2,470,948	1,054,809	26,235	3,551,487
1854..	2,895,208	1,207,186	39,232	4,141,626
1855..	3,318,555	1,284,113	50,209	4,652,877
1856..	3,258,356	1,351,970	44,270	4,654,596
1857..	3,028,716*	1,318,750	37,967	4,385,433
1858..	2,932,583†	1,380,730	69,614	4,381,957

Tot.. 37,728,814† 16,127,428 413,042 54,269,284

* Of which 43,036 by Lehigh.

† Of which 66,133 " "

‡ Of which 109,169 " "

Journal of Railroad Law.

FENCING RAILROADS. LAW OF NEW YORK ON THE SUBJECT. LIABILITY OF COMPANIES FOR STRAY CATTLE KILLED.

The case of Philip Duffy *vs.* the New York and Harlem Railroad Company, recently determined in the New York Common Pleas, discusses the question of the liability of railroad companies, under the existing law of New York, relative to fencing railroads, for stray cattle killed by trains.

The action to which we refer was brought to recover the value of a horse belonging to the plaintiff, and which was run over and killed by the engine or cars of the defendants on their rail track in Fordham, Westchester County.

It appeared that the plaintiff hired pasturage for the horse upon a lot belonging to Mrs. Bassford, adjoining the strip of land on which the defendants' track was laid. That the horse was turned into this pasture lot on the morning of Sept. 3, 1857, and the partition fence between the lot and the rail track being insufficient and defective, the horse strayed through it and on the track of the defendants, and was thus killed.

It was claimed by the defendants that it was negligent to put a horse in the lot referred to, the fences being in a defective condition; and a dismissal of the complaint was asked on that ground, but was denied by the Justice.

The defendants then produced in evidence a deed from Bassford and wife to them of the strip of land adjoining the pasture lot, dated Jan'y 20, 1841, and recorded in the clerk's office of Westchester County, July 22, 1843, containing a covenant on the part of Bassford for himself, his heirs, executors and administrators, to erect upon the easterly and westerly lines of said strip, good, lawful, and sufficient fences, to inclose the same, and at his and their own cost, and charge, maintain and keep the same in good repair for the term of eighteen years, or until the expiration of the defendants' charter.

The Justice gave judgment for the plaintiff for the value of a horse, and the defendants appealed to the Common Pleas.

The latter court held that the plaintiff was not entitled to recover, and that the judgment in his favor must be reversed. The following is the principal opinion rendered upon the appeal.

HILTON, J., after stating the facts. In *Corvin vs. the New York and Erie Railroad Company*, (3 Kernan, 42,) it was determined that the general duty of erecting and maintaining fences on the sides of railroads is now imposed by section 44 of the General Railroad Act of 1850, (see Laws, 1850, p. 233,) upon all railroad companies, and until compliance on their part they and their agents are liable for all damages which shall be done by their agents, or injuries to cattle, horses or other animals thereon. That this duty was imposed, not only for the benefit and security of the public, but also for the benefit of the owners of cattle generally, and until such fences are erected, the statute excludes any defence of negligence on the part of an owner of cattle killed upon the track, in an action brought by such owner against the corporation to recover damages for the injury resulting from such killing.

And it is entirely immaterial whether such cattle enter lawfully or unlawfully upon the premises adjoining the railroad and stray from thence

upon the track, provided it appears that the corporation have not erected and maintained the fences required by the statute. Although after the fences have been erected, there can be no recovery in such a case when the negligence or misconduct of the owner of the cattle injured contribute to the injury; or in other words, the common-law doctrine in respect to actions on the case for negligence then prevailing.

It may also be noticed, that in the case cited, the plaintiff's cattle strayed upon the land of one Gregory, and from thence upon the track of the defendants, and as it appeared that Gregory, like Bassford, in the present case, had conveyed the strip of land for the railroad track, and in the conveyance had covenanted to erect and maintain forever all necessary fences on each side of the railway, it was insisted that the plaintiff was bound by this covenant. But the Court (Marvin, J.) held that as the plaintiff then was a stranger to the covenant, he could not be bound by it; adding, however, that if "Gregory's cattle had entered upon the road from his land, by reason of there being no fence, and been injured, his covenant would have been a good answer to the action," or, in other words, he would be estopped from recovering any damages resulting from a non-performance by him of his express covenant, and although the duty had been imposed by the statute upon the Corporation, yet he undertook to perform it, and as his performance of the covenant entered into by him would have satisfied the statute; he would not be permitted to recover for any injury resulting to himself and arising from his non-performance.

Thus, in the present case, had the horse in question belonged to Bassford it is quite clear he would not be entitled to recover in an action like this, and the only question therefore to be determined by us is, whether the plaintiff stands in any different position with respect to an injury of this character than his landlord.

It has long been settled law that a covenant to maintain partition fences between lands granted and other land of the grantor runs with the land and binds and affects all persons claiming or occupying the lands under the party making the covenant. 2 Hilliard, Abridgment, sec. 48 p. 375; Platt on Covenants, (3 Law Lib.) 481; Beddoe *vs.* Wadsworth, 21 Wend., 120; 4 Kent's Com., 472, and note; Spencer's case, 5 Rep. 16; Bally *vs.* Mills, 3 Wilson, 25; Norman *vs.* Wells, 17 Wend., 136.

In the language of Chief Justice Wilmot in *Bally vs. Wells*, *supra*, as reported in his Opinions, p. 341: "Covenants which run and vest with the land, lie for or against assignees at the common law, though not named. They stick so fast to the thing on which they nail that they follow every particle of it." And therefore it is that although a party may have a mere occupation of the land for a particular purpose, and which may be said to be a species of title, though of a very low order, (2 Black, Com., 195,) yet it is in subordination to and affected by the covenant of the landlord. And although he may not be bound to perform the covenant as heir or assignee, yet it would operate as an estoppel against him in all cases in which the landlord would be estopped by reason of it.

In Spencer's case, *supra*, distinction was taken

between a covenant to erect a wall upon the devised premises, and in which the assigns of the lessor were not named, and a covenant to maintain a wall already erected, and it was held that the assignor in that case, (which was of the class first named,) was not bound because the thing in respect to which the covenant was made was not in issue, and had not at the time of making the covenant been a part of the land. It was only contemplated; although it was agreed by the judges that because it was a thing which would directly affect the devised premises, if the word assigns has been used, the covenant would have bound the assignee; but it could not be extended to him without his being named in it, as the subject matter of it did not relate to a thing in existence at the time of the devise. (Grey *vs.* Cuthbertson, 2 Chitty, R. 482.)

But this nice distinction, originating at a time when it was necessary to use the word "heirs," or other words of inheritance in a conveyance, in order to grant or carry an estate in fee, cannot be now said to exist, as in *Norman vs. Wells*, *supra*, p. 148, it was determined that those covenants run with the land, which are made touching or concerning it, and affect its value, and are not confined to those which respect some physical act or omission upon it.

It is unnecessary, however, to pursue this subject, as it will not be pretended that the estoppel which arises in this case grows out of the plaintiff's liability to perform the covenant of Bassford.

It is sufficient that his occupation was under Bassford, and in subordination to covenants contained in a deed duly recorded long previous to his entering upon the premises. He could acquire no greater rights in respect to their occupation than his landlord had to confer, and he is estopped in an action of this nature to the same extent as Bassford would have been had he been plaintiff.

The covenant was one that runs with the land, and not only affected every particle of it, but every occupation was subject to it, even though the occupant was under no obligation to perform it.

The judgment should be reversed.

The Great India Rubber Case.

MR. HORACE H. DAY has just obtained a decree on final hearing, pleadings and proof in the United States Circuit Court for the District of Maryland, involving his claim to the exclusive right to manufacture and vend all kinds of India rubber goods. This decision fully establishes the validity of Mr. Day's claim. It was made a test case by the defendants in a number of other suits, who stipulated to abide by the decision rendered in this one. The Court has granted a perpetual injunction which will restrain all others from making, importing or selling, all kinds of elastic, vulcanized, India rubber fabrics, except under the license of Mr. Day.

The effect of this decision will be far greater than may at first sight be imagined. It not only prevents the manufacture of this kind of goods by unauthorized persons, in this country, but it puts an end to their importation. Immense quantities of the various articles made from this valuable material, have heretofore been imported from Europe, but this decision of the United States Court will serve as a protection to the home

manufacture, as well as to secure the right of Mr. Day from the competition of domestic rivals.

New York and Erie Railroad.

Below we give a statement showing the result of the operation of this road for 6 months ending March 31st last.

RECEIPTS AND EXPENSES FOR THE HALF YEAR.

	1859.	1858.
Freights.....	\$1,697,944 74	\$1,938,692 75
Passengers.....	507,917 88	525,553 76
Storage.....	788 61	704 24
Telegraph.....	4,660 34	4,617 64
Rents.....	11,471 45	6,196 09
Hire of cars.....		586 11
Mails.....	47,205 50	46,793 00
Total.....	\$2,269,988 55	\$2,523,143 59
Expenses, including taxes, etc.....	1,509,048 69	1,800,671 41
Net earnings..	\$760,939 86	\$722,472 18

Transportation Expenses.

Half year ending March 31.

DISTRIBUTION OF ACCOUNT.

	1859.	1858.
Office and station exp's.		
Office exp. and stat'nery.....	\$22,209 34	\$24,087 80
Agents and clerks.....	68,625 09	71,475 59
Labor, loading, unload'g.....	58,340 92	72,487 14
Cost of running.		
Porters, watchmen, etc.....	25,979 64	32,060 37
Wood, water, etc.....	3,868 03	4,864 49
Fuel, first cost, etc.....	186,460 09	248,708 51
Passeng. conductors, etc.....	31,764 00	33,471 29
Freight do.....	47,694 43	59,598 47
Passeng. enginemen, etc.....	29,239 99	33,660 79
Freight do.....	52,588 82	63,589 46
Oil for passeng. eng., etc.....	8,282 59	8,932 72
Do. freight do.....	15,812 12	18,006 96
Do. passeng. cars, etc.....	1,317 83	1,950 15
Do. freight do.....	9,004 25	12,866 26
General expenses.		
Loss of goods, etc.....	4,792 81	13,839 47
Dam. for injuries to per's.....	2,235 93	11,503 32
Damage to property.....	9,029 09	1,994 70
General superintendence.....	29,121 17	30,323 27
Contingencies.....	25,358 82	55,336 59
Repairs of engines & cars.		
Eng's and tend., passeng.....	40,669 67	62,738 39
Do. freight.....	80,610 98	135,308 42
Passenger and bagg. cars.....	48,528 19	78,654 06
Freight cars.....	115,307 67	167,477 82
Tool and mach'y in shops.....	11,131 76	16,644 04
Incl. exp's about do.....	12,014 19	16,987 80
Repairs of track and railway.		
Road-bed.....	43,038 48	30,063 55
Track.....	352,926 34	315,516 25
Fences, gates, etc.....	4,224 37	4,174 02
Repairs and structures.		
Truss bridges.....	32,985 46	20,404 26
Pass. wood & w't'r stations.....	19,844 42	10,947 36
Engine and car H. M. Wps.....	8,069 31	7,417 45
Rents, (dwelling).....	154 31	342 08
Incidental.		
Superint'd'ce and off. exp.....	1,263 00	347 50
Contingencies.....	1,139 62	9,616 83
Miscellaneous.		
Ferry.....	55,616 30	49,347 11
Exp's operat'g telegraph.....	18,964 66	23,268 11
Total.....	\$1,477,848 69	\$1,743,007 40

* Of this amount \$5,401 79 was caused by the flood at Corning.

† Of this amount \$5,033 10 was for new boilers for steamer New Haven, and \$4,904 08 for refitting said steamer.

Decrease of expenses.....\$291,622 72
Do. gross earnings.....253,155 04

Increase of net earnings....\$38,467 68

In addition to the above transportation expenses and taxes, the liabilities of the Company for the six months were:—

Rent of Union railroad.....	\$41,000
Interest on floating and funded debt, partly estimated.....	925,000
Sinking fund.....	210,000
Total.....	\$1,176,700
Net earning as above.....	760,939

Deficiency.....\$414,761

STATEMENT OF MONTHLY RECEIPTS.

	1858.	1859.
	October.	November.
Freight.....	\$333,775 10	\$333,694 39
Passengers.....	115,242 23	100,658 62
Storage.....	139 44	226 63
Telegraph.....	720 55	840 83
Rents.....	179 46	2,813 46
Mails.....	7,867 58	7,867 59

Total.....	\$457,924 36	\$446,101 52
Expenses, including taxes, estimated..	368,843 15	295,600 95
Net earnings...	\$149,081 21	\$150,500 57

	1858.	1859.
	December.	January.
Freight.....	\$297,590 57	\$237,146 20
Passengers.....	75,939 40	64,340 29
Storage.....	132 91	57 94
Telegraph.....	768 88	838 08
Rents.....	1,128 76	
Mails.....	7,867 58	7,867 58

Total.....	\$383,426 10	\$309,250 09
Expenses, including taxes, estimated..	280,420 07	212,028 35
Net earnings...	\$103,006 03	\$97,221 74

	1859.	1859.
	February.	March.
Freight.....	\$228,377 65	\$268,360 83
Passengers.....	58,485 58	93,251 76
Storage.....	60 62	171 10
Telegraph.....	702 70	789 30
Rents.....	5,504 89	1,846 88
Mails.....	7,867 59	7,867 53

Total.....	\$300,999 03	\$372,287 45
Expenses, including taxes, estimated..	195,856 87	216,299 30
Net earnings...	\$105,142 16	\$155,988 15

Reputation in Wisconsin.

We copy a portion of an address delivered by Judge McArthur, of Wisconsin, before the people of Madison, the capital of the State, on the 4th ult., on the duty of the State and its people to foreign creditors. This eloquent and rightly directed argument is the more timely as, at present, nearly the entire Municipal and Farm Mortgage Debt, as the Railway Mortgages of the State, are in default, and few or no active steps being taken to remove the difficulty. It appears from the confession of this prominent citizen of Wisconsin that no system of railway work in the country has been so entirely built on means borrowed out of the State, as the roads which connect the lake ports of Wisconsin with the Mississippi river. The Judge says:

This gigantic progress has been brought about by our railroads almost exclusively, and in building them probably quite thirty or forty millions of dollars had been borrowed and used in their construction. I have been informed by persons familiar with our railroad statistics, that not more than two hundred thousand dollars in cash have been paid by our citizens toward the cost of our railroads, so that almost the total outlay for their construction has been borrowed out of the State, and paid in hard cash by foreign capitalists, who have derived no benefit from their investment, and whose unpaid coupons, and forfeited bonds, are melancholy proofs of their valuelessness. There

is a fact connected with this subject, of the utmost importance to the credit and honor of Wisconsin. Experience has proved that the roads are less productive than was anticipated, and the companies have failed to protect their mortgages, and have exposed the municipalities, who guaranteed their bonds to the demands of the holders.

When the roads were built the money was not in the State; it must come from abroad, and be obtained upon such securities as we could give. Under these circumstances the Farm mortgages were executed. Their validity is now called in question; and the legal points which they involve will be adjudicated by the authoritative tribunals of the State. But it may be properly hoped that after the diffusion of so much prosperity produced by the investments which they were intended to secure, and in view of the stupendous benefits which they have been the means of showering upon us, the principles of jurisprudence will harmonize with the dictates of justice, protecting the interests of the parties according to the just provisions of their undertaking. These are private contracts, but the case is widely different with the town and city securities given to assist the companies. These are public securities, which derive a sacred inviolability from the public faith and honor. With these there is but one course compatible with moral sense of justice, and that is, at any sacrifice, to make provision for the payment of the interest until the principal can be liquidated. No person, or at least very few, have dared to hint at the other alternative, which is repudiation. I do not believe the people of Wisconsin are prepared for this flagitious crime. But there are two methods of repudiating our just public debts, and both of them entail an equal inheritance of shame; one is by openly refusing to pay, and the other is by doing nothing to pay. A State can never settle its debts by repudiation. Its obligations will live a perpetual disgrace, depriving us of all respect in the world, and exiling us from consociation, or credit, with our neighbors. If we are told that the people of the towns and cities who have voluntarily voted their public credit, will not, and cannot, bear the necessary taxation, let them be assured that if they fall into the putrid gulf of repudiation, they will have more grievous burdens to bear than high taxes. The scorn of mankind, and the moral sense of the world, will sink us into universal infamy.

The benefits derived from the loans exceed even in material wealth a thousand fold the amount that would be sufficient to save our credit and our character, and but a tithing of what we have already realized, would amply enable us to pay the interest as it falls due. It is easy to lose our reputation, and extremely difficult to regain it. A little self-sacrifice and self-denial at the proper time will preserve us from degradation. No one ever lost a character but he regretted in the bitterness of despair that he had not resorted to the means of retaining it. So with States. It is needless to say that only those municipalities will be blighted who have proved recreant. The world regards a State or community in the concrete, and no pause is made to discriminate the members from the whole.

When a public crime is committed, in public judgement the condemnation extends to the entire body. The public faith is in the keeping of the whole community. The character of the State is its noblest treasure, and no man with self-respect will desire to come here unless that character is good.

Whenever the brand of direktion from good faith has stigmatized a State, that State has always been outlawed as a traitress to her sister communities, and shunned in their common intercourse long after the original cause of condemnation had been fully expiated. Mississippi earned not only the scorn of all honest men, but the indignation of every honorable State in the Union. The mere suspicion that attached to Pennsylvania will not be forgotten until we cease to blush. On the other hand, a faithful observance of foreign and domestic pledges has ever upheld the credit of nations abroad, and silenced anarchy at home,

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending August 9, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6 1/2	85
Covington and Lexington, 2d Mortgage.	7 1/2	85
Do. do. Income.	10 1/2	82 1/2
Ohio & Miss., E. D., Construction.	7 1/2	25
Cinc., Ham. and Dayton, 2d Mortgage.	7 1/2	85
Indianap. & Cincinnati, do. do.	7 1/2	85
STOCKS.		
Cincinnati, Hamilton & Dayton	65	
Columbus and Xenia	82	
Indianapolis & Cincinnati	50	
Little Miami	83	

Railroad Earnings.

The following is a statement of the earnings of the Buffalo, New York and Erie Railroad (Buffalo to Corring), for the month of July, 1859, compared with the same month of last year:

	1859.	1858.
Passengers.....	\$14,181 65	\$14,251 67
Freight.....	25,506 05	26,054 16
Other sources.....	1,271 92	1,504 17

Total.....\$40,959 62 \$41,846 00

The July earnings of Milwaukee and Mississippi railroad were:

	1859.	1858.
Freight.....	\$24,368 49	\$68,215 72
Passenger.....	20,144 15	29,353 12
Mails.....	1,835 42	1,877 60

Total.....\$46,348 03 \$99,446 44
46,348 03

Decrease.....\$53,098 41

The traffic of the Great Western Railway of Canada for the week ending July 29, 1859, was as follows:

Passengers.....	\$16,978 52
Freight and live stock.....	8,247 23
Mails and sundries.....	1,410 93

Total.....\$26,636 68
Corresponding week of last year.....28,337 46

Decrease.....\$1,700 78

The receipts of the Grand Trunk Railway of Canada for the week ending July 23, were.....\$37,434 65
Week ending July 24, 1858.....36,267 43

Increase.....\$1,167 21

Total traffic from July 1st.....\$128,024 84
Same period last year.....125,173 03

Increase.....\$3,851 81

The earnings of the Toledo and Wabash Railroad for July, were as follows:

Passengers.....	\$20,260 95
Freight.....	34,156 82
Mail.....	3,316 66

Total.....\$57,734 44

The earnings of the Little Miami and Columbus and Xenia Railroad, for July, as compared with the same period last year, were as follows:—

July, 1859.....	\$90,871 93
July, 1858.....	85,524 59

Increase.....\$5,374 34

The Little Miami Railroad Company, for the half-year ending June 1st, report a gross revenue of \$596,295; expenses, \$342,362; dividend fund, net, after paying interest on debt and other incidental charges, \$184,378.

The earnings of the Worcester and Nashua railroad for July, 1859, were \$17,629 49; for July, 1858, \$16,528; increase, \$1,101 49; increase for seven months previous, \$18,380 64; total increase this year, \$19,482 13, being a gain over the cor-

responding time last year of over twenty per cent.

The business of the Illinois Central Railroad for July, 1859, was as follows:

Land Department.

Acres Construction Lands sold.....	1,306.97	for \$16,114 41
Acres Interest Fund L'ds sold.....	80.00	" 1,933 40
Acres Free Lands sold ..	80.00	" 596 00

Total sales during the month.....	1,466.97	for \$19,643 81
To which add Town Lot sales.....		1,523 40

Total of all.....\$21,167 21

Acres sold since Jan'y 1, 1859.....18,516.64 for \$273,067 89
Acres sold prev'ly, 1,229,835.33 " 15,637,148 95

Total.....1,248,351.97 for \$15,910,216 84

Construction Bonds canceled in July, 1859.....	\$28,500 00
Construction Bonds canceled previously.....	1,119,500 00

\$1,148,000 00

Free Land Bonds canceled in July, 1859.....	\$4,000
Free Land Bonds canceled previously.....	145,000
	149,000 00

Total Bonds canceled up to July, 31, 1859.....\$1,297,000 00

Cash receipts in July, 1859.....	\$42,713 24
Do. since Jan'y 1, 1859.....	333,237 38

Total cash and bonds received to July 31, 1859.....\$3,008,134 91

Traffic Department.

Receipts from passengers.....	\$54,167 41
Do. freight.....	69,915 60
Do. mails.....	6,358 33
Do. rent of road.....	5,133 33
Do. other sources.....	3,832 97

Total receipts in July, 1859.....\$139,407 64

Do. do. 1858.....	154,299 42
Do. since Jan'y 1, 1859.....	\$1,009,200 13
Do. do. 1858.....	1,057,952 61

Original land grant, 2,595,000 acres; railway, 706 miles of main track, and 87 miles of sidings; 113 engines; 2,401 cars; funded debt, \$18,703,000; share capital, \$60 paid on 175,000 shares—\$10,500,000.

	1856.	1857.	1858.
Traffic...\$2,434,878.59	2,293,964.47	1,976,578.52	
W'rk'g ex- penses ..	1,444,546.19	1,791,231.14	1,419,954.80

Balance....\$990,332.40 \$502,733.43 \$556,623.72

The following are the July earnings of the Cincinnati, Hamilton and Dayton Railroad, compared with the corresponding month of previous year:

July, 1859.....	\$11,241 60
July, 1858.....	35,161 15

Increase.....\$6,080 45

The business of the Chicago, Burlington and Quincy railroad in July was as follows:

	Galesburg & Quincy.	Chicago & Burlington.
Freight.....	\$7,902 41	\$49,244 45
Passengers.....	9,332 59	29,099 30
Mails and miscellaneous ..	856 33	1,886 33

Total.....\$18,091 33 \$80,230 08

Total earnings, per 310 miles.....\$98,321 41
Earnings in July, 1858.....143,759 38

Decrease in July, 1859.....\$45,437 99

The following are the earnings of the Michigan Central Railroad, for July:

	1859.	1858.
Passengers.....	\$62,118 62	\$82,488 20
Freight.....	40,692 47	55,233 77
Miscellaneous.....	5,492 85	6,150 48
Total.....	\$108,303 94	\$143,872 45

The earnings of the Michigan Southern and Northern Indiana Railroad for July were:

	1859.	1858.
Passengers.....	\$49,146 59	\$70,990 59
Freight.....	42,145 68	61,277 63
Mails.....	4,583 41	4,635 14
Express, etc.....	6,151 61	12,703 42

Total.....\$102,027 29 \$149,603 78

The net receipts of the New York and Harlem were as follows:—

July, 1858.....	\$88,582 46
July, 1859.....	91,189 78

Net increase.....\$2,607 32

The earnings of the Galena and Chicago Union Railroad Company, for the month of July, were:

	1858.	1859.
Freight.....	\$106,897 84	\$52,310 17
Passengers.....	45,124 57	31,746 00
Mails, etc.....	5,262 97	5,800 00

Total.....\$157,285 38 \$89,856 17
Decrease.....\$67,429 21

Corrected earnings for the previous month.....\$110,656 29

The following is a statement of the earnings of the New York Central Railroad, for the month of July, 1859, compared with its earnings for the corresponding month of the previous year:

1859.....	\$511,669 48
1858.....	458,663 80

Increase.....\$52,905 68

The earnings of the Norwich and Worcester railroad, for July, 1858 and 1859, were:

	1858.	1859.
Passengers.....	\$11,591 24	\$14,180 59
Freight.....	14,139 55	21,171 58

Total.....\$25,730 79 \$35,352 17
Gain over 1858.....\$9,621 38

Allentown Railroad and its Connections.

We understand the Mine Hill Railroad Company have the privilege, in their present charter, to make a lateral of six miles to connect with the Allentown Railroad at Anburn. There are charters already in existence to connect all the internal railroads in Schuylkill county with the proposed Auburn and Allentown Railroad. A survey has already been made between Schuylkill Haven and Auburn by the Mine Hill Company, and the route, we learn, has been found quite favorable for the connection.—*Pottsville Miners' Journal.*

The Cedar Key and Fernandina Route.

We learn from the gentlemanly mail agent for Florida, Geo. Center, Esq., who arrived in our city on Saturday last, per steamer Suwanee from Cedar Key, that the road is now considered open, and that he brought through to Cedar Key, from Fernandina, the first United States Mail, the Havana, and that by the first of October the entire line will be in complete running order, at which time the contract for the daily mail from New York to New Orleans is expected to go into operation. Say what you may of this enterprise, and question the motives of the originators as you will, still the naked fact stares us in the face, that a safe, speedy and cheap traveling communication has been, or will shortly be, opened through the Peninsular of Florida, that must and will successfully compete for the great stream of our traveling public, that twice a year set their faces North and South from

Maine to Texas, and even to the Central American States.—*Apalachicola Adv.*

American Railroad Journal.

Saturday, August 13, 1859.

New York and Erie Railroad.

Within the past two weeks matters have proceeded with a rapid pace in reference to this road. The intimation that legal proceedings had been taken by some of the bondholders had hardly been made, when it is announced that the Company is already in the meshes of the law; that the road is in the hands of a Receiver; that the powers and duties of the directors are superseded, and that the concern is now on the road toward liquidation, which means, we suppose, that it is to go into the hands of the fourth and fifth mortgage bondholders, leaving the unsecured bondholders and stockholders apparently without remedy or hope—a fitting and necessary conclusion of Mr. Moran's administration.

The event is greatly to be regretted—all the more so, because unnecessary. The road is entirely capable of paying the interest on its funded debt; indeed upon its whole debt. Not a dollar of either need have been lost. With the prospect of being able to do this at a day not very remote, if not instantly, we are confident that no creditor would have moved. But with Mr. Moran remaining as the executive officer, no such prospect existed. He was so infatuated with his own crude and impracticable notions, that he would receive advice from no one that did not flatter his peculiar idiosyncrasy; while upon all matters relating to the management of the road, and the finances of the company, he has proved himself as incapable, as infatuated. He alienated from himself, and lost the confidence of nearly every member of the Board of Directors. Unfortunately, most of the gentlemen composing it lacked the spirit to meet the emergency as it required. Mr. Moran has been allowed full swing to the present moment. His salary, to be sure, was cut down a few days ago to \$8,000 per annum, in expectation that he would receive this act as an expression of a desire to be rid of him. But he still held on—the result is before us.

What is to be the next step in the programme? Mr. Marsh, late Secretary of the road, is appointed Receiver, amenable only to the courts of law. The adjustment of the present suit can alone restore the road to the stockholders. The Plaintiff, in interest, in the present suit, is Mr. Daniel Drew, one of the directors, and, of course, a stockholder. We presume he would be willing to make any reasonable settlement with the Company. For the purpose of seeing whether some settlement cannot be effected, or, perhaps, we should say, for the purpose of considering the present condition of the Company, and of seeing whether some plan whereby to escape the danger threatening, cannot be devised, a committee of five directors, consisting of E. J. Brown, Daniel Drew, Samuel Marsh, E. K. Alberts, and Hermann Gelpcke, have been appointed. How soon they may be expected to act, we are not informed. They have a deep interest in the road, and are most anxious to do all within their power for the unsecured bondholders. They cannot act too soon.

In the meantime the interest of all parties own-

ing stock or bonds is represented by Mr. Nathaniel Marsh, the Receiver. How these will be protected remains to be seen. He has not yet entered upon the discharge of his duties. They are certainly extremely onerous and difficult, and call for the exercise of the highest abilities. The road, fortunately, is in fair condition, but the force upon it pretty thoroughly demoralized. Large amounts are overdue. Are these overdue wages a charge against the Receiver, or, are they to come under the head of unsecured debts? With regard to the future, a system and policy entirely different from that pursued by Mr. Moran has to be inaugurated. A healthy sentiment has to be created among the employees on the road. The lost favor of the public and of connecting railroads is to be regained. In fact the Receiver will have to open new books all round, and if he succeeds in his new duties, he will show himself a very remarkable man.

We have always dreaded having this road go into the hands of the law, for the reason that most important steps are constantly to be taken by parties who, in their private and personal relations, would be considered, and would consider themselves, entirely incapable of acting. A Judge in the interior of the State, who, probably, is ignorant of the very rudiments of railway management, decrees that the road shall go into the hands of a Receiver. He names a person to select the Receiver, as ignorant and incapable, very likely, as himself. Such tremendous responsibilities as those resulting from the appointment of a person to manage a property that has cost \$40,000,000, should not be lightly exercised, nor should it be exercised at all, except by parties who have shown, by the results of their own experience, a capacity to make a proper selection. In saying this, we mean no reflection upon the Receiver appointed, as we shall very willingly wait till we can judge of his qualification by his acts. We are speaking generally. There is not one road in ten, situated like the Erie, that does not fall a sacrifice to incompetency on the one side, and cupidity on the other. If the Erie escapes a common fall, it will be fortunate. The Receiver may do all in his power, and accomplish but little. Once in Court, the road becomes a common object of plunder, while the ties by which the employees are bound to it are greatly weakened. One of the most powerful of all motives, the desire to contribute all in their power to promote the success of a prosperous road is taken away. Nothing but a sense of duty, as the incentive to good conduct, remains—a feeble one, often, in the servants of a corporation, where personal relations can seldom be established.

Terre Haute, Alton and St. Louis Railroad.

The following gentlemen were recently elected Directors of this road:

W. D. Griswold, Terre Haute, Ind.; Robert Smith and Nathaniel Hanson, Alton, Ill.; John S. Hayward, Hillsboro, Ill.; Anthony Thornton, Shelbyville, Ill.; Harrison Messer, Mattoon, Ill.; Thomas A. Marshall, Charleston, Ill.; R. B. Southerland, Dudley, Ill.; T. P. Usher, Terre Haute; Edwin C. Litchfield, N. Y.; John Stryker, Rome, N. Y.; Caleb Rice and William Mattoon, Springfield, Mass.

W. D. GRISWOLD, *Pres.* and *Gen'l Supt.*

ROBERT SMITH, *Vice President.*

RALPH TOWSEY, *Sec. and Treas.*

H. C. MOORE, *Supt. Western Division.*

J. W. COULOUZE, *Supt. Eastern Division.*

Improvement in the Manufacture of Car Wheels.

Our attention has been called to an improvement in the construction of car wheels, invented and patented by P. F. GEISSE, Esq., of the *Fulton Foundry and Machine Works*, Wellsville, Ohio, in the operation of which a perfectly equable cooling and annealing of the wheel is effected in such a manner that they are almost completely proof against any accident that may befall them while in use upon the road. The wheels manufactured by Mr. Geisse, and cooled by his peculiar process, have given very general satisfaction where used. When the wheels are taken from the flasks, they are placed in an apartment heated to the same temperature as the wheels. They are never heated again, but a slow and completely uniform decrease of temperature follows, in which the rays of caloric pass in an infinity of converging streams from the rim to the centre, in such a manner that all parts of the wheel are exactly of the same temperature at any one time. The chill is not softened in the least by this process, but the toughness of the soft part of the wheel is peculiarly imparted to the rim, and renders the wheel proof against any but extraordinary accidents, or the effects of intense cold.

A sledge weighing sixty pounds, and wielded by a very strong man, has failed in two hundred blows to produce a crack. When by dint of continued efforts a crack is made, it cannot be seen in the intervals between the blows until the edges have been chafed by vibration against each other, thus showing that the metal in the wheel is under no strain whatever, and consequently must possess all its natural strength.

Miscellaneous.

GAS-LIGHT COMPANIES.—There are 237 gas-light companies in the United States, with an aggregate capital of \$34,920,464.

COMMERCE OF NEW ORLEANS.—The value of domestic products exported from New Orleans to foreign countries during the past 7 years, ending 30th June, has been: In 1852-3, \$67,768,728; in 1853-4, \$60,176,663; in 1854-5, \$55,688,552; in 1855-6, \$80,547,963; in 1856-7, \$91,514,286; in 1857-8, \$88,382,435; and in 1858-9, \$100,350,650.

SAN FRANCISCO MINT.—The depositors of gold during the year ending 30th June, 1859, numbered 9,300, and the deposits amounted to \$14,027,050, or each, on the average, \$1,508. The weight of all this gold, of the first melting, was 771,755 ounces, or 64,312 pounds, or 32 tons, and after being reduced to standard (nine-tenths), 757,797 ounces.

Belleville Railroad.

We learn from the *Newark Mercury* that this company was organized on Saturday last by the election of the following gentlemen as directors, viz: Gashere De Witt, Jr., Hugh Holmes, D. S. Gregory, John S. Darcy, John P. Jackson, John Kennedy, and S. V. C. Van Rensselaer. A majority of the Board are citizens of Belleville, the preponderance having been conceded to the stockholders in that place, though holding a minority in interest.

Subsequently, the Board of Directors met and organized by electing John P. Jackson, Esq., as President, H. J. Southmayde, Treasurer, and F. Woolcot Jackson, Secretary. On motion, it was resolved that a speedy survey be made of several

routes for the proposed railroad, under the charge of the executive officers, with the advisement and direction of the members of the Board.

Interest and Dividends.

The Board of Directors of the New York Central Railroad Company, have declared a dividend of 3 per cent., payable on the 20th inst.

The New York and New Haven Railroad Company have declared a dividend of 3 per cent., payable on the 15th inst.

The Mine Hill and Schuylkill Haven Railroad Company has declared a semi-annual dividend of 5 per cent., payable on the 20th inst.

Analysis of Railroad Reports--Galena and Chicago Railroad.

Below we give a statement showing, in detail, some of the principal items of cost of conducting the operations of this road for a period of five years, ending in 1858.

The general result cannot be said to be an unfavorable one. The cost of repairs of engines is moderate. That of oil and waste is at least twice as much as it should be. We have given the total charge for these articles in the table, but have estimated that two-thirds of the amount used went to the locomotive department. Fuel is enormously high. The Chicago, Burlington and Quincy Railroad run their trains for 10 cents per mile for fuel, against 23.33 on the Galena road. We see no reason why fuel on the latter road should cost 25 per cent. more than on the former. The fuel is unquestionably the *leaky* department on this road, in which at least \$100,000 annually should be saved.

The total cost of repairs, service, oil, waste, and fuel, per mile run by locomotives, on this road, for the past 5 years, has equalled 40.58 cents per mile; or 40 per cent. of the whole expenses of the road. This is enormously out of proportion, and should be brought down to 20 cents the mile. The New York Central Company is now operating its road for 18 cents for the same items that cost the Galena Railroad 40. The Illinois Central Company is running its road at about 19 cents per mile for the locomotive department. Wood, on the line of this road is as high as upon the Galena and Chicago. The former is going largely into the use of coal. We presume that the Galena road will soon follow its example. Coal must soon be the fuel for all our roads.

The amount expended upon track is moderate, provided it covers the wear of rails and ties, which we presume is not the case, as neither have been in use a sufficient length of time to call for extensive renewals. A large sum will probably be called for within a few years for these objects, which will be likely to keep the ratio of expenses, to earnings, to a pretty high figure, for some time to come.

The falling off in earnings from 1856 to 1858, was \$687,782. We presume that for the current year, the earnings may not exceed one-half what they were three years ago. Still, we believe, the road will be one of the first in the West to recover. It has an admirable line for business, and one that may be cheaply maintained. The most rigid economy should be practised in these dull times. In this way, a most useful lesson may be learned for the future. We believe this road must continue to be productive on its entire cost,

Statement showing in detail, some of the principal items of expenditures on the Galena and Chicago Railroad for five years last past.

Year.	1854.	1855.	1856.	1857.	1858.
Length of road.	186.211	186.249	186.249	186.249	186.249
Cost.	\$6,787,328	\$6,787,328	\$6,787,328	\$6,787,328	\$6,787,328
Total earnings.	\$1,506,710	\$1,506,710	\$1,506,710	\$1,506,710	\$1,506,710
Current expenses.	\$724,598	\$724,598	\$724,598	\$724,598	\$724,598
Net earnings.	\$782,117	\$782,117	\$782,117	\$782,117	\$782,117
Miles run by company's trains.	638,288	638,288	638,288	638,288	638,288
Miles run including trains of the C. B. & Q. R. R.	708,288	708,288	708,288	708,288	708,288
Cost of locomotive repairs.	\$8,909	\$8,909	\$8,909	\$8,909	\$8,909
Cost per mile run, in cents.	6.14	6.14	6.14	6.14	6.14
Cost of fuel.	\$177,175	\$177,175	\$177,175	\$177,175	\$177,175
Cost per mile run, in cents.	25.01	25.01	25.01	25.01	25.01
Cost of locomotive service.	\$53,860	\$53,860	\$53,860	\$53,860	\$53,860
Do. per mile run, in cents.	8.50	8.50	8.50	8.50	8.50
Cost of oil and waste.	\$117,102	\$117,102	\$117,102	\$117,102	\$117,102
Do. per mile run.	17.72	17.72	17.72	17.72	17.72
Total cost of repairs of engines, wages of firemen and engine'rs, and of fuel and oil and waste.	\$282,344	\$282,344	\$282,344	\$282,344	\$282,344
Do. per mile run.	41.50	41.50	41.50	41.50	41.50
Cost of repairs of track.	\$133,508	\$133,508	\$133,508	\$133,508	\$133,508
Do. per mile in cents.	18.84	18.84	18.84	18.84	18.84
Station expenses.	\$153,261	\$153,261	\$153,261	\$153,261	\$153,261
Repairs of cars.	\$47,898	\$47,898	\$47,898	\$47,898	\$47,898
Cost of train service.	\$29,371	\$29,371	\$29,371	\$29,371	\$29,371
Percentage of expenses to gross earnings,	45.60	45.60	45.60	45.60	45.60

Finances of Canada.

From the report of the Inspector-General we obtain the following particulars of the public debt of Canada and of the receipts and expenditures.

On the 31st December, 1858, the public debt of the province was as follows:—

Direct debt	\$24,430,975 17
On account of railroads	20,295,098 47
Do. municipal loan fund	9,057,792 00
Do. miscellaneous funds	1,169,684 85

Total (£13,738,387.62 currency) ..\$54,953,550 49

Of the direct debt \$3,752,843 22 is held on account of the sinking fund for the redemption of the "unpaid loan," and \$621,726 68 is held on account of the consolidated fund. The debt of the province has been incurred exclusively for public works, and herein the security for Canadian Government bonds differs from that of the major portion of European States in which war expenditures form the largest element. Scarcely one-twelfth of the whole is unproductive.

The outlay for which the direct debt has been incurred is shown in the following exhibit of special costs:—

Welland and St. Lawrence canals ..	\$14,155,206 35
Other canals	2,766,146 40
Harbors and lighthouses	2,807,057 92
Roads and bridges	1,610,267 34
Miscellaneous works	1,326,346 21
Unproductive do.	1,982,039 70

Total

—showing a larger sum than the actual debt and to the amount of that difference and of the sinking fund, etc., the sum has been paid from the surpluses of current revenues. These together amount to \$4,600,658 65 or more 1-6th the total cost.

The advances on account of railroads are assumed to be productive investments and are but small in comparison with the cost of the lines which improve every description of property within the province.

The liabilities on account of the consolidated municipal loan fund may prove but of a temporary character, and the local revenues will no doubt be able to supply the government with funds to meet the current charges. The last year was one of misfortune, and the province had to pay the interest on this class of bonds; but with the revival of business the municipalities will regain their abilities.

The current accounts of the province for the fiscal year present the following:—

Gross income	\$10,271,291 81
Gross expenditures	11,403,587 44

In the sums are included the operations of all the funds, the payment and re-payment of advances, redemptions, balances, etc. The actual revenue amounted to \$5,774,089 and the actual expenditures to \$8,943,013. The estimates for 1859 put forward by the Inspector General give—receipts \$7,334,000 and expenditures \$7,497,000.

Cedar Valley and Minneapolis Railroad.

The transfer of this road to the Directors of the Southern Minnesota Railroad Company, says the *Chatfield Republican*, took place in Mendota on the 21st July. "The report of the President, Mr. Shields, shows a very bad financial condition; in fact an indebtedness of \$191,000, with \$200,000 given in pawn to raise \$53,000 for the use of Directors."

Atlantic and St. Lawrence Railroad.

At the annual meeting of this company, held in Portland, on the 2d inst., the following gentlemen were elected Directors for the ensuing year: St. John Smith, John B. Brown, Charles E. Barrett, Phineas Barnes, John M. Wood, Geo. F. Shepley, James L. Farmer, Byron Greenough, and Harrison J. Libby. The report of the company for the fiscal year, ending June 30, 1859, was presented, of which the following is a synopsis:

The road for the past year, as heretofore, has been operated by the lessees, the Grand Trunk Railway Company, connected with their lines of road in the Canadas.

It has been kept in good running condition, and much improved by re-building the stone abutments and piers of many of the bridges, and replacing several wooden structures—the most important with iron, and the others with new wooden bridges. The number of iron bridges at the close of this season, including those over the Presumpscot, Wild, and Connecticut rivers, will be sixteen.

The amount of indebtedness on notes of the company, unpaid June 30, 1859, which have not matured, and will not fully mature until 1862, is \$8,000.

The whole amount of the stock, standing on the books of the company, June 30, 1859, is \$2,494,900, exclusive of 15,000 shares held by the city of Portland, as collateral security for loans of city bonds to that amount—say \$1,500,000—which, being held as collateral, according to the provisions of the Acts authorizing the first and second city loans, are not entitled to dividends or votes.

The funded debt of the company is as follows:

City of Portland bonds, loaned to the Railroad Company.....	\$2,000,000
Bonds of the Railroad Company, dated April 1, 1851, on 15 years, exclusive of those pledged to the City of Portland as collateral.....	988,000
Bonds of the Railroad Company, dated Nov. 1, 1853, on 25 years, payable in Sterling currency.....	484,000
Notes payable before mentioned.....	8,000
	\$3,480,000
Amount of share capital.....	2,494,900

Total.....\$5,974,900

The Grand Trunk Railway is completed to St. Mary's, C. W., about 724 miles from Portland, thence by branch to London, 22 miles, there connecting with the Great Western Railroad of Upper Canada. From Richmond to Quebec, 96 miles; and from Quebec to St. Thomas, 49 miles, the road is also finished. From St. Thomas to River De Loup, about 80 miles, the construction is progressing.

A railroad from Toronto, 38 miles long, connects the Grand Trunk with the Great Western Railroad of Upper Canada, at Hamilton.

The Grand Trunk is connected with Lake Huron by the Ontario, Simcoe and Huron Railroad, 95 miles long. A large amount of freight and travel, coming from the Western States, passes over this road. The extension of the Grand Trunk Railway, from St. Mary's, by Port Sarnia to Detroit, about 128 miles, is all under contract, and will be complete and ready for use next autumn. The above roads being finished the Grand Trunk will have a direct and independent connection with the Western States.

The Victoria bridge is nearly completed. The abutments and twenty-two of the twenty-four piers are finished, and the other two under good way. Eighteen of the twenty-four iron tubes, constituting the road-way, are in place, complete, and the iron for the other six tubes is at Montreal. The bridge will be finished and ready for the passage of locomotives and cars next autumn. When completed, it will be nearly two miles in length.

Messrs. Edmonstone, Allan & Co.'s Canadian line of ocean mail steamers, running to and from Liverpool, connects with the Grand Trunk Rail-

road at this port during the winter season, and additional wharves for their accommodation are now being constructed. They will arrive and depart fortnightly the coming season.

The Treasurer reports the capital stock to be the same as last year, \$2,494,900. This is exclusive of the 15,000 shares which were placed with the City of Portland, under the two loan Acts, as collateral security, upon which, while thus held, no dividends are payable under the lease. There has been a large number of shares converted into Sterling currency during the past year; and while the shares continue to command a higher price abroad than at home, the dollar shares will gradually decrease in number.

The Commissioners of the Sinking fund report the aggregate amount of the two funds, at this time, to be \$284,567 01, viz:

	Principal.	Interest.
Fund of 1848.....	\$140,750	\$51,005 27
Fund of 1850.....	65,000	19,811 74
	\$213,750	\$70,817 01
		213,750 00
		\$284,567 01

The state of the investments of both funds, at this time, as compared with the last year, is as follows:

	1858.	1859.
City scrip of the railroad		
loans.....	\$97,500 00	\$101,500 00
Mortgages of real estate.....	125,778 33	149,132 00
County securities.....	21,000 00	19,000 00
Railroad stocks—		
Boston & Maine.. 33 shares		
Boston & Worcester.. 37 “		
Port. Saco & Ports.. 53 “		
Tot. No. of shares.....	123	12,300 00
Premium account.....	674 17	373 79
Cash.....	1,153 03	2,260 22
	\$246,105 53	\$284,567 01

The officers of the company are:

ST. JOHN SMITH, *President*.

S. T. CORSER, *Superintendent*.

CHARLES E. BARRETT, *Treasurer*.

Springfield, Mt. Vernon and Pittsburg R. R.

We are informed by Mr. J. R. Straghan, Superintendent and Chief Engineer of the Springfield, Mt. Vernon and Pittsburg Railroad, that Mr. Dunbar, President of the road, has succeeded in making a contract for iron in England, which will insure a speedy completion of the line. The work is progressing rapidly, and it is expected that trains will run through to Mt. Vernon by the 1st of January, 1860. It is claimed that this route when finished will be the best and cheapest line to the East, and the officers are very sanguine of their ultimate success. The iron will be shipped about the first of August, and immediately after its arrival the work of laying track from Delaware to Lakeville will be commenced.—*Dayton Journal*, July 25th.

Mississippi and Wabash Railroad.

The *Warsaw Bulletin* learns that the work on this road, projected from Warsaw to Peoria, through the counties of Hancock, McDonough, Fulton and Peoria is going forward steadily. Gangs of hands are at work on all the sections between Carthage and Blandinville.

North Carolina Railroad.

The receipts of the North Carolina Railroad, from freights and passengers, for the first six months of 1857, were \$143,571 41; for the first six months of 1858, \$152,185 19; for the first five months of 1859, \$150,601 43. June has yielded, it is thought, \$30,000, making \$180,000 for the first six months of 1859.

Finances of New Brunswick.

The financial year 1858 ended with October. The funded debt of the province at that period stood as follows:

Sterling Debentures on account of St. Andrew's and Quebec Railroad.....	£44,000
do. European and N. American R. R.....	90,000
do. Railroad const'ns (19 Vic. cap. 6).....	400,000
do. Province liabilities (19 Vic. cap. 20).....	31,000
	£565,000
Add 1-5 for exchanges.....	113,000
Currency.....	£678,000
Other holders.....	28,800

Total funded debt (currency).....£706,800
Floating debt.....157,564

Gross total of Provincial debt.....£864,364

The assets of the Province amounted to £737,657, comprising cash on hand £17,068, balance of special funds, £10,894, investments, including railroad constructions, £608,097, and miscellaneous, £47,000. The abstract of the expenditures as estimated, and as shown by warrants and charges for the service of the fiscal year, 1858, gives the following result:

Estimates.....	£129,379 18s. 5d.
Actual expenditures.....	130,114 16 6

Difference.....	£784 18 1
Off, 1-13 of post office expend're.....	577 8 4

Exc. of exp'ture over est'te. £267 9 9

The estimates for the fiscal year 1859, are as follows:

Undrawn appropriations.....	£23,703 11s. 9d.
Services already auth'ed by law.....	72,547 0 0
“ to be voted on.....	59,690 0 0

Total.....£155,940 11 9

The revenues are thus stated:

Cash, balances, etc.....	£24,131 12 4
Ordinary income.....	132,830 0 0

Total.....£156,961 12 4

—leaving a balance in favor, amounting to £1,021.

Flint and Pere Marquette Railroad.

This company have nearly completed the grading of that portion of their road between Flint and Saginaw. They have also contracted for the iron for it, and will commence laying the rails in a few days—several cargoes of which will be shipped from the Wyandotte Rolling Mills next week. These are both important events in the history of Michigan. The completion of so important a road as that we have named, placing Detroit within nineteen miles of Flint by railroad, and at a time when railroad building has almost everywhere else been suspended, is an era in our State. And that the iron for it has been made by our own citizens, from our own ore, is an equally important one. We understand that the road will be in running order to Saginaw by the middle or last of October.—*Detroit Press*.

Flint and Pere Marquette Railroad.

The Flint and Pere Marquette Railway Company have completed their bridge over the Cass river at Bridgeport. The bridge is one hundred feet span, of the style known as 'Howe's.' It is a very substantial structure, and most thoroughly built by Edward F. Weeks, Esq., of this city, who had the contract for building. The dock at Saginaw is also completed, and the chairs and spikes for the road have begun to arrive.—*Flint Dem.*

Vicksburg, Shreveport and Texas Railroad.

We understand from the *Vicksburg Sun* that the cars commenced running on this road, for the first since the subsiding of the overflow, on the 27th ult.—*N. O. Pic.*

U. S. Cents not "Legal Tender."

The opinion has prevailed quite generally that copper coins were legal tender in small amounts for the payment of debts. This, it seems, is an error; and no one is *obliged* to take a pocket-full of these little "rocks." The Director of the Mint states that cents are not a legal tender for any specified amount. They are "lawful coins," and authorized to "pass current as money," but are not expressly made a legal tender in payment of debts. The Constitution of the United States prohibits the States from making "anything but gold and silver a legal tender in payment of debts." This prohibition to the States does not apply expressly to Congress, but the principle perhaps does; and Congress has never made anything but gold and silver a "legal tender."

Orange and Alexandria Railroad.

We are gratified to learn that the work on the western end of the Lynchburg Extension of the Orange and Alexandria Railroad is progressing quite rapidly. The grading from Mr. George Pettyjohn's, (one mile and a half east of this city,) is completed for ten miles, and the track laid for two and a half miles on this end—the rails are being laid at the rate of two miles per week. The heavy cut at Love's factory, on the opposite side of the river, it is thought, will be gotten through in two weeks, when the track will be laid to that point. For four or five miles east of Tye River Warehouse, in Nelson, the grading is completed and the track-laying commenced. The abutment of the bridge, on this side of the river, has been under way for two or three weeks past, and the work on the middle piers began recently. Col. Crockford, of Alexandria, has the track-laying in charge, and confidently expects to complete the entire work by the first of December.—*Lynchburg Virginian*.

Pacific Railroad of Missouri.

This road is now finished to Syracuse, one hundred and sixty-eight miles from St. Louis, and ninety miles from Kansas City. We learn this from a private letter to the agent of that line now in this city.

Genesee Valley Canal.

The extension of the canal from Olean to Millgrove Pond, will be completed early next spring. When this is done, coal can be laid down at Rochester for \$2 50 a ton; Syracuse, at \$3 15; Buffalo, \$3 21; Albany, \$4 25, and New York \$4 44.

Alabama and Tennessee Rivers Railroad.

Track-laying on this road was commenced near Alpine on the 25th ult. A strong force are spiking down the bars.

Selma and Gulf Railroad.

The Selma Reporter announces the appointment of committee of nine leading citizens to solicit subscriptions for this enterprise.

**FULTON FOUNDRY AND MACHINE WORKS,
P. F. GEISSE,
WELLSVILLE, OHIO.**

STEAM ENGINES of every variety built to order. STEAM BOATS and STEAM FERRY BOATS contracted for in whole.

PURMAN'S PATENT Turn-Tables (a very superior and simple table) of all sizes built to order at very reasonable rates.

Car Wheels of a quality superior to any ever yet made. I am now manufacturing from the best material, and annealed by a process patented by me in February, 1859, which renders them almost equal to wrought iron. Car Wheels, Steam Engines and all kinds of machinery furnished at as low, if not lower rates than can be found elsewhere.

Rights to manufacture Car Wheels under P. F. GEISSE's annealing process may be obtained from the Patentee at Wellsville, O., or from T. Culbertson, No. 8 Fourth Avenue, N. Y.

Testimonials from the Superintendents and Master Mechanics of the Cleveland and Pittsburgh, Little Miami, and Steubenville and Indiana Railroads, as to the superior quality and durability of these Wheels will be furnished on application.

A GENTLEMAN who has upwards of 36 years experience in conducting an extensive machine manufacturing business, (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.

Address S. box 932 Baltimore Post Office.

4132

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other parts of the U. S. CASWELL & PERKINS, Brokers, 69 Wall st.

New York, July 9, 1859.

FREIGHT CARS FOR SALE.

11 CARS—Have been run about one year,—viz:—

3 long 8-wheel Box Cars,
9 " " Platform Cars.

These Cars are made in the best manner, with large axles, brakes, Lightner boxes, etc., and will be sold low for cash. WILLIAMS & PAGE, 44 Water st., Boston.

26tf

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
Boston, June, 1851. 29 Central Wharf.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 Cliff st., N. Y.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS of SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.
New York, Aug. 1, 1859.

RAILROAD IRON.

THE RENSSLAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

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MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL
IN ALL THEIR VARIETIES.

ROILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
CUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.

Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

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THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
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Eric Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are therefore prepared to execute orders promptly for RAILROAD IRON of any pattern and weight. Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
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THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG.,

are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

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THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or ex ship at ports in the United States.

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New York, 1st June, 1859.

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WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

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OFFICE, No. 407 Walnut st.

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RAILROAD IRON MILL COMPANY,
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MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to
ALBERT G. SMITH,
President of the Incorporation.
February, 1862.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

Address N. WILKINSON, Secy,
WHEELING, VA.

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JOS. R. ANDERSON,
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TREDEGAR IRON WORKS, RICHMOND, VA.

WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL METAL
BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE,
CANNON AND PROJECTILES, ALL KINDS,
IRON AND BRASS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our **SPIKE AND BOLT FACTORY**, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.
The Machinery Department of our Establishment is under the supervision of **THATCHER PERKINS, Esq.**, for 15 years the Master of Machinery on the Baltimore and Ohio Railroad, and late of the concern of SMITH & PERKINS, Locomotive Builders, Alexandria, Va.

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MANUFACTURERS OF THE

CELEBRATED CAST STEEL,

FOR MAKING SUPERIOR TOOLS,

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Near LEEDS, Yorkshire,

MANUFACTURERS OF
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TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.
For sale, at manufacturer's prices, by

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SOLE AGENTS for the UNITED STATES and CANADAS.

BEERS' 'CAST IRON ENDLESS RAIL,' FOR CITY RAILROAD.

Patented August 24, 1858, and May 10, 1859.



THIS Road is constructed exclusively of Iron, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

BEERS' "ELASTIC IRON RAILWAY," FOR LOCOMOTIVE USE.
This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from undulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$9,000 to \$11,000; out of which \$3,000 will be saved on the first cost of equipment, and character of grading. The undersigned is prepared to construct, either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

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A specimen of these Roads may be examined at 55 Liberty st., NEW YORK.

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WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.
NORRIS & BROTHER,
BALTIMORE.
And 17 Nassau st., New York.

RAILROAD IRON.

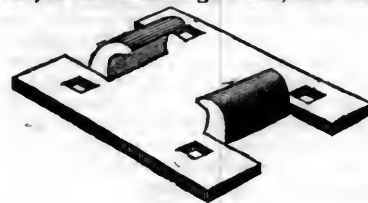
500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.
M. K. JESUP & COMPANY,
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J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.
Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "New York Wrought Iron Railroad Chair Company," and also the entire machinery for manufacturing their improved **Wrought Iron Railroad Chair**, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best **Wrought Iron Chair** now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned with the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

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New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R. R. Co., etc., etc.

Messrs. M. K. JESUP & CO., 44 Exchange Place, NEW YORK, are the only parties authorized to act as our Agents.

Mr. JACOB ROWE, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY

**MORRIS, TASKER & CO.,
PASCAL IRON WORKS.**

Established 1821.

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THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Down's Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

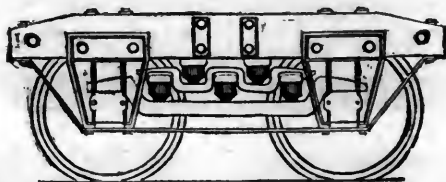
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MANUFACTURE RAILS, BOILER PLATES,
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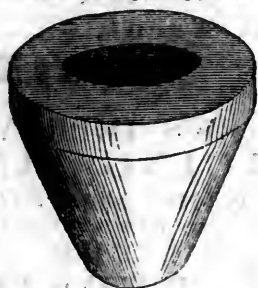
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MANUFACTURERS OF THE **PATENT ELASTIC CONE SPRINGS** for Railway Cars. This Spring is new, and simple in its construction, and possesses superior advantages. It is manufactured from the best quality of India Rubber prepared under the Joslyn Patent, and is less expensive, and at the same time affords more ease, than other shaped springs. It can be fitted to all descriptions of cars without alteration or expense.

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Will be happy to furnish a **SET OF SPRINGS** to such companies as may wish to try their **Durability and Elasticity**, by writing us the Length, Width, Curve over all, and the weight which they are to bear.

Patent Reversible Baggage Check.

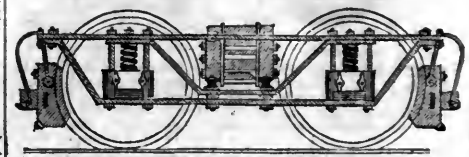


STEEL CAR SPRINGS,



MANUFACTURED
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PATENTEE,
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THESE SPRINGS are now in use on many of the leading Railroads East, South and West. Samples can be examined and Price Lists obtained at
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ARE prepared to fill, at short notice, of the best materials and workmanship, orders for **Wrought and Cast Iron Work**, fitted ready for use, for the building or repairs of **Passenger and Freight Cars**, complete or in part. A sample wrought iron truck can be seen at our office.
No. 5 Gold st., NEW YORK.

We also manufacture—
**BEST FAGGOTTED CAR AXLES,
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INSURANCE COMPANY.**
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CAPITAL, \$200,000.

THE SAFEGUARD INSURANCE COMPANY, having retired that portion of the Capital Stock which was based upon Securities out of this State, are now prepared to continue the Insurance business, and will insure against loss or damage by Fire, on Houses, Merchandise, Leases and the risks of Inland Navigation, on as favorable terms as other Companies.

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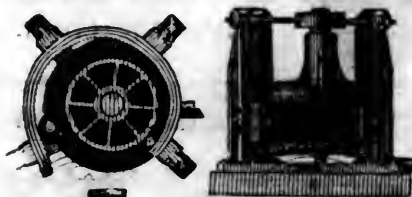
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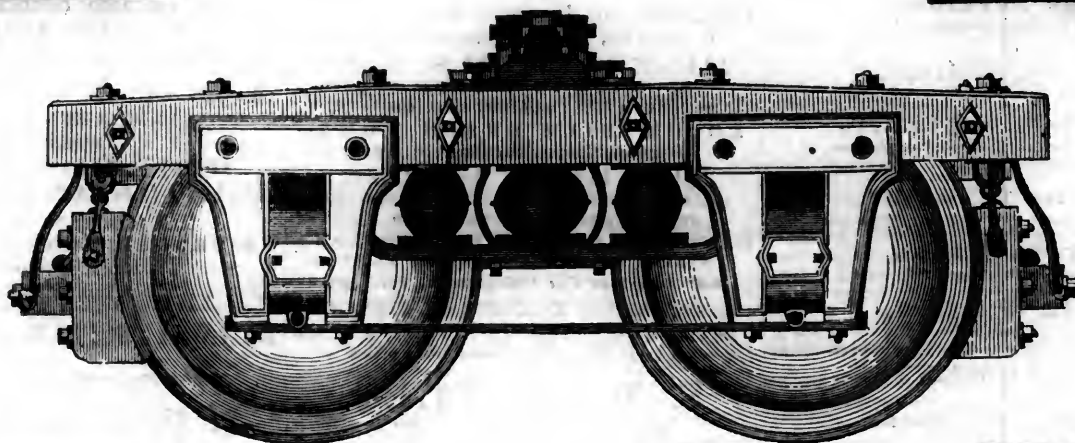
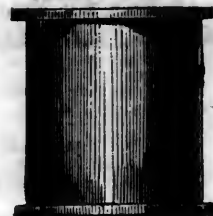


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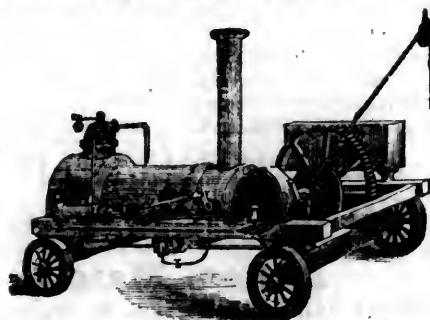
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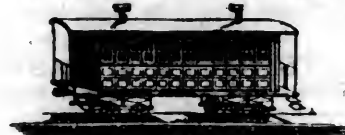
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 34.]

SATURDAY, AUGUST 20, 1859.

[WHOLE No. 1,218, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, August 20, 1859.

New York and Erie Railroad.

GROSVENOR HOUSE, }
LONDON, July 29, 1859. }

To the Editor of the AM. RAILROAD JOURNAL.

SIR:—The many and able articles that have from time to time appeared in your *Journal*, together with the valuable information you have furnished, have long since proved to those interested on this side of the Atlantic, that your great desire and labor has ever been to realise complete success and prosperity for each and every one of that mighty network of railroads which traverses in every direction the States of North America. For this great purpose your columns have been open to statements from all sides, in order that being compared one with the other, the truth might be extracted from them. This knowledge it is that emboldens me to claim a share of your space, to draw notice to an important subject which has not yet been sufficiently investigated.

To trace the progress of American railroads from the commencement would occupy too much space; suffice it to say that the confidence Europeans have had in their securities was widened by the amount now held here. Time, however, has

worked great changes. A few large corporations have raised themselves to unenviable notoriety by their unfortunate results, and, as the best lines, and there are many of them, are least known here, all are classed in one sweeping condemnation. Why is this? Because there is the difficulty of discriminating between the good and the bad; and those who trust to a friend's advice—particularly a business friend's—may chance to be misled. I say not wilfully, for it requires more than a common degree of nerve and perseverance to explore and understand the mysteries of a Railroad Exhibit.

The English think themselves fooled, and are now inclined either to relinquish all hope of, by energy, retrieving the money now sunk, or else to let matters be their own guide. This supineness is the greatest temptation to laxity of discipline. The several companies are now looked upon as being ruined, because they were intrinsically worthless. This is an untruth, and should not be allowed to pass currently, for in nine cases out of ten, the undertakings have been involved through sheer ignorance and mismanagement, and now, however, they may strive, the lines cannot bear the burden that is forced upon them. Such is the fate of the *New York and Erie*, and the fact of my being interested in its securities, has more immediately caused this communication.

Not to go too far back, it will be recollected that the issue of *third* mortgage bonds was to provide a reserve for the payment of the *second* mortgage, due this year, and that the issue of 1875 bonds was to clear up all liabilities. Neither of these objects was fulfilled; and now, notwithstanding the creation of a fourth and fifth mortgages, the Company is in arrears for interest on the first mortgage and other debts. Who is to be blamed for all this? The head of the Executive and no other! This may seem a bold assertion, and before proceeding further, it would be as well to state that in any strictures I may pass on Mr. Moran or his conduct, it is the *Railroad Chairman* I treat of, and not the *individual*. When a man enters the arena of public life, and struggles for its prizes, he must also assume those responsibilities which are indissolubly attached to them.

By his household hearth, surrounded by every domestic accessory to comfort, Mr. Moran may be

a model of kindness, thoughtfulness, and amiability. But not so at the head of the Erie Company. He may be an image of tact and management, in soothing down, and blending into one harmonious whole, any little jealousies, or acerbities, that may occur at his own table. But not so when negotiating for the Erie Railroad. He might make a Member of Congress; an Ambassador; a General, or an Admiral; but he is of no use where he now is! Who would blame the Iron Duke for not writing Poetry, or Byron for not being a General? Nelson for not being a Tragedian, or Shakespeare for not being a Admiral? Palmerston for not being a Parson, or John Bright for not being Premier? No one! Who, then, in the name of all creation, could have blamed Mr. Moran for not being worth a straw as a Railroad President. It was simply a mistake of vocation.

Let us be charitable, and suppose our friend thought he could astound the whole world by his railway financiering and management—and, therefore, wished to try his hand. If so, has he not had ample time to find out the mistake. Had Mr. Moran voluntarily retired, no one could have cavilled, and he would now have been estimated at a moral worth far above \$25,000 a year. Now the case is different. Adversity has taught no lesson to the quick intelligence of this Master Mind, and the only change has been, from bad to worse.

Apparently, the Erie has been thought fair game for all beginners to try their skill upon. Like some poor hospital patient, it has been drenched and physicked, and amputated and bled, until hardly a drop of blood is left in its body. "An occasional aspirin will be of use in preventing repletion, or excess of good fortune. If it sinks, never mind, we can try another." Mr. Moran has been the latest operator, and his favorite hobby appears to be the last straw to break the camel's back. A man may have a hobby if he pleases. Who can object? But is he to ride it to death at other person's expense? If Mr. Moran must have a railroad to manage, and will be content with nothing less, then let the shareholders furnish him with a model line, completely fitted—such as children have, but greater, as men are children of larger growth—provide a weak man and a boy as a staff, and then, with undivided sway, those cherished dreams of "through traffic," "Great

East West Line," and "Western Connections," may be carried to a most unsubstantial completion, and injure no one. The decrease in the receipts of the line may be attributed to natural causes, but that the traffic obtained does not pay, is the fault of management.

Under the head of "London Correspondence," in your *Journal* of March 5, this year, I read a statement showing the cost and receipts per through passengers on the Erie and the Central. Startled by the assertions made, I waited in expectation of some contradiction, officially, or otherwise; but I was mistaken; the subject being allowed quietly to drop to the ground. Since then, I have examined the calculations myself, and see no reason to doubt that the "through traffic" of the Erie for 1858 was carried at a loss.

If the Erie is the best route to the West, then she will obtain business in preference to other lines. Producers may be trusted to find out the best means of sending to market. An increase of 10 per cent. on the rates would have converted the loss of 1858 into a profit, and not a cent worth having would have been lost to the company. If the advance cannot be obtained, then the line had better be without the business than carry it at a loss. If the Central is the worse line how is it that she carries more than three times as many "through" passengers as the Erie, and though limited to a charge of two cents for passengers, she is not restricted with regard to goods.

When the managers of a line are aware that foreign traffic is all they have to depend on, their frantic and almost insane efforts to gain or retain it may be partly excused; but when, as is the case with the Erie, the noble profits from local business are swallowed up by the deficit on foreign business, the management causing such disasters cannot be sufficiently reprobated.

If this idea of seeking *through* traffic be given up, there will be an end to the expenditure on the Long Dock. By the way, where is this property? Ask any dozen bondholders, and you will be told eight different localities, and two brace, "I don't know's. Some say it is at New York, others at Brooklyn, and others that it is "just across"—wherever that may be. For myself I have a private opinion on the subject which, for the present, I shall keep private.

My desire then is to draw attention to the traffic and what is gained by it; and it cannot be too well sifted. There is plenty of data here; but the large holders are the least disposed to investigate, and a demand from your pen would enforce compliance.

In some out-of-the-way corner of this city there still exists a committee of bondholders, but for any sign of activity that it gives it might as well be buried "full fathom five."

The proper plan would be to call a public meeting, but the members of the committee are either so obstinate or so thick-skinned that no hint or request produces an effect, and to you we are obliged to apply. Whatever may be said to the contrary, John Bull has a long patience as well as a long purse, yet both may be exhausted.

As for Mr. Moran,—the traffic reformed—let him remain if he will, but with an intelligent and capable man by his side to advise and assist, whether in relation to a lost dollar ticket or a \$500,000 contract. Yet one fault must be corrected.

I have heard Mr. Moran speak here and his promises of action; but my experience proves that his only acting is promising what he never performs. I am yours

Most obediently.

AN ENGLISH BONDHOLDER.

Florida, Atlantic and Gulf Central Railroad.

At the annual meeting of the stockholders in this road, held at Jacksonville, on the 5th ult., the report of the directors for the fiscal year ending June 30th, 1859, was presented; from this we learn that the whole road between Jacksonville and Lake City is either completed or ready for the iron, and has been examined and approved by the engineer appointed by the State Trustees of the Internal Improvement Fund. The road is 60 miles in length, nearly straight. The grades are generally low, there being only a few instances in the whole distance where it exceeds 10 feet. The highest is 42 feet. No single curvature exceeds one degree. There are in all about 2,500 feet of tressle; and the crossing of the South Prong of the St. Mary's river, 1,000 feet, is rather a tressle than a bridge. The entire work, excavation, embankments, culverts and tressle are of the best material and executed in a good and substantial manner.

The cost of the road-bed, as ascertained on final settlement, is\$181,284 21
Engineering on this branch of the work 16,111 49
Right of way, as far as adjusted 2,312 50

Total cost of road-bed, etc....\$199,708 20

This has been paid for as follows—

In stock of the company at par\$30,700 00
In Columbia Co. and Jacksonville stock bonds, \$111,750 at 83,815 00
In free land bonds, \$81,450 at 57,015 00
In cash realized from stock and sale of stock bonds of the above named county and city 28,178 20
\$199,708 20

The discount on the \$193,200 bonds paid the contractors is \$52,375 50. This should be charged to the road bed, thus making the aggregate cost \$252,083 70. Allowing three miles for side track and 60 miles for main line, the result is \$4,001 33 per mile.

In June, 1858, the ironing of the road was commenced; since which time to the date of the report 32 miles had been laid, leaving but 28 miles to be completed, the iron for which was either on hand or on its way. It is confidently believed that the entire road will be in readiness for the daily running of the trains to Lake City by the first of January next.

The cost of the superstructure was as follows, viz:—

Iron, 3,000 tons\$155,731 88
Freight and insurance 10,813 01
Duty on English iron 7,714 29
Track-laying, 32 miles 16,087 51
Chairs and spikes 7,313 88
Turn-table 1,543 23

Total\$199,203 80

Of this amount, there has been paid \$196,601 98, leaving a balance of \$2,641 82—which has not yet passed into the Treasurer's books. These payments were made from proceeds of sales and hypothecation of the securities of the company.

The Rolling Stock consists of 2 first class en-

gines, and 25 cars, viz: 1 baggage and 2d class car, 3 box cars, 1 stock, 5 platform, 9 lumber, and 6 smaller cars. The entire cost of the equipment has been \$28,606 28, and of this \$22,826 28 has been paid. A first class passenger car has been purchased, and is now on the way.

In addition to the expenditures for road-bed, superstructure and rolling stock, and depot buildings. There has been paid, for wharf, \$8,640 98, and for lands at Jacksonville, \$10,800—together \$19,440 98. Beyond this, a sum of \$1,926 03 has been paid for depot buildings.

The entire amount of stock subscribed is\$213,800 00
Of which there has been collected ... 205,781 10

Leaving uncollected\$8,018 90

The capital stock is fixed at \$500,000, and hence there still remains of this source of revenue \$286,200.

The Report of the Treasurer shows the total receipts from all sources, as follows:

Stock subscription\$205,781 10
Free land bonds 200,000 00
First mortgage bonds 300,000 00
Transportation certificates issued 8,561 00
Bills payable 164,670 46
Miscellaneous balances 13,613 29
\$892,625 85

And the disbursements have been as follows:

Road-bed\$199,708 20
Superstructure 196,601 98
Rolling stock 28,606 28
Wharf, depot, lands, etc. 21,087 21
Interest on free land bonds 2,330 00
Interest account 4,225 44
Salaries, commissions, and incidentals 34,879 33
Discount on bonds, etc., road-bed 52,375 50
" " " superstructure 55,022 73

Amount disbursed\$594,836 67

Remaining on hand, viz:

1st mort. bonds\$209,000 00
Free land bonds 86,400 00
Cash and coupons 2,389 18
297,789 18

\$892,625 85

—and applicable to payment of liabilities, which, on the 1st July, 1859, amounted to \$181,862, and leaving an excess of assets over liabilities of \$115,926 59.

To iron and equip the 28 miles yet to be completed, will require the following expenditures:

2,000 tons of iron, including freight, etc.\$120,000 00
1 locomotive, including freight, etc. 8,500 00
2 passenger cars 5,000 00
20 box and platform cars 12,000 00
Expense of laying superstructure 10,500 00
Engineering, salaries, etc. 7,000 00
Depots, stations, etc. 5,000 00

Total\$167,000 00
Outstanding liabilities 181,862 59

Total requisition\$348,862 59

The Assets with which to complete the road, and liquidate outstanding liabilities, are stated thus:

On hand, as stated above\$297,789 18
1st mortgage bonds to be received on the 2,000 tons of iron 274,000

Total\$571,789

—which shows an excess of means amounting to \$222,816 41.

It will appear from the foregoing data, which includes the entire expenditures, together with the

discounts on securities, commissions, salaries, etc., that the total cost per mile of the 32 miles, completed and equipped, has been a fraction less than \$14,000.

Since the completion of the first 19¼ miles in March last, the gross earnings have been \$10,265 58; and the expenses \$8,750 64—leaving as net earnings, \$1,504 94.

There are many elements connected with this road favoring its prosperity, not the least of which is the location of its eastern terminus. At Jacksonville, on the St. John River, it is brought into immediate connection with the Atlantic and the rich cities on its coast, receiving the benefit of a large commerce already established at that point.

The point of connection with the Pensacola and Georgia Railroad has been definitely fixed at Lake City, and the depot grounds secured. The P. & G. R. R. will be ready for the superstructure from Tallahassee to this junction before the end of this year. This road being virtually a continuation of the F. A. & G. C. This fact is pertinent to any estimate of the future productiveness of the line. The F. A. & G. C. Railroad starts from Jacksonville, on the St. John's River, by which it is brought into immediate connection with the Atlantic and its ports, passes west to Lake City, a distance of 60 miles, at which point it is destined in a few months to connect with the P. & G. R. R., and with this road will form a line which will ultimately extend through the centre of the State from its eastern to its western limits.

The officers of the company are:

J. P. SANDERSON, *President*.

T. P. BUCKMAN, *Superintendent*.

GEO. R. FOSTER, *Secretary and Treasurer*.

Railroad from Spartanburg to the Tennessee Valley.

The old project of the railroad from Charleston to Cincinnati seems to be making steady progress, notwithstanding the failure of the company which had this matter in hand many years ago. The original plan was too large for the times. What could not be carried out as a whole, will, in time, be accomplished by the construction of successive links, the cost of which do not, for the time, exceed the means of those undertaking them.

A convention was held at Hendersonville, North Carolina, on the 28th ult., composed of the Presidents and Directors of the Cincinnati, Cumberland Gap and Charleston, the Greenville and French Broad and the Spartanburg and Union Railroad Companies, to take measures for the construction of their several roads. The cost of that portion of the line lying in the States of North and South Carolina, is estimated as follows:

From Spartanburg Court House to Butt Mountain, thirty-four miles, at \$14,000 per mile	\$476,000
Next ten miles, at \$40,000 per mile	400,000
Thirty miles to Asheville, \$12,000 per mile	360,000
Forty-three miles, from Asheville to Paint Rock, at \$30,000 per mile	1,290,000

Total cost of road from Spartanburg Court House to Paint Rock.....\$2,526,000

This portion of the line is covered by the Greenville and French Broad River Railroad. The available means of this road is, at present, as follows:

Private subscription	\$175,000
County "	325,000

Total

The cost of graduation and bridging of that portion of the Cincinnati, Cumberland Gap and Charleston Railroad, east of the Tennessee river, is \$269,379. Toward this sum, the company have available means to the amount of \$230,600. For the rails and equipment, the company have a State appropriation equaling \$10,000 per mile. In reference to the means still lacking for that portion of the line in North and South Carolina, a committee of the convention report:

What assistance can be obtained from South Carolina, independent of any legislative aid, can be only conjectured. It is not doubted that Spartanburg and Union, and other sections of the State equally as much interested, will imitate the example of the people of the French Broad Valley in North Carolina, and tax themselves to build this road. If so, it would not be unreasonable to anticipate from that source, and from private subscriptions, at least \$500,000. This sum, and that already raised in this State, would leave only a little over \$1,500,000 to be raised to complete this great enterprise. A work of such magnitude, with one-fourth of the means necessary for its construction already raised—with a well-grounded expectation that another fourth can be readily commanded—in the judgment of this committee, must go forward in spite of rival routes, false notions of economy, and a disposition to sacrifice the material interests of a whole commonwealth to a mere point of honor.

Having great confidence, therefore, in the final success of this work, and a disposition to test its merits thoroughly as the cheapest route from Charleston across the Blue Ridge into the Mississippi valley, the committee recommend the following resolutions:

1. That the Presidents and Directors of the Greenville and French Broad, the Cincinnati, Cumberland Gap and Charleston, the Spartanburg and Union Railroad Companies, in joint convention assembled, appreciate the importance of an early, accurate, and thorough survey of the route from Spartanburg, South Carolina, to the Paint Rock, on the Tennessee line.

2. That a joint survey of said route be at once begun.

3. That this convention cannot disperse without expressing the opinion confidently that nothing but a reliable and complete survey of this line is needed to satisfy any candid mind that it affords by millions of dollars the cheapest, and by many miles the shortest route from Charleston across the Blue Ridge to the Mississippi valley.

New Orleans and Opelousas Railroad.

The *Planters' Banner*, of the 23d ult., says:—Mr. G. W. R. BAYLEY, Chief Engineer of the New Orleans, Opelousas and Great Western Railroad, passed by here on Tuesday last on his way to New Iberia, to commence operations toward completing that section of the road lying between the before mentioned point and Berwick City. This is indeed cheering news, and an earnest that the affairs of the road—one of the most important in the South—under the present efficient President and Board of Directors, are in a sound and healthy condition.

Locomotives for the M. & O. Railroad.

We observed at the North-eastern Railroad Wharf, on Monday, two new locomotives destined for the Mobile and Ohio Railroad. They are passenger engines, from the manufactory of Messrs. Danforth, Cook & Co., Paterson, N. J. They are named the "A. De Berry" and the "R. G. Payne," and will pass to the West immediately. They are in charge of Mr. Geo. W. Shipley, master mechanic.

Our railroad mechanics will do well to examine these passenger engines, as they are from a shop whose work is but little known in this State, though the shop bears an excellent reputation at the North. Independent of all this, they are fine looking locomotives.—*Charleston Mercury*, 4th.

Louisville, Frankfort and Lexington R. R.

This line is composed of the Louisville and Lexington railroad, extending from Louisville to Frankfort, 65 miles, and the Lexington and Frankfort railroad, thence to Lexington, 29 miles—making a total length of 94 miles. The annual meeting of the stockholders in these roads was held on the 30th ult., at which the annual reports for the fiscal year ending June 30th, 1859, were submitted. The proposition of the directors of the Lexington and Frankfort railroad to make a perpetual agreement for the joint operation of their road with the Louisville and Frankfort railroad was accepted by the board of directors of the latter company. The receipts from the joint operations of these roads for the year were:—

From passengers	\$191,771 13
" freight	186,384 37
" mails	8,957 00
" rents and bridge tolls	1,120 90
	<hr/> \$388,233 40

And the expenditures were:

Fuel	\$21,846 69
Wages	48,344 22
Repairs of road	48,189 41
Do. cars	21,656 54
Do. locomotives	19,389 88
Do. rails	7,833 28
Do. bridges	4,771 89
Do. buildings, etc.	6,898 82
Cross ties	5,522 63
Miscellaneous	25,637 90
	<hr/> 210,142 14

Net profits.....\$178,091 26

The proportion of gross and net earnings and expenses applicable to each road is as follows, viz:

LOUISVILLE AND FRANKFORT.

Earnings	\$268,046 19
Expenses	154,097 31

Net income

LEXINGTON AND FRANKFORT.

Earnings	\$120,187 21
Expenses	56,044 83

Net income

The revenue from the operation of the joint roads shows the following increase, viz:

From freight	\$30,772 28
" passengers	1,671 56
" mails	1,291 00

Total

—or about 9½ per cent. over those of the previous year.

The annual net earnings of the two roads are sufficient to pay a six per cent. dividend upon the stock, the interest upon the debt, provide a sinking fund to meet the debt at maturity, and leave a surplus of from 25 to 40,000 dollars. This balance the superintendent recommends should be expended in ballasting, relaying ties, improving the drainage, and erecting permanent and convenient station houses at all the important stations,—being firmly persuaded that, besides contributing very largely to the comfort of the patrons of the road, and thereby encouraging business, it will pay the stockholders in diminished expenses of operation.

The directors of the Louisville and Frankfort railroad are of the opinion that after the first of January, 1861, a regular cash dividend of six per cent. per annum will be paid from the net earnings, after providing for the principle and interest of the debt of the road as it falls due. The road

has cost \$1,502,084 61, while the outstanding stock amounts to only \$741,069 41.

The directors of the Lexington and Frankfort road say that the increase of gross and net earnings beyond those of any previous year since the road was opened, has justified them in declaring a stock dividend of 20 per cent., out of previous earnings which has been applied to the construction of the road. They have also declared, in cash, two dividends of 3 per cent. each, and an extra dividend of 1 per cent. out of the net earnings for the present year, leaving a balance, which has been applied partly to improving the road by widening the cuts and embankments, and procuring broken stone for ballast, and the residue to the regular sinking and contingent funds.

The following is a condensed statement of the receipts and expenditures of each company from their organization to June 30, 1859:

LOUISVILLE AND FRANKFORT RAILROAD.

Dr.	
Capital stock	\$741,069 40
State of K't'cky, for right of way, etc.	74,519 50
City of Louisville bonds	174,000 00
248 bonds of the company sold	248,000 00
Balance bills payable given for depot grounds	8,096 87
Profits and loss	376,817 45
Cash dividends unclaimed	585 36
	\$1,623,088 58

Cr.	
Construction	\$1,502,094 61
Real estate	39,066 64
Proportion of rolling stock, etc., in joint road	26,820 41
Bills receivable	23,639 51
Cash in New York to pay interest..	7,890 46
Materials on hand	15,958 12
Cash do.	1,078 83
Stock in other roads	6,540 00
	\$1,623,088 58

LEXINGTON AND FRANKFORT RAILROAD.

Dr.	
Capital stock	\$514,409 44
Bonds	130,000 00
Dividends unpaid	2,183 71
Sinking fund	6,000 00
Renewal and contingent fund	30,034 78
Stock profits	22,439 65
Profit and loss	7,254 99
	\$712,322 57

Cr.	
Construction	\$590,401 20
Proportion of rolling stock	52,300 50
Bonds receivable	30,000 00
Bills "	4,275 81
Real estate	3,391 32
Materials on hand	23,123 81
Cash	8,829 98
	\$712,322 57

The officers are:

EDWARD D. HOBBS, *President.*

SAMUEL GILL, *Superintendent.*

T. W. SPILMAN, *Treasurer.*

Central Park Loan.

The City Comptroller announces a fresh issue of \$466,600 Central Park Improvement Fund stock, for which proposals will be received until Friday, September 2, at 2 P. M. The stock will consist of four thousand six hundred and sixty-six shares, of \$100 each, and comprises the remainder of the amount authorized to be issued—\$1,666,600—for the improvement of the Central Park. It bears interest at the rate of 6 per cent. per annum, payable quarter-yearly, and principal reimbursable Aug. 1, 1857.

Alabama and Tennessee River Railroad.

On the first of June 1858, this road was in operation to Childersburg, 90 miles from Selma; on the 25th of the same month it was opened to Alpine, its present terminus, 99 miles—giving 98½ miles as the average distance run during the year, against 87¾ miles in 1857-8. The report of the company for the fiscal year ending May 31, 1859, has been received. From this we learn that the receipts from operations of the road during that time were:

From passengers	\$38,084 85
" up freights	31,813 00
" down freights	74,442 94
" mails, &c.	11,288 04
	\$155,628 83

And the expenditures were 76,721 40

Leaving as net receipts \$78,907 43

The receipts from all sources during the year were \$295,048 37; and the disbursements, \$276,536 69—leaving cash on hand to the amount of \$18,511 68.

Compared with the previous year, the gross earnings show an increase of \$42,477 31
The expenses an increase of 15,385 55

And the net income an increase of \$27,091 76

The principal items of disbursements during the year, as shown in the Treasurer's report were:

For equipment	\$10,476 29
" Stations, buildings, etc.	4,599 11
" Superstructure	78,716 66
" Graduation, masonry and bridging	30,121 62
" Engineering, agencies, etc.	6,360 02
" Interest, discount, etc.	63,723 05
" Running and repairing road	76,721 40
Miscellaneous	5,818 54
Total	\$276,536 69

During the year the work of construction has been prosecuted between Alpine and Talladega.

The masonry has been completed. The bridge spanning Talladega Creek finished, and the iron laid over it. The graduation has also made some progress. There are about 14,000 yards of earth yet to be removed. This can be done in two months, when the entire track will be ready for track-laying to Talladega. Sufficient rails, chairs and spikes for this purpose has been purchased—the former from the Montour Iron Works, Penn.; and the latter from Messrs. J. R. Anderson & Co., of Richmond, Va. A portion of the rails had been received, and the remainder were in course of delivery. The cross-ties were also in readiness. So that, by the employment of an ordinary working party, the road can be opened for business as far as Talladega by the first of September next. This will give 109.77 miles of road constructed and equipped, at a cost, excluding interest, of about \$1,832,856, or \$16,706 per mile. The condition of the remaining 57.65 miles between Talladega and Gadsden, the terminus fixed by this company's charter, is as follows: From Talladega to Jacksonville, 34.81, about 27 miles are graded, 4.69 miles partly graded, and 312 miles not commenced. Thence to Gadsden, 22.84 miles, 5.58 miles are graded, 4.14 miles partly graded, embracing all the heaviest work, and 13.12 miles not commenced. On the former of these two divisions, about two-fifths of the masonry are built, and on the latter about one-third. If the company had the iron to clothe the road, the whole could be finished to Gadsden in eighteen months. The estimated cost

of the road from Talladega to Gadsden is as follows, viz:

From Talladega to Oxford, 20.16 miles ..	\$178,672
" Oxford to Jacksonville, 14.65 miles ..	149,240
" Jacksonville to Gadsden, 22.84 miles ..	277,529
	\$605,441

The subscriptions to the capital stock of the company is as follows:

By individuals	\$958,140 00
Paid for labor, materials, etc.	45,000 00
Taken by the State in the 2 and 3 per cent. funds	259,641 04
	\$1,262,781 04

Making the capital stock of the Co. \$1,262,781 04
Of which there has been collected .. 1,054,915 27

Leaving a balance uncollected of. . . \$207,865 77

Under the Act of Congress of June 3, 1856, this company was made the recipient of a grant of land, of a similar character of the grants made to other roads. There have already been certified to the company 413,770 acres. A farther quantity will be obtained, but the amount is at present uncertain, as a division of a portion of the territory through which the road runs, has to be made with the North-east and South-west Alabama Railroad. These lands are valuable, and will add largely to the means of the company.

In reference to the connections of this road, the report says:

At Gadsden, the northern terminus of your road, the Tennessee and Coosa Railroad sets in, which connects North and South Alabama at Gunter's Landing, at the south bend of the Tennessee river, a distance of 36½ miles from Gadsden. This company, as we are advised, have 23 miles of their road graded, and have let the remainder to contract. Thus it will be seen that the distance from Talladega to Gunter's Landing is 94 miles, and out of this distance the two companies have 55½ miles graded, 8.83 miles partly graded, and 29¾ miles not graded. If the road is completed to Gunter's Landing, the connection with the Nashville and Chattanooga Railroad, near Winchester, and with the Memphis and Charleston Railroad, will be made in a short time. At or near Gadsden, your northern terminus, the Wills Valley Railroad will connect with yours, which will give you a connection with East Tennessee at Chattanooga. This road is under contract 60 miles, and the work has been commenced some time since. At Jacksonville, the Coosa and Chattooga Railroad, and the Dalton and Gadsden Railroad expect to connect with your road.

The Southern connections with your road are engrossing quite a large share of public attention. The Selma and Gulf Railroad was organized some time last year; a thorough survey has been made and the road located on a very favorable route, near a place called Midway, about 50 miles below Selma. The Mobile and Great Northern Railroad has been organized, and has elected a Board of Directors, under whose direction, we confidently look for an early connection with the Selma and Gulf Railroad at or near Midway, which will give Mobile the controlling influence of the traffic and travel South.

GENERAL STATEMENT.

Individual stock	\$725,382 83
71 bonds of City of Selma, sold	69,891 85
State of Alabama fund stock	259,641 04
526,000 first mort. bonds sold	487,522 27
Second mort. bonds, 1st series	180,050 00
" " " 2d "	45,654 49
Interest	26,690 86
Net proceeds from transportation	239,921 50
Sales of engines, cars, etc.	12,699 52
Rents of warehouses	13,016 92
Borrowed money and bills payable ..	212,496 16
Miscellaneous	501 95
	\$2,264,468 94

Rolling stock	\$144,549	45
Station buildings, etc.....	60,430	13
Superstructure	769,288	06
Graduation, masonry and bridging...	761,883	40
Engineering, agencies, salaries, etc...	108,946	53
Interest, discount and commissions ..	326,961	59
Real estate, etc.....	16,119	85
Right of way	7,501	07
Rebuilding Coosa bridge.....	18,829	36
Miscellaneous	31,447	82
Cash and bills receivable.....	18,511	68

\$2,264,468 94

The officers are :

THOS. A. WALKER, *President.*

WM. ROTHROCK, *Chief Engineer.*

D. SULLIVAN, *Superintendent.*

A. M. GOODWIN, *Treasurer.*

Journal of Railroad Law.

ACTIONS FOR DAMAGES. PLAINTIFF'S NEGLIGENCE. OMISSION TO RING BELL AT CROSSING.

A statute of the State of New York, requires railroad companies to ring their bell, or sound the steam whistle, at each railroad crossing, whenever a train passes; and prescribes a penalty for omitting to do this, and also enacts, that in case of an omission to do so, the company shall be liable to any injured party, for all damages which he shall sustain by reason of such neglect. In the case of *Staves vs. the Oswego and Syracuse Railroad Company*, lately decided in the Court of Appeals, a person who was run over at a crossing, attempted to sustain an action against the company on the ground of an alleged omission to comply with the act; and contended that if such an omission was shown, it was immaterial whether the plaintiff had himself been guilty of negligence; and that the company were liable at all events.

The court held, however, that the general rule that a plaintiff who sues to recover damages against a company for injuries suffered through their negligence, must show himself innocent of negligence, was applicable to the case; and that the plaintiff having been negligent in crossing the track inattentively, he could not recover. The circumstances under which the accident happened, are stated in the opinion of the court, which was in substance as follows.

HARRIS, J.—The testimony in this case presents an instance of surprising negligence and inattention on the part of the plaintiff. After riding along parallel to and in plain sight of the railroad track for the distance of about a mile, he undertook to cross the track, his horses being upon a walk. The day was cold and the wind blowing fresh from the north-west. He was traveling against the wind; His coat was turned up around his ears and a fur cap drawn over them. With his hearing thus obstructed, and with abundant opportunity to see and avoid the approaching train, if he would but look, he advanced slowly upon the track. The only witness who saw the occurrence, says: "He did not increase his speed; he did not look back when crossing the track, or before; he did not turn his head either way, before or after he got upon the track." Such negligence, such indifference to danger—is both unaccountable and inexcusable. The cars were passing at the usual time. With his senso of hearing unobstructed, the plaintiff might have heard the train long before it approached the crossing, and in abundant season to avoid even the possibility of danger. If, for his own comfort

and to protect himself from the cold, he had chosen in any degree to deprive himself of the ability to hear, he should have used his eyes so much the more. Ordinary regard for his own safety would have prompted him, as he approached the crossing, to see, as he might well have done, whether the cars were not also approaching. It is obvious that a single look would have saved him from the disaster with which he met. One of his own witnesses, who stood forty rods west of the crossing, saw the cars when they were half a mile distant. He says he heard them plain enough, and that they had a bright light. He stood to see them come. That the plaintiff should have entirely omitted to look was the extreme of carelessness. Such carelessness is entirely inconsistent with a right to recover damages founded upon the negligence of the defendants. The plaintiff is himself the author of his own injury.

The only delinquency imputed to the defendants, and upon which alone the plaintiff seeks to sustain his action, is their omission to ring their bell or sound their whistle as required by law. (Laws of 1850, 232, §39.) Regarding this as a question of fact merely, the testimony was insufficient to require the judge, at the trial, to submit it to the jury.

[His Honor here reviewed the evidence on this point and continued as follows:]

But if it be assumed that, upon the question whether or not the bell was rung, the testimony was sufficient to sustain a verdict for the plaintiff, still I think the judge at the circuit was right in granting the motion for a non-suit. The defendants, if they omitted to ring their bell or sound a whistle as by law they were required to do, incurred the penalty prescribed for such neglect, and also rendered themselves liable for all damages which the plaintiff sustained "by reason of such neglect." (Laws of 1850, 232, §39.) It is not enough to entitle the plaintiff to recover, that he establishes the fact that the defendants neither rang their bell nor sounded their whistle. Having established this fact, it must then appear that he has sustained damages by reason of this omission. This he did not do. On the contrary, as we have seen, he brought the injury upon himself by a most unexampled act of carelessness. It did not require even ordinary care to avoid the injury. The slightest attention to his own safety was all that would have been required. The plaintiff had lived near the crossing where he was injured, and in sight of the railroad, for many years. He had often crossed at that place in going to and returning from Syracuse. The cars were running at their usual hour. They might have been distinctly heard and seen, only for the trouble of listening and looking. They were both seen and heard, at the distance of half a mile, by one who had no better opportunity to see and hear than the plaintiff himself. His own witness, having heard the cars and seen their light, stood looking at them for ten or twelve minutes, as he says, before they came to the crossing. Under these circumstances, it cannot be said that his injury was produced by any neglect on the part of the defendants.

The case of *Brooks vs. The Buffalo and Niagara Falls Railroad Company*, (25, Barb., 600), in most of its principal features, bears a strong resemblance to that now in hand, and in principle was not distinguishable. In that, as in this, the plaintiff sued

for an injury which occurred at a crossing. The plaintiff then, as here, resided in the vicinity of the place where he was injured. The cars were running on their usual time, as they were in this case. The road upon which the plaintiff was driving, ran at right angles with the track of the railroad. For the distance of seven rods along the road by which the plaintiff came to the crossing, the cars might have been seen, in the direction from which they came, at the distance of sixty or eighty rods. The plaintiff drove upon the track and there stopped, looking in an opposite direction from that from which the cars approached, and remained until the collision took place; but how long it does not appear. It was assumed that the defendants did not ring their bell. This was the only negligence imputed to them. The action was brought in the Recorder's Court of Buffalo. The case was submitted to the jury, who rendered a verdict in favor of the plaintiff. Upon appeal to the Supreme Court the judgment was reversed, upon the ground that there was no question in the case to be submitted to the jury. Mr. Justice GREENE, in a well-considered opinion, pronounced the judgment of the Supreme Court. In alluding to the conduct of the plaintiff, he says:

"It was an act of negligence, evincing a lamentable want of care, to drive upon the track heedless of the approaching train, which he might have seen and avoided, by turning his eyes in the direction where at least ordinary caution, under the circumstances, would have prompted him to look for it."

The decision of the Supreme Court was affirmed by this Court, upon appeal, in December, 1855. It seems to me, that this decision should be regarded as conclusive upon the question now under consideration.

Virginia and Tennessee Railroad.

The receipts of this road for the fiscal year ending 30th June, 1859, as compared with those for the year ending 30th June, 1858, were:

	1859.	1858.	Increase.
July.....	\$48,037 11	\$30,063 06	\$12,974 05
August.....	72,631 90	46,921 97	25,709 93
September ..	84,127 98	45,098 34	37,029 64
October	75,979 68	36,815 04	39,164 64
November ..	67,893 19	36,908 26	30,894 93
December ..	53,381 92	42,872 75	10,509 17
January	40,868 77	29,185 11	11,683 66
February... ..	41,800 99	27,166 34	14,634 65
March	57,191 98	37,704 46	19,487 52
April	48,429 72	47,116 64	1 312 08
May	43,369 99	48,390 24	*5,020 25
June.....	46,263 51	39,945 54	6,317 97

\$672,976 74 \$468,187 75 \$209,809 24

* Net increase.....\$204,788 99

* Decrease.

Minnesota and Cedar Valley Railroad.

Senator Shields, who was elected to, but recently resigned the office of President of this Corporation, has published a statement of its condition. Its liabilities are \$191,130, to meet which it has 125 bonds. These assets were placed in the hands of H. H. Sibley as Trustee, to be paid to creditors, if they would receive them at the rate of one dollar for ninety-five cents.

Mr. Shields announces that an arrangement has been made with Messrs. Benjamin Pringle of Batavia, N. Y., Joseph Chamberlin of Cleveland, and others, by which the hypothecated bonds of the Company are to be redeemed and applied to the construction of the road. Mr. S. resigned the Presidency so that Mr. Pringle might take his place.

Delaware, Lackawanna and Western R. R.

The amount expended for the six months ending 30th June, 1859, for construction and equipment, was \$79,205 31, being for coal cars, right of way, previously unsettled, new side tracks, and tunneling on Warren Railroad.

The amount of securities retired up to 30th June, 1859, on account of Sinking fund and Income bonds, was \$117,030.

REVENUE.

Receipts from sales of coal, transportation and other sources, (including value of coal on hand,) for six months ending 30th June, 1859, \$2,055,146 58
Amount paid during same time for coal and expenses, (including value of coal on hand, 31st Dec., 1858). 1,662,455 86

Net earnings for six months.... \$392,690 72

To cover interest on debt, rent of connecting roads, &c.

DEBT.

Mort. bonds of 1871, (whole issue)... \$900,000 00
Mort. bonds of 1875, (whole issue)... 1,500,000 00
Mort. bonds of 1881, (whole issue)... 2,600,000 00

Making.....\$5,000,000 00
Less amount on hand and retired for sinking fund..... 99,000 00

Total.....\$4,901,000 00

Income bonds of 1862, (issued)..... \$474,920 00

Income bonds of 1865, (issued)..... 29,000 00

Income bonds of 1867, (issued)..... 759,250 00

Making.....\$1,263,170 00

Less amount retired for sinking fund..... 40,530 00

Total.....\$1,222,640 00

Coupons deferred by stamp..... 7,875 00

Bills payable in 1859..\$284,478 03

Bills payable in 1860.. 66,629 61

Bills payable afterward. 23,467 19

Accounts payable..... 374,574 33

Aggregate debt, including interest and rent, payable July 1.....\$6,892,382 67

AVAILABLE ASSETS.

Cash on hand.....\$53,714 09

Bills receivable in '59..\$190,005 61

Bills receivable afterw'd 2,867 27

192,872 28

Accounts receivable.....264,590 39

Cash on hand.....305,862 18

817,039 44

Leaving.....\$5,985,343 23

There was also on hand:

First mortgage bonds Warren Railroad.\$22,100 00

First mortgage bonds L. & B. R. R. Co. 50,000 00

\$72,100 00

Stock of L. & B. Railroad Co.\$132,450

Stock of Warren Railroad Co. 329,400

\$461,850 00

Materials available for operating the railroad and coal mines.....\$201,566 60

Roseport and Maryville Railroad of Kansas.

At a meeting of the stockholders of this road, held on the 13th ult., the following gentlemen were elected Directors: John A. Likens, Silas Woodson, R. M. Stewart, Fred. W. Smith, M. Jeff. Thompson, Samuel P. Blair, Sinclair Miller, A. L. Lee, and Frank Marshall. After which the following officers were chosen: President, M. J. Thompson; Secretary, W. R. Likens; Treasurer, Jas. M. Wilson; Chief Engineer, John Severance. The work of grading was commenced on the road on the 18th.

Illinois Central Railroad--Locomotive Department.

CHICAGO, July 20th, 1859.

To the Editor of the AM. RAILROAD JOURNAL.

SIR—I hand you statement of the cost of performance of locomotives on the Illinois Central railroad for the six months ending June 30th, 1859, as follows:—

Miles with passenger trains	456,400
Do. freight do.	308,186
Do. construction do.	78,095
Do. wood do.	15,009
Do. switching do.	92,441
Total miles.....	950,131
Lbs. of waste	12,099.25
Gallons of oil.....	8,204.25
Cords of wood.....	17,909
Tons of coal.....	5,188.37
Wages of engineer and firemen	\$36,958.03
Repairs.....	52,975.74
Value of oil and waste	7,790.55
Do. wood and coal	84,871.26
Cleaning engines.....	6,363.07
Total cost.....	188,958.65
Cost of oil and waste per mile	cts. 0.81
Do. wood and coal do.	8.93
Do. wages engin'r & firemen p. mile	3.88
Do. repairs per mile.....	5.57
Do. cleaning engines per mile	0.66
Total cost per mile	19.85

Respectfully,

S. J. HAYES, Supt Machinery.

We add to the above a comparative statement of the cost of maintaining the locomotive department on this road for four years previous to the last half year.

Miles run by engines—	Cost (dollars) of—	1855.	1856.	1857.	1858.	1859. (1st half)
Oil and waste	27,299	36,770	25,260	18,288	7,790	84,871
Wood and coal	167,683	261,705	288,891	181,283	86,968	79,447
Labor (wages).....	67,612	76,048	100,682	79,447	86,968	52,975
Repairs.....	67,636	120,481	149,156	102,592	102,592	6,363
Cleaning.....	20,100	28,771	15,484	15,484	6,363	
Total (maintenance and repairs)	\$330,227	614,054	592,760	395,996	188,958	
The following shows the same reduced to the cost in cents, for each mile run by the engines:—						
Oil and waste.....	2.44	1.98	1.38	0.91	0.81	
Wood and coal.....	14.97	14.14	12.69	9.05	8.93	
Labor (wages).....	6.03	4.06	3.88	3.97	3.88	
Repairs.....	6.03	6.60	6.67	6.13	5.67	
Cleaning.....	6.03	1.08	1.29	0.77	0.66	
Totals.....	29.47	27.76	26.22	19.81	19.85	

The above is a very favorable exhibit, as the engines probably required more extensive renewals the past year, than in 1855 and 1856, when they were new. The cost of maintenance and repairs in 1858, per mile run, was 9.66 less than in 1855, showing a reduction of cost equal to 32.65 per cent. If the locomotive department on this road can be permanently maintained for 20 cents per mile run, the saving effected over the cost of this department on most of our roads will be of material assistance in enabling the company to pay the interest on its bonds.

Ruttan's System of Car Ventilation.

The mode of ventilating cars, constructed by this gentleman, who has not only given more attention to this subject, both practically, and as an amateur, in which latter capacity he commenced his investigations, than any gentleman in this country, has been recently tested on the Boston and Lowell Railroad with entire success. It has already been introduced on the Grand Trunk Railway of Canada. His system of ventilation may be thus described:

The air is received on what the inventor calls a receiving box on the top of the car, and is thence propelled down the sides of the car, through flues, into a water tank situated under the floor of the car. The tank of water is about sixteen feet in length, by nine feet in breadth. The water is an inch or two in depth, and the tank is so arranged that the fresh air is compelled to traverse the whole surface of the water before it can rise into the car, so that all the cinders and dust, which usually enter the compartment, remain deposited in the water. From the tank the air passes into the car through two air tubes, which Mr. Ruttan calls pedestals, standing one in the centre of each row of seats, and about five feet high. The air is thence thrown from two apertures, each nearly a foot wide, almost at the top of the pedestals, and passes just over the heads of the passengers, or even with them. In winter, these pedestals are taken up, one aperture is closed, and a peculiar stove placed over the other. By this means the air is warmed, and the car not only equally warmed, but the passengers' feet are warmed, the hot air flowing through a flue under the floor. With the stove in operation, and the cars in motion, the whole air in the car is changed every six minutes. In the summer time, when the stoves are not in use, it is claimed that there is a complete change of air in the cars every four minutes.

The Boston Courier states, that in the experiment on the Lowell road, the windows of the car were closed; yet a constant supply of fresh air was forced through the carriage, and the atmosphere within appeared to be perfectly free from dust and cinders. Mr. Ruttan does not believe that his system of ventilating cars is perfect. Indeed, the trip suggested to him some minor improvements which he designed to make in it. But he does believe that he has found the right system, and that when it shall be perfected, travelers by railroad will be freed from the annoyances of dust and cinders. The apparatus certainly worked successfully, and it is not probable that constant use will impair its efficiency.

Platte County Railroad.

The following gentlemen have been elected Directors of this road for the current year:

Wm. Osborne, Wm. L. Irvine, John Curd, Israel S. Parker, R. A. Park, J. S. Kellogg, E. J. Catledge, A. P. Parker, H. B. Palmer.

At a meeting of the Board, William Osborne was elected President of the Railroad Company; Richard A. Park, Secretary and Treasurer; John S. Kellogg, Auditor; and John Severance, Chief Engineer.

Edgefield and Kentucky Railroad.

The bridge at Sulphur Fork of Red river being now completed, or very nearly so, the track-laying will immediately be resumed on the road, and will progress rapidly to the terminus at the Kentucky line. It is believed that the road will be opened by the middle of autumn, and at the same time the Clarksville road will make junction with the Edgefield and Kentucky at the Kentucky line.

Warsaw and Peoria Railroad.

The Warsaw (Ill.) Bulletin states that the work on this road, projected from Warsaw to Peoria, through the counties of Hancock, McDonough, Fulton, and Peoria, is going forward steadily. Hands are at work on all the sections between Carthage and Blandville.

Cincinnati Stock Sales.

By KIRK & OREVER.

For the week ending August 16, 1859.

BONDS.	Per cent.	
Little Miami, 1st Mort.	68	and int.
Comington and Lexington, 2d Mortgage	7s	85
Cinc. Ham. and Dayton, 2d Mortgage	7s	85
Indianap. & Cincinnati, do.	do.	85
STOCKS.		
Cincinnati, Hamilton & Dayton	63	
Columbus and Xenia	82	
Indianapolis & Cincinnati	50	
Little Miami	83	

Railroad Earnings.

The revenue of the Baltimore and Ohio railroad, for July, 1859, was:—

Passengers.	Tonnage.	Total.
Main Stem. \$59,982 35	\$207,296 42	\$267,278 77
Wash. Br. 26,467 80	6,472 42	32,940 22
N.-W. V. Br. 2,179 77	8,535 66	10,715 43

Total..\$88,629 92 \$222,804 50 \$310,934 42

Compared with the same month in 1858, the returns show the following result:

June, 1859.	June, 1858.	Decrease.
Main Stem. \$267,278 77	303,701 44	\$36,422 67
Wash. Br. 32,940 22	38,222 49	5,282 27
N.-W. V. Br. 10,715 43	16,680 72	5,965 29

Total..\$310,934 42 358,604 65 \$47,670 23

The above table shows a decrease in every department of the road of \$47,670 23 as compared with July, 1858.

The financial year of the company commenced with October. Comparing the revenue so far of the present with that of the past fiscal year, the following result is shown:—

	1858.	1857.
October	\$392,503 02	\$396,191 84
November	383,159 22	361,443 38
December	386,861 01	379,259 02
1859.		
January	327,176 63	317,513 73
February	321,391 10	277,035 49
March	410,061 21	439,256 23
April	369,067 33	483,558 45
May	397,959 53	397,770 07
June	359,029 01	400,730 00
July	310,934 42	358,604 65

Total.....\$3,608,142 29 \$3,814,362 87

Decrease present year.....\$206,220 58

The earnings of the Macon and Western railroad for July were:

1859	\$25,662 41
1858	21,724 44

Increase.....\$3,937 97

Earnings, July	\$25,662 41
Expenses, do.	11,301 39

Net earnings.....\$14,361 02

The earnings of the Cleveland and Mahoning railroad for July were:—

Passengers	\$4,521 01
Freight	9,116 56
Coal	8,591 82
Mail	262 50

\$22,491 89

Expenses.....8,056 13

Net earnings.....\$14,435 76

The earnings of the Pacific Railroad of Missouri for July, 1859, were:—

Passengers	\$24,602 63
Freight	16,056 09
Mails	2,037 50

\$42,696 22

Earnings for July, 1858.....40,875 23

Increase.....\$1,820 99

The earnings of the Ohio and Mississippi Railroad Company for the month of July were:

Passengers	\$70,304 40
Freight	35,263 90
Express	3,172 50
Mail	6,633 33

Total.....\$115,874 13

The earnings of the Eastern Division, in July, 1859, were.....\$69,702 99

July, 1858.....62,005 79

Increase.....\$7,699 20

The receipts of the Grand Trunk Railway of Canada for the week ending July 30, were.....\$44,364 69

Week ending July 31, 1858.....39,429 55

Increase.....\$4,935 14

Total traffic from July 1st.....\$172,389 53

Same period last year.....164,602 58

Increase.....\$7,786 95

The traffic of the Great Western Railway of Canada for the week ending August 5, 1859, was as follows:

Passengers	\$20,799 15
Freight and live stock	9,507 62
Mails and sundries	1,387 50

Total.....\$31,674 62

Corresponding week of last year.....32,187 57

Decrease.....\$512 95

The earnings of the Central Railroad Company of New Jersey, for the month of July, 1859, were.....\$80,000 00

For July, 1858.....77,285 84

Increase.....\$2,714 16

The following statement shows the business of the Philadelphia and Reading Railroad Company, for the month of July, 1859, compared with the corresponding month of last year:—

	1859.	1858.
Received from coal...	\$206,448 81	\$184,295 60
Do. merchandise.	23,612 98	29,804 60
Do. travel, etc. .	27,392 84	34,761 52

Total.....\$257,454 64 \$248,861 72

Transportation, road-way, dumpage, renewal Fund, and all charges.....130,267 57 127,803 87

Net profit for a month..127,187 07 \$121,057 85

Do. for previous 7 mos. 519,353 43 614,810 21

Total net profit for

8 months.....\$646,540 50 \$735,868 06

The earnings of the Watertown and Rome railroad for July were as follows:

	1859.	1858.
From passengers.....	\$12,174 48	\$12,252 65
From freight	14,886 42	17,500 99
From other sources	3,090 01	1,328 27

Total.....\$30,150 91 \$31,081 91

The following is a statement of the earnings of the Pittsburg, Fort Wayne and Chicago Railroad, for July, 1859, compared with the same month last year, viz:—

	1859.	1858.	Increase.
Freight	\$62,870 73	\$51,536 76	\$11,333 97
Passengers .	59,231 04	51,135 55	8,095 49
Mails	7,825 00	4,482 29	3,342 71
Miscellan's .	125 00	635 27	*510 27

Total..\$130,051 77 \$107,789 87 \$22,261 90

* Decrease.

The earnings of the Stonington Railroad Co. in July, 1859, were.....\$24,756 97

July, 1858.....19,937 44

Increase.....\$4,819 53

The receipts of the New Haven, New London and Stonington road were in July.....\$12,242 49

July, 1858.....8,442 90

Increase.....\$3,799 59

Extension road.....2,500 00

Increase.....\$6,299 59

The earnings of the North Pennsylvania Railroad were:

For July, 1859.....\$26,387 31

For July, 1858.....25,033 11

Increase.....\$1,354 20

For eight months to July 31, 1859.....214,042 31

Same time last year.....181,499 93

Increase.....\$32,542 17

Pembroke Iron Works.

The Machias Union gives an interesting account of the Iron Works of the Pembroke Iron Company, which are now in constant operation under the superintendence of L. L. Wadsworth, Esq. They now manufacture annually about 10,000 casks of nails, 60 tons of rivets, 2,450 tons of manufactured iron, and 2,800 tons of puddled iron. The capital invested is \$100,000; 240 hands are regularly employed, and the pay-roll averages \$8,000 per month. The nails manufactured by this company are all made to order. The principal buyers are at Portland, Bangor, and Belfast, though they are marketed in all parts of New England.

Under the head "Quality will Tell," the Boston Traveler says:

"When the Grand Falls Bridge, over the St. John's river, fell last winter, a few of the bolts, of large size, were of Pembroke Iron, which were twisted into all sorts of shape, but did not break. All the larger portions of iron work, forged from English scrap iron, broke. The engineer is now in the city, and has given the contract for all the iron work to the Pembroke Forge Company to be made of Pembroke iron, being satisfied, as he says, if the Pembroke iron had been used in the first place, the bridge would not have fallen, and a large sum would have been saved both to the government and himself."

Pensacola and Georgia Railroad.

This company are offering their lands for sale. Those now offered are located on that part of the line extending from Tallahassee to Alligator, a distance of 105 miles. Most of them are in the vicinity of, and east of, the Suwannee river. They embrace, to copy the language of the advertisement, every variety of soil, from lands suitable merely for timber and naval stores, to the most valuable description for the production of Sea Island and Short Cotton, Sugar, Rice, Corn, Tobacco, and other agricultural products of Florida. A large portion are pine lands based on clay, with dense and large forest growth, resembling much the best pine lands of Baker County, Georgia, with the difference in their favor that climate and proximity to the seaboard make them admirably adapted for the production of Sea Island cotton and sugar. The best recommendations of these lands will be found in the crops of corn, sugar, cane, long and short staple cotton growing on them and adjacent and similar lands. The purchasers will have access to both the Gulf and Atlantic ports of Florida, to which our roads are now built and being extended, and on the completion of the Pensacola and Georgia road with the Main Trunk road of Georgia, the principal part of the lands will be in ten hours travel of Savannah. They are at present in about twenty-four hours travel of both Charleston and Savannah by steamer to Fernandina, and thence by railroad, &c., to Alligator. These lands were granted for railroad purposes, and the proceeds of the sale are to be applied to

the purchase of iron for the road already graded, or the grading for which is in rapid progress of completion.

American Railroad Journal.

Saturday, August 30, 1859.

New York and Erie Railroad.

It is, perhaps, premature to say much in reference to this road, till we get the report of the committee of directors, who have the matter of the re-organization of the company under consideration. From what we can gather, however, it is not unlikely, that a proposition may be submitted to convert all the unsecured bonds into stock at, perhaps, something like 80 cents on the dollar—reduce the stock 80 or 85 per cent. from its present value, and convert two or three coupons of each of the 4th and 5th mortgages in stock. Should such a plan of reorganization be carried out, the financial condition of the company would stand somewhat as follows:—

Amount of 1st, 2nd, 3rd, 4th, and 5th mortgage bonds	\$17,800,000
Am't of unsecured bonds and coupons, \$7,980,000, to be converted say, at 80 cents on the dollar	6,381,000
Amount of stock, \$11,000,000, reduced 80 per cent.	2,200,000
Assessments on new stock, 12 per cent.	1,030,080
Coupons of 4th and 5th mortg. bonds converted	336,000

Making the cost of the new road under the re-organization \$27,750,000

The floating debt, and overdue coupons on mortgage bonds, with such as are soon to fall due, amount to, say \$1,050,000. The assessments on the new stock, and the amount of the coupons of the 4th and 5th mortgages, will supply a sufficient sum to place the company entirely out of debt.

The great hardship in the case is the advantageous position given to the 4th and 5th mortgage bonds. Each class of unsecured bondholders purchased their bonds, originally, under the conviction that each loan, as it was bought out, would provide an amount of means sufficient to complete the road. After their money has been obtained in this way—mortgages are put upon the very property which the unsecured bondholders helped to create. In a moral point of view their position is a much higher one than that of the 4th and 5th mortgage bondholders, who ought, in conscience, to make sacrifices quite equal to those of the unsecured bondholders, especially as the former bonds came to most of the present holders at very low figures.

Are the inducements held out to the unsecured bondholders sufficient to lead them to accept of the terms proposed? They change their places from *creditors*, liable to be cut off altogether, to that of *stockholders*. Debts to the amount of \$17,500,000 will have the first claim upon the earnings of the company. The interest on these will amount to \$1,246,000 annually. To pay 7 per cent. on the whole amount of stock and bonds, the road must earn *net* \$1,942,500. That it has the capacity of doing this no competent railroad man will controvert. It is simply a question of management. What this is to be is a problem for the future to solve.

There seems, as far as we can learn, a disposi-

tion on all sides to adopt a fair plan for the re-organization of the company, although there is likely to be much difference of opinion as to the mode in which it shall be effected. Till we get the scheme that is to come officially from the directors, it may be as well to defer comment upon the various plans that are afloat, or to suggest schemes which will only add to the number already offered, and which embarrass quite as much as they help the solution of the difficulty.

Mr. Marsh has gone into the possession of the road as Receiver. We presume Mr. Charles Minot will go upon it as *Superintendent*. Much is expected from his energy, his well known popularity with the employees of the road, and with the officers of connecting lines, and from his thorough acquaintance with the previous operations of the company.

North Missouri Railroad.

This company has made a contract with James Kelly & Co. for the extension of its road 60 miles North, which will carry it within 8 miles of the Iowa State line. The contract price is \$15,000 per mile, everything except machinery. This contract will have to be ratified by the State, into whose possession the road has fallen for the non-payment of the interest on its bonds. There are still \$1,000,000 of State bonds standing to the credit of this road, but, in the present state of affairs, they cannot be used without the consent of the Legislature. On the meeting of that body we presume the necessary steps will be taken to extend the road, by either ratifying the contract made, or entering into a new one with other parties.

Tennessee and Alabama Railroad.

At a meeting of the stockholders of this road, held at the company's office in Franklin, Tenn., on the 2d inst., the following gentlemen were elected Directors for the ensuing year, viz:

John Marshall, Jno. S. Claybrooke, W. P. Cannon, W. O'N. Perkins, W. Baugh, C. H. Kinnaid, H. G. W. Mayberry, Thos. F. Perkins, Saml. Henderson, W. Park, M. L. Stockard, B. M. Hughes, C. W. Nance, M. G. L. Claiborne, and John McGavock.

JOHN MARSHALL, *President*.
W. O'N. PERKINS, *Superintendent*.
A. ANDERSON, *Engineer*.
FRANK HARDEMAN, *Treasurer*.

Analysis of Railroad Reports--New York Central.

We give this week an analysis of the reports of the New York Central railroad for 5 years, which embrace, (with the exception of two months,) the entire period since its consolidation.

It will be seen by the statements annexed that the construction account of this road has increased, since the consolidation, dating from Sept. 30, 1853, \$8,589,988. The sources from which this amount has been supplied, have been mainly as follows:—

Received from new stock	\$2,850,000
" " seven per cent. bonds ..	3,000,000
" " bonds for real estate ...	200,000
" " " and mortgages ...	254,952
" " " of the Buffalo and Niagara Falls R. R. ...	139,000
Balance of income account	1,826,572
	\$8,260,524

To pay the last year's dividends, the company drew from the "Balance of the income account," \$232,246, reducing this account from \$1,826,572

to 1,594,226. This "Balance of income account," however, is a *myth*, having no actual existence, the same being absorbed in construction as fast as it accrued, as is shown by the balance sheet from the company's general ledger. The dividends for last year were, consequently, \$232,246 in excess of the nominal net earnings.

For the present year, the construction account will be increased, say \$850,000, being the principal of the interest, at 7 per cent., agreed to be paid on the (perpetual) lease of the Canandaigua and Niagara Falls railroad, at the rate of 5 per cent. on \$1,200,000.

The new line constructed since the consolidation measures 22 miles. The total increase in new road, double track and sidings, equals 116 miles. The cost of graduation for this mileage is \$5,617 per mile. To provide rails, ties, and lay the same, should not have required more than \$7,500 per mile; or a total for additional track, of \$13,117 per mile, equal to a total sum of \$1,521,572.

Assuming that 10,000 tons of rails were required for the new track, costing the company, say, \$55 per ton, the total expenditure for this object has been \$550,000, leaving about \$1,500,000 for purchases of rails for the old track. These ought not to have cost the company, in exchange for new ones, much more than \$30 per ton. In addition, the company paid for rails out of the income accounts, \$237,733 in 1858, and 343,043 in 1857. In other words, the company have paid out since the consolidation, a sum nearly sufficient to relay the entire road.

It is this open construction account that renders it impossible to form a correct opinion as to the actual amount of the net earnings of the road. As this company have now exhausted all sources of supply of money, without making direct loans, or issuing new stock, it seems probable that, for the future, we shall have much more accurate data upon which to base a more satisfactory conclusion. The dividends paid up to the present time have averaged 8 per cent. per annum.

In comparison with most of our eastern and northern railroads, the cost of operating this road per mile has been moderate, being almost exactly *one dollar* per mile. The road, however, has an admirable line, and has had a very large amount of money expended upon it, in construction since the consolidation. Only a small proportion, if any, of the earnings has been expended in this manner. But while the construction account is open, and rapidly increasing, as has been the case on this road, all statements of operating expenses must be received with many grains of allowance. Items will always be put to construction that should be embraced in current expenses.

The cost, however, of maintaining the locomotive department has been excessive. The great item of this expense has been *fuel* which makes more than one-half of the whole. It seems impossible to account for the enormous amount of fuel consumed in 1856 and 1857, upon any reasonable hypothesis. There must have been a great leak, or a great waste here. The reduction from 1857 to 1858, was 36 per cent. During the present year extraordinary reductions have been made upon the past. Taking the month of May as an average for the present year, the reduction from the past is equal to 40 per cent.; and from 1857 to 1859, nearly 66 per cent.

If the Central railroad can be run for 8.19 cents per mile for fuel, then a saving equal to \$350,000 annually may be made in wood alone, on the average cost of this article for 5 years past; and if the locomotive department can be maintained and run for the future, at the rate of 18.04 cents per mile, instead of 33.49, the average for five years past, the total saving in this department will be equal to \$570,000, a sum equal to more than 2½ per cent. on the capital stock of the company. We believe there is no good reason why the cost of this department should not be kept down to 20 cents the mile run. If so the saving effected would be equal to \$500,000 annually, or more than two per cent. on the capital stock. The reforms that are being made in this department alone, if they can be lived up to, will amount to quite a respectable dividend.

What is extraordinary in the statement of the consumption of fuel, is the vastly increased amount of service a cord of wood is now made to perform. In the years 1856 and 1857, a cord of wood only sufficed to carry the trains about 19 miles. A cord, at the present time, carries the trains 42½ miles. There has been, in the meantime, no particular improvement in the quality of wood, nor in the general structure of the engines used. The saving is most extraordinary, and one cannot help wishing that so important a company as the Central, the leading one on this continent, would get into a habit of making public reports, in which the manner in which it is worked, could be better elaborated. We get at its financial condition, and the items that go to make up the cost of operating it, from the reports made to the Legislature, but these have little value compared with the information the company might furnish.

Oil and waste are small items, but the saving effected in these show what may be done in other departments. The cost of these articles per mile run for the month of May was 0.64 against 1.62 cents per mile.

The cost of maintenance of track is the most uncertain element in the calculation, for the reason that during the period given, \$2,821,672 were expended on the track from capital. How this immense sum was expended, we have no means of ascertaining. We know that the greater part of it went to the portions of the road already in operation, toward renewing superstructure, ballasting, etc., etc. A large amount of new iron was placed upon the road, the wear of which has not yet begun to show itself. The expenditure for this department, we presume, will continue to be large for some years to come.

While the figures given offer their own commentary, the stockholders of this road have certainly one great cause of complaint, that the officers of the company make no other reports than those submitted to the Legislature, which are entirely insufficient to give the stockholders any adequate idea of the manner in which the road is managed. Such gross neglect of duty should no longer be tolerated. We hope that at the close of the year the directors will, of their own accord, give us what all our leading companies give, an annual report, in which they will endeavor to give a detailed and lucid account of their acts and policy, instead of withholding everything but a dry mass of figures, as is at present the case.

Statement showing some of the leading items of the cost of operating the New York Central Railroad for a period of five years ending in 1858.																								
Years.	Length of road.	Cost of road.	Earnings.	Expenses.	Net earnings.	Per centage of net earnings to gross receipts.	Miles run by all the trains.	Cost of repairs of locomot's.	Do. per mile run, in cents.	Wages of enginemen and firemen.	Do. per mile run, in cents.	Cost of fuel used.	Do. per mile run, in cents.	Cost of oil and waste used on engine and tender.	Do. per mile run, in cents.	Total cost of maintaining & running locomotive department.	Do. per mile run, in cents.	Ratio of cost of the locom. dep't to whole expense.	Cost of repairs of track, including bridges and iron.	Do. per mile run, in cents.	Do. per mile of road.	Cost of repairs of passenger and freight locomotives.	Do. per mile run, in cents.	
1854 .. 562	\$25,907,374	\$5,918,384	\$3,088,041	\$2,830,293	48	3.317,278	\$270,682	6.13	\$140,290	4.22	\$610,181	15.08	\$65,361	1.97	\$986,894	29.78	32	\$658,516	19.39	\$1,180	298,886	8.16	\$300,644	9.06
1855 .. 566	27,360,781	6,563,881	3,401,465	3,162,126	48	3.654,674	400,392	10.95	151,838	4.16	689,880	16.14	65,250	1.78	1,207,820	38.03	36	657,290	17.90	1,180	298,886	8.16		
1856 .. 566	29,786,372	7,707,348	4,097,867	3,609,481	47	3.599,889	445,414	12.37	176,600	4.61	768,588	21.85	62,851	1.74	1,448,820	40.90	38	853,507	23.70	1,585	353,884	9.83		
1857 .. 566	30,516,315	8,027,251	4,453,515	3,573,786	44	3.984,290	485,688	10.42	170,558	4.28	847,653	21.28	61,844	1.55	1,515,648	38.04	34	1,049,467	26.34	1,857	368,696	9.25		
1858 .. 566	30,732,517	6,528,412	3,487,292	3,041,120	46	3.942,537	288,457	7.19	106,350	4.22	649,178	18.92	43,862	1.11	1,042,877	26.45	30	865,154	21.94	1,657	229,543	5.82		
Comparative statement of the cost of certain items for May, 1859, 337,439 14,530 3.98 16,832 5.22 27,812 8.19 2,310 .64 61,490 18.04																								

Statement showing the cost of the road for each year since 1853, with the yearly increase in the construction account and the length of the road, and length of track laid including double track and sidings.	1853.	1854.	1855.	1856.	1857.	1858.
For graduation and masonry	\$6,125,423	\$6,548,610	\$123,188	\$6,700,438	\$151,828	\$6,736,415
For bridges	647,901	719,674	71,773	783,104	63,430	793,183
For superstructure, including iron	8,146,372	9,388,456	1,342,084	9,914,580	526,124	10,146,874
For passenger and freight stations, buildings and fixtures	674,576	860,302	85,726	981,266	120,964	1,061,493
For engine and car houses, machine shops, machinery & fixtures	482,423	608,877	66,464	690,734	81,857	733,597
For land, land damages and fences	2,676,952	3,501,062	824,110	3,560,291	89,229	3,853,945
For locomotives and fixtures, and snow plows	1,458,649	1,904,931	446,282	2,019,059	114,128	2,211,662
For passenger and baggage cars	475,482	636,203	158,781	781,974	145,711	830,011
For freight and other cars	825,005	1,210,104	385,099	1,356,734	146,016	1,689,865
For engineering and agencies	531,737	569,095	37,358	583,165	593,089	9,924
Construction acct. of the Rochester & Lake Ontario R. R. Co. ....	.....	.....	.....	.....	.....	.....
Do. do. of the Buffalo & Niagara Falls R. R. Co. ....	.....	.....	.....	.....	.....	.....
Do. do. of the Lewiston Railroad Co. ....	.....	.....	.....	.....	.....	.....
Totals, cost of road and equipment	\$22,044,529	\$25,907,374	\$3,862,845	\$28,523,913	\$2,616,539	\$29,786,372
Length of road	534	562.75	562.75	562.75	566	566
Length of track laid, including double track and sidings	775	839.50	802.08	866.68	881.35	891.09
Statement showing some of the leading items of the cost of operating the New York Central Railroad for a period of five years ending in 1856.						
Cost of repairs of locomot's	\$270,682	\$400,392	\$445,414	\$485,688	\$515,648	\$549,178
Do. per mile run, in cents	6.13	10.95	12.37	10.42	10.42	18.92
Wages of enginemen and firemen	\$140,290	\$151,838	\$176,600	\$170,558	\$161,844	\$151,515
Do. per mile run, in cents	4.22	4.16	4.61	4.22	4.22	2.64
Cost of fuel used	\$610,181	\$689,880	\$768,588	\$847,653	\$847,653	\$847,653
Do. per mile run, in cents	15.08	16.14	21.85	21.85	21.85	18.92
Cost of oil and waste used on engine and tender	\$65,361	\$65,250	\$62,851	\$61,844	\$61,844	\$61,844
Do. per mile run, in cents	1.97	1.78	1.74	1.55	1.55	1.11
Total cost of maintaining & running locomotive department	\$986,894	\$1,207,820	\$1,448,820	\$1,515,648	\$1,515,648	\$1,515,648
Do. per mile run, in cents	29.78	38.03	40.90	38.04	38.04	26.45
Ratio of cost of the locom. dept't to whole expense	32	36	38	34	34	30
Cost of repairs of track, including bridges and iron	\$658,516	\$667,290	\$689,880	\$689,880	\$689,880	\$689,880
Do. per mile run, in cents	19.39	17.90	23.70	23.70	23.70	21.94
Do. per mile of road	\$1,180	\$1,180	\$1,180	\$1,180	\$1,180	\$1,180
Cost of repairs of passenger and freight locomotives	\$300,644	\$300,644	\$300,644	\$300,644	\$300,644	\$300,644
Do. per mile run, in cents	9.06	9.06	9.06	9.06	9.06	5.82
Incr. in construction account .....	.....	.....	.....	.....	.....	.....

	1853.	1854.	1855.	1856.	1857.	1858.
Debt certificates outstanding.....	\$8,885,210	\$8,734,500	\$8,543,700	\$8,422,600	\$8,260,000	\$8,100,000
Convertible 7 per cent.....	380,661	2,981,800	3,000,000	3,000,000	3,000,000	3,000,000
Debts of former companies assumed and outstanding.....	1,861,223	1,263,080	1,214,256	1,052,962	880,753	657,682
Bonds issued for funding debts of other companies.....	817,000	817,000	817,000	831,000	399,000	1,266,000
Bonds for railroad stock purchased under the consolidation.....	218,000	218,000	230,000	221,000	807,000	785,000
Bonds for real estate.....	110,800	110,800	110,800	103,100	98,500	93,000
Bonds to Buffalo and Niagara Falls Railroad Company.....	55,000	55,000	55,000	55,000	55,000	46,000
Funded debt of Buffalo and Niagara Falls Railroad Company.....	10,000	10,000	10,000	10,000	10,000	10,000
Bonds to Telegraph Company.....	208,109	199,383	199,383	286,235	265,657	254,956
Bonds and mortgages.....	.....	.....	.....	508,583	656,062	2,133
Debts of former companies paid and again funded.....	.....	.....	.....	.....	.....	.....
Total amount of funded debt.....	\$11,564,038	\$11,797,120	\$14,111,942	\$14,802,751	\$14,631,573	\$14,404,767
Amount of stock outstanding.....	22,213,983	23,067,415	24,164,860	24,136,660	24,136,660	24,182,400
Cost of road and equipment.....	\$33,778,016	\$34,864,535	\$38,266,842	\$38,939,411	\$38,768,233	\$38,537,167
	22,044,529	26,907,374	28,523,913	29,786,372	30,516,815	30,732,617

Memphis and Charleston Railroad.

The annual meeting of the stockholders of the Memphis and Charleston Railroad Company was held at Memphis on the 3d inst.

Col. SAM. TATE, President of the company, presented a report of the operations of the road during the past year, which was read, and ordered to be printed. The report evidences a remarkable degree of prosperity on the part of the road, its operations for the year having been as follows:

Total receipts from all sources..... \$1,330,812 40
Expenses..... 552,776 00

Net profits.....\$778,036 40

The total cost of the road and its equipments has been \$6,188,133 49, and the net profits above referred to are equal to 12½ per cent. on the entire investment. As will be seen, the total expenses of operating the road for the year ending July 30th was \$552,776 40, which is a fraction under 42 per cent. of the gross receipts.

The bridge on this road, over the Tennessee, recently destroyed, has been so far replaced that the trains are running over it as usual.

The Long Dock.

This work is situated in Jersey City, on the west side of North River, opposite this city. Connected with it is about two miles of railroad, and a long tunnel through Bergen Ridge. The tunnel is now pretty well advanced toward completion, but a very large sum will be required for the works yet necessary to render the grounds a suitable city terminus of the Erie Railroad—probably \$1,000,000. The whole work may be considered a portion of the Erie Railroad, though it is being executed by a company incorporated by the laws of New Jersey, the Erie Company agreeing to pay 8 per cent. upon its cost. Up to the present time this company have paid out about \$1,000,000 on account of it. It was commenced in 1856, but work on it was discontinued soon after Mr. Moran's accession to the Presidency. The work was resumed a few months since, but is not being pushed forward very vigorously. It may require a year yet to complete it.

There is no doubt that upon a fair cost, this work would be very beneficial to the Erie road. It would dispense with the ferry of 25 miles to Piermont, which costs the company over \$100,000 annually to maintain. The best frontage for ships in the whole harbor is probably at Jersey City, being better protected from winds, and never obstructed by floating ice. It has, also, very deep water. At the dock, ships of all sizes could receive and discharge their freight from and into the cars, and their cargoes transported to Lake Erie without breaking bulk. In fact, Jersey City should have been the original business terminus of the road instead of Piermont, whither it was forced by political considerations. The large advances made by the Erie Company to the Long Dock Company is one of the great causes of the embarrassment of the former.

New York and Erie Railroad--London Correspondence.

We give elsewhere a letter from an English gentleman residing in London, devoted chiefly to the New York and Erie Railroad. For several reasons we defer comments upon it till next week.

Interest and Dividends.

The Directors of the Oswego and Syracuse Railroad have declared a semi-annual dividend of 4 per cent., payable on the 1st of September.

The New Brunswick and Canada Railway.

The works on the railway lately in progress between St. Andrew's and Quebec has stopped. From the report of the Directors, just issued, we learn the precise reason. The expenditure during the half year amounted to £20,012 for works, material, &c. They estimate the liabilities up to the present time at £28,636. The only mode open to company for raising the capital still required is by the issue of debentures, which were, in the first instance, offered to the shareholders, and only very recently to the public. The Directors are prepared to take a portion of those debentures, and they trust that, if the shareholders will take up a due proportion of them, the amount will be speedily subscribed. They state that, unless funds are provided without delay, it will be impossible to complete the railway within the period prescribed by the Provincial Legislature—a failure which must necessarily entail serious loss upon the company. The capital account shows that £180,936 had been received, and £195,572 expended; leaving a balance of £16,036 against the company.

Morris and Essex Railroad.

The Newark Mercury, of 17th inst., states that the final papers in relation to the extension of the Morris and Essex railroad to Hoboken have been signed, and that the early construction of the road is now a certainty. The contracts executed carry out in full the previous statements, and secure the Morris and Essex railroad the greatest advantages.

Dubuque and Pacific Railroad.

Col. R. B. MASON has received the appointment of Vice President of this company, combining in his duties the office of Superintendent and Chief Engineer. In the absence of the President, J. Edgar Thomson, Esq., Col. Mason will be Acting President of the company.

Valuation of Boston.

The assessors of Boston have concluded their valuation of the city for the year 1859; the result is as follows:

Real estate.....\$157,092,800
Personal estate..... 104,921,700

Total.....\$262,014,500

The rate of taxation is \$9 70 on \$1,000; last year it was only \$8 60; in 1857, \$9 30. The increase in the total valuation, over last year, is \$7,293,100, or 2.86 per cent. The increase of real estate is \$3,514,100, or 2.29 per cent.; of personal estate \$3,779,000, or 3.73 per cent. The number of polls is 33,323, an increase of 735, or 2.26 per cent.

Covington and Lexington Railroad.

IMPORTANT RAILWAY DECISION.

We learn that the State Court at Lexington, Kentucky, has decided the various questions arising in the case of Winslow, Trustee, vs. The Covington and Lexington Railroad Co. The following comprises the substance of the decision:

I. All the mortgages in controversy, first, second and third, as well as the mortgage to the Directors, and the income mortgage, were decided to be valid and binding on the company and stockholders.

II. That the first and second mortgages had priority over all other liens on the road.

III. As many of the income bonds as were sold before the execution and record of the 3d mortgage, have precedence over such of the holders of the 3d mortgage bonds as had notice of the income bonds.

IV. The 3d mortgage bonds have priority over all income bonds not sold at the time of recording the 3d mortgage.

V. The holders of 3d mortgage bonds who had no notice of the income bonds when they purchased, have precedence over the incomes.

VI. That the 2d mortgage holders are entitled to a sale of the road for the payment of their whole debt, upon credit in accordance with the mortgage, and a sale of the whole road is ordered for the payment of all the debts due by mortgage.

Central Southern Railroad.

We learn that the track-laying upon this road is rapidly progressing from Columbia (S. C.) southward. Seven miles of track are laid, and by October, the road will be completed to Pulaski. The track-layers on the Decatur end of the road have reached a point eight miles north of Athens, Alabama, and it is thought that by January next the whole road will be opened for travel.

Dayton and Michigan Railroad.

The last invoice of iron for the completion of this road has been received, and the people of Toledo are already preparing for a grand celebration of the opening of the road early in September. By this route, when in full operation, a traveler can leave Cincinnati in the morning and be in Detroit in the evening.

American versus English Rails.

We gave a week or two since the testimony of Mr. Felton, President of the Philadelphia, Wilmington and Baltimore railroad, in favor of the superiority of rails of American, over those of English manufacture. The Central Railroad of Georgia use American rails, exclusively, upon its road. This company, in 1856, supplied itself in part with British and in part with Pennsylvania rails, made by the Phoenix Iron Company of Pennsylvania, and early in 1857, these rails were laid on opposite sides of the same track, for a long distance, for the purpose of testing their durability under perfectly equal conditions. The rails were of the same pattern or form, and an extra price of five dollars per ton was paid for the British, in order to insure the best quality. It should be remarked, however, that none of the parties to furnishing the iron were aware of the intended trial until the iron was actually laid.

The following letter from the Superintendent of the Central railroad states the result:

CENTRAL RAILROAD OFFICE, SAVANNAH, GA.,
August 1, 1859.

Dear Sir,—Your favor of the 27th ult. is received. Very recently I examined the rails made by your company, and laid on this road in spring of 1857, on one side, and English rails on the other, and have no hesitation in saying that yours are wearing much better than the latter. We also have some premium English rails laid same spring, but not on opposite side to yours, that are not wearing as well as yours, though \$5 per ton above current price was paid for them, to secure an extra good rail.

Yours, very truly,
Geo. W. ADAMS,
General Superintendent.

JAMES MILLIKEN, Esq.,
Sec'y Phoenix Iron Co.,
410 Walnut st., Phila. }

Cleveland, Painesville and Ashtabula R. R.

At the annual meeting of the stockholders in this road, held on the 9th inst., the following gentlemen were re-elected Directors for the ensuing year: Alfred Kelly, James Miles, W. D. Beattie, Stillman Witt, Thomas M. Kelley, Amasa Stone, Jr., Wm. Case, H. B. Payne, E. M. Gilbert, Samuel J. Randall, J. B. Johnson, Hamilton White, C. C. Dennis.

AMASA STONE, JR., President.
S. WITT, Vice President.
GEO. B. ELY, Sec. and Treas.

**FULTON FOUNDRY AND MACHINE WORKS,
P. F. GEISSE,
WELLSVILLE, OHIO.**

STEAM ENGINES of every variety built to order. STEAM BOATS and STEAM FERRY BOATS contracted for in whole.

PUTNAM'S PATENT Turn-Tables (a very superior and simple table) of all sizes built to order at very reasonable rates.

Car Wheels of a quality superior to any ever yet made. I am now manufacturing from the best material, and annealed by a process patented by me in February, 1859, which renders them almost equal to wrought iron. Car Wheels, Steam Engines and all kinds of machinery furnished at as low, if not lower rates than can be found elsewhere.

Rights to manufacture Car Wheels under P. F. Geisse's annealing process may be obtained from the Patentee at Wellsville, O., or from T. Culbertson, No. 8 Fourth Avenue, N. Y.

Testimonials from the Superintendents and Master Mechanics of the Cleveland and Pittsburgh, Little Miami, and Steubenville and Indiana Railroads, as to the superior quality and durability of these Wheels will be furnished on application.

A GENTLEMAN who has upwards of 26 years experience in conducting an extensive machine manufacturing business, (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.

Address N. box 932 Baltimore Post Office. 4t32

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, July 9, 1859.

FREIGHT CARS for SALE.

11 CARS—Have been run about one year,—viz:—
2 long-wheel Box Cars,
9 " " Platform Cars.

These Cars are made in the best manner, with large axles, brakes, Lightner boxes, etc., and will be sold low for cash.
WILLIAMS & PAGE,
44 Water st., Boston.
26tf

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
Boston, June, 1851. 29 Central Wharf.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 Cliff st., N. Y.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.
New York, Aug. 1, 1859.

RAILROAD IRON.

THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS
received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.
New York Agency:
RUSSING, CROCKER & DODGE,
33 Cliff St.

**MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.**

IRON AND STEEL
IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
CUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, and DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.

CAR SPRING STEEL.

Far superior to the ordinary kind.

FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY and AT LOW PRICES.

SALTUS & CO.,
45 Cliff st., New York.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

**LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.**

BY the completion of the DELAWARE, LACKAWANNA and WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO, and WITTON PARK IRON WORKS, YORKSHIRE, ENGL., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or on ship at ports in the United States.

M. K. JESUP & COMPY,
44 Exchange Place.
New York, 1st June, 1859.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA, NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.

**THE
RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,**

MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the hands, if desired.

Apply to
ALBERT G. SMITH,
President of the Incorporation.
February, 1858.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

Address N. WILKINSON, Sec'y,
WHEELING, VA.
8t

JOS. R. ANDERSON,
JOHN F. TANNER,
R. ARCHER,
R. S. ARCHER.

TREDEGAR IRON WORKS, RICHMOND, VA.

WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL METAL—

BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE.
CANNON AND PROJECTILES, ALL KINDS,
IRON AND BRASS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our SPIKE AND BOLT FACTORY, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

The Machinery Department of our Establishment is under the supervision of THATCHER PERKINS, Esq., for 13 years the Master of Machinery on the Baltimore and Ohio Railroad, and late of the concern of SMITH & PERKINS, Locomotive Builders, Alexandria, Va.

J. R. ANDERSON & CO.

SANDERSON, BROTHERS & CO., MANUFACTURERS OF THE CELEBRATED CAST STEEL, FOR MAKING SUPERIOR TOOLS, SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,
Armitage's Genuine Mousehole Anvils, etc.
16 CLIFF STREET, NEW YORK.

42 BATTERYMARCH ST., Boston.
24 BANK PLACE, New Orleans.

516 COMMERCE ST., Philadelphia.
TYLER, DAVIDSON & CO., Cincinnati, O.
HISS & COLE, Baltimore, Md.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

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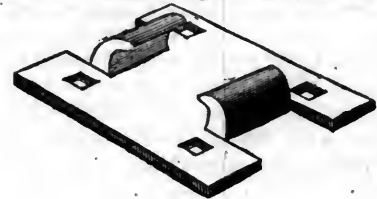
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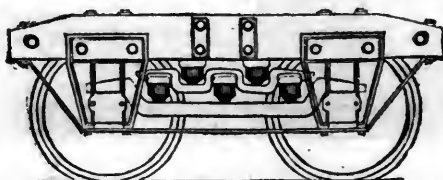
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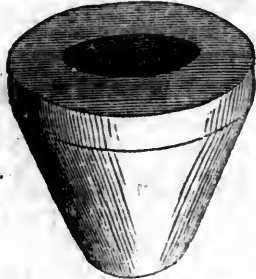
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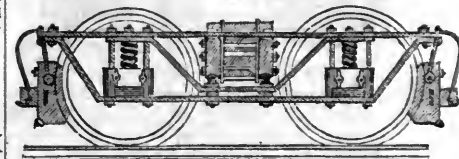


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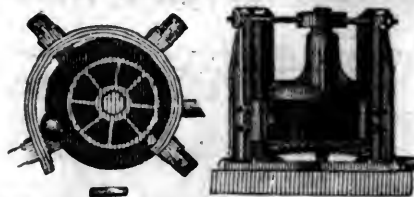
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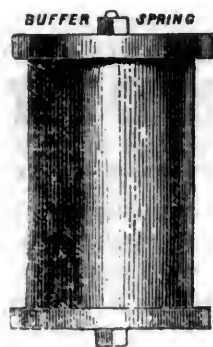
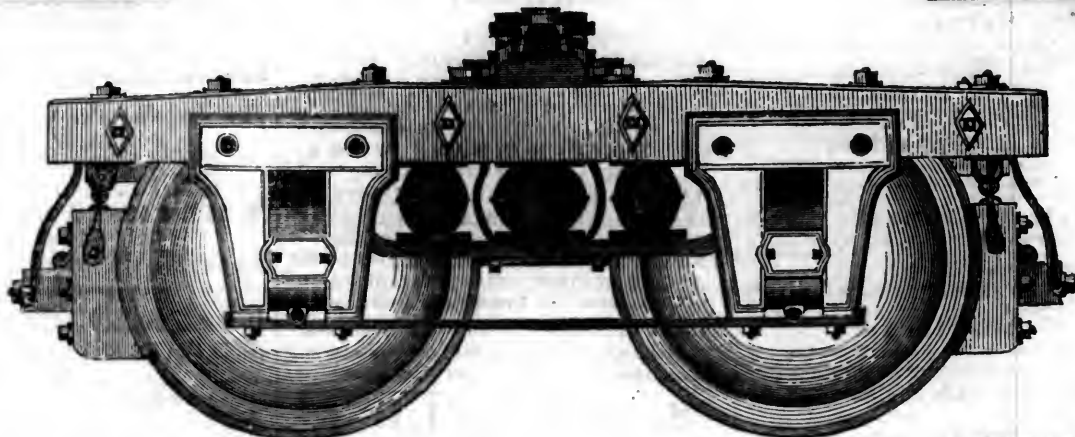
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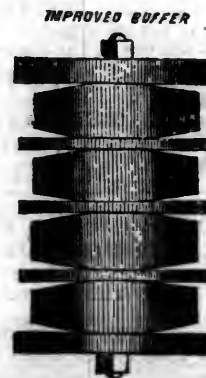
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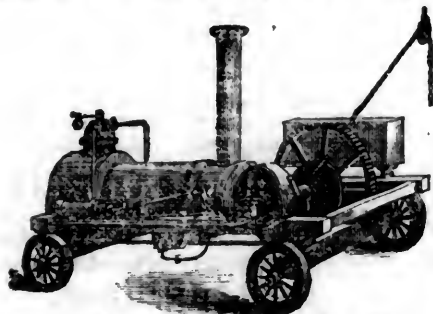
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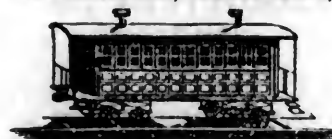
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Probably no modern improvement connected with Steam Power combines so many advantages as this. The economy of Fuel alone from its use soon repays the cost of the apparatus. Prices reduced. Terms easy.

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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SATURDAY, AUGUST 27, 1859.

[WHOLE No. 1,219, VOL. XXXII.]

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, August 27, 1859.

Florida and Its Internal Improvements.

It is well known that the State of Florida has, for several years past, been making rapid progress in the construction of an extensive system of railroads, and one entirely adequate to the wants of her people. In devising this system in the outset, and in securing its adoption by the Legislature, the Hon. D. L. YULEE, U. S. Senator from that State, was chiefly instrumental. After its adoption, he assumed the presidency of the great line extending across the neck of the Peninsula, upon the route so much discussed in passed times, in reference to a canal. This road, under his able management, has now nearly reached its completion. To testify their high appreciation of his efforts and those of his associates, in securing the construction of this road, and in promoting the welfare of the State, the citizens residing in the vicinity of Archer Station, on the road, invited the officers of the company to a grand *barbecue* which took place on the 14th ult. Mr. Yulee was unable to be present, but replied to the committee at considerable length in a letter, the greater part of which we copy, and which is better fitted to excite our admiration, and will prove a lasting

monument to his reputation, than the services he has rendered the people of the State in securing the construction of their magnificent system of public works; as the ends sought to be accomplished far outweigh, in value, the material advantages which the railroad will secure. The letter should have a public record in the history of the internal improvements of the State.

FERNANDINA, July 12, 1859.

GENTLEMEN:—You invite me to a *barbecue* entertainment to be given by the citizens of your neighborhood, to the officers and friends of the Florida railroad, at Wacahoota station, on the 14th of this month. This gratifying demonstration of sympathy in the efforts of the company, is highly valued by all who are connected with its administration, and in their behalf I tender grateful thanks. To me it is particularly pleasing, from the circumstance that I number among the citizens of your vicinity, some of my longest and most respected personal friends. I very much regret that imperative engagements disable me from enjoying a meeting with you on the day appointed.

There are one or two features in your letter of invitation, which strike upon my attention most pleasantly. I wish to express the special satisfaction I derive from it. In the forshadowing it gives, I see a happy augury for the future of our State. In your populous and influential district of country, citizens, as you say, "*of both political parties*," waiving all personal differences, "united in this movement. And the influence which produced this spontaneous union was a *common sympathy in the progress and prosperity of the State*. It points to a coming gathering of all who are for progress, upon a platform of State policy directed to that end.

Has not the time now reasonably come for a general fraternization upon domestic questions? Why may we not turn our minds to our home interests, too much heretofore neglected? Why not rally to the service of the State, all of goodness and of intellect, and of energy, which she holds? Too long have some of the ablest minds of the State been obscured, and their talents lost to her use, by the inexorable necessities of severe party division. These necessities no longer pressingly exist. May we not now assemble around our State altar and joining hands once more as brothers, move together, with a new spirit, in a united effort to make this a happy home for ourselves and our children. The noblest emulation in which we may all engage is to do most to advance the moral and material greatness of our State, to adorn her borders, and to elevate her name.

Never did a State more need combined and har-

monious effort in her service. Capable, by every natural advantage, to be among the first in power, usefulness, and influence, she has been among the last in all these respects.

Who of us, with one spark of State pride or just feeling, could review the results of the statistical tables collected in 1850 under the Census act, without mortification, and without also resolving, as a first duty of all true sons of the State, to devote every energy to improve her condition. Sadly impressed with the picture it revealed, I have since then turned my chief attention to State development, and am anxious to join hands with all who can go with me, in a devoted effort to raise our noble mother State to the dignity of her rightful rank.

The area of Florida is near sixty thousand square miles—which is exceeded in extent by only four other States, namely California, Texas, Virginia, and Missouri.

Of the whole sea coast of the Eastern shore of the United States, we have within our limits *more than one-third*. The whole coast line of the United States on the Atlantic and Gulf of Mexico is 3,020 miles of continental line, of which Florida has 1,146 miles.

In point of health Florida stood at the head of all the Southern States, only surpassed, (that too very slightly,) by three Northern States.

In woods, the most valuable cover its whole extent. The Live Oak, the Cedar, the White and Red Oaks, the Cabinet Woods (Red Bay, Magnolia, etc.,) and the best Yellow Pine, for lumber and naval stores, abound in almost inexhaustible quantities, conveniently placed for commerce.

The variety and value of our agricultural capability as a State is altogether unsurpassed in the Union. In suitability for Upland Cotton equal to any other, and surpassing immeasurably all others in adaptedness to the richest of all staples, the Sea Island Cotton, the Sugar, the tropical Fruits, and early market Vegetables.

Around the shores of the State passes the largest commerce of the continent estimated to exceed five hundred millions of dollars annually.

It is the only State of the Union which has a shore upon the Gulf of Mexico as well as Atlantic, and we control the useful access of other Atlantic States to the Gulf. We possess innumerable harbors upon both shores, of various capacity, and equal to the requirements of any amount of commerce.

With all these great elements we should be among the first in commerce and wealth, in agriculture and the mechanic arts, in population and social development.

How is it with us? Alas, I am almost ashamed to draw the picture of our comparative inferiority.

Organized as a Territory in 1821, during that

long period of 30 years which intervened to 1850, the white population of the State had reached only to forty-seven thousand, being only twenty-nine thousand more than we had in the census of 1830. Of that forty-seven thousand, about twenty thousand were born in the State, showing an immigration in 30 years, from 1821 to 1850, of only twenty-seven thousand. With an area of about 60,000 square miles, we had twenty-four thousand fewer inhabitants than Delaware, which has an area of only 2,120 square miles, and *ninety-six thousand less than Rhode Island, which has only one thousand three hundred and six square miles!*

In the table of relative rank of population Florida stood *least*, and so low, that having fewer than the ratio established by law, we suffered the mortification to become entitled to a representative in Congress, only by the forecast of the Constitution, which provided that each State should be entitled to one representative without regard to population.

There was not a city in the State which reached a population of twenty-five hundred.

There was not one canal in the State, nor one mile of railroad upon which a locomotive could be run.

We were the lowest but one (Arkansas) in manufactures, &c.

We were the lowest but one (Delaware) in aggregate wealth, even including the value of slaves; and were the lowest in State revenues.

In moral and social condition, the contrast with other States was equally sad.

In the number of churches, greatly the lowest. In the value of church property, lowest but one (Arkansas). In the number of churches compared with white population, the lowest of all.

In the number of public and private schools, to the square mile, we were greatly the lowest; and in the per centage of children at school, *as compared with population*, we were much below every other.

Nearly one-fifth of the white population of the State, over twenty years of age, were unable to read and write.

In colleges, theological, medical and law schools, so utterly were we deficient, that Florida was altogether omitted from any place in the table.

Not one daily newspaper was printed in the State, and in the number of papers of all kinds circulated, in proportion to white population, we were among the last.

In the number of libraries, and of volumes of books, we were greatly below every other State.

It is no pleasant task to array the results exhibited in that year; but it is the part of wisdom to look fairly in the face our true condition, that we may better appreciate the task before us.

We can place our State among the first in power and influence, and we ought to do it.

I trace the whole of our then comparative inferiority in public prosperity, to the lack of that public spirit and enterprise which was necessary to keep us up with the spirit of the age. While other States had been generously and courageously at work to develop all their resources, and to foster their natural advantages, we, abounding in the elements of wealth, had rested supine. Other States, seizing at once upon the instrumentalities of progress which modern science has furnished, and made useful to their people all the advantages of their position. With the best position for commerce, we had no commerce. With the best soil and climate for profitable agriculture, we had fewer inhabitants to the square mile than any other State. With a geographical relation to the Union which entitled us to be central in the intercourse between the seaboard States, we have been isolated and obscure.

There is, in proportion to numbers, an unusual amount of intellect and energy in the population of the State; but we had failed to cultivate that PUBLIC SPIRIT AND STATE PRIDE, which would direct it in the channels of STATE PROGRESS. This may be well excused, and is fully accounted for, by the effects of the harassing and protracted Indian hostilities that devastated and disquieted the State, and by the diversified nativities of our pop-

ulation, which has required time for coalescence.

Now, however, within a few years past a change has been working, which it is our true policy to cherish, and which will place us in the next census upon a prouder footing. The State has started upon a new career, and the noise of what she is doing, is already beginning to be heard abroad. What has already been achieved may well encourage us to go on.

The electric wires have penetrated to us in the West and East, and soon may meet together across the length of the State.

Roads are progressing in various directions, which will connect all the best harbors on the Gulf with those of the Atlantic, and furnish avenues for every various need of commerce.

Agriculture has caught the spark of improvement, and the products of our fields are daily increasing.

Our cities are advancing in their improvements, and new towns are springing into existence with an elasticity that evidences the progress we are making.

And in all social respects the advancement is equally evident.

Let us proceed, with courage and animation, to force through our own territory, the tide of intercourse between the Gulf and Atlantic States, by furnishing it with better channels than any other now employed upon the land or upon the water.

Let us enable our planters to combine easy access to the cheapest provision markets on the one hand, and the best cotton and sugar markets on the other, and thus induce occupation of our soil.

Let us build up our own seaports to furnish the convenience and protection of a home market for our produce, and to supply the financial agencies necessary to our further more rapid improvement.

Let us prepare to use the wealth which will thus come to us, in advancing our moral and social condition as a community, by building up colleges, and providing a generous system of public schools.

Let us resolve TO PROGRESS.

For one, I am enlisted to do yeoman's duty in all that can promote the moral and material growth of the State.

I am for completing the system of improvements now begun, by *whatever aids may be necessary*.

I am for dedicating the magnificent fund which a wise administration of the Internal Improvement Fund will create, to *Education*; and in the meanwhile, I am for a generous system of public schools at public cost.

I am for advancing by an *active and positive policy* the social and industrial condition of the State.

I am for *Progress*, and will join efforts with all who are laboring in the same direction.

I beg leave to repeat, and to beg you to repeat with me over and over again: Let us resolve TO PROGRESS. Your respectful servant,

D. L. YULEE.

South-West Branch of Pacific Railroad.

We are authorized to state that at an adjourned meeting of the Board of Directors of the Pacific Railroad, held on Friday, August 19th, the Chief Engineer was directed to commence forthwith the heavy sections lying between DILLON's and the Gasconade river. These are four in number, and are known as sections 73, 78, 81 and 83.

At a previous meeting, the Board authorized the commencement of the work between KINSEY's and DILLON's, to which latter point, one hundred and nine miles from St. Louis, it is intended to lay the rails during the present year, unless delay should arise from unforeseen circumstances. This work has been commenced, and will be prosecuted energetically.

The heavy sections now authorized, may be urged until next spring before the lighter graduation in their vicinity need be commenced.

The rails are now laid from St. Clair nearly to Stanton; and although some unexpected detention has occurred in their transportation from New York, they are now arriving rapidly, and the graduation is so far advanced that the superstruc-

ture can be laid down hereafter continuously, and without delay.—*St. Louis Republican.*

Cincinnati, Hamilton and Dayton Railroad.

The financial exhibit of this company for the year ending March 31, 1859, was presented to the stockholders at their annual meeting held in Cincinnati May 3d, last. From this we learn that the gross earnings from operations of their road during the year were:

From passengers	\$212,645 53
" freights	235,119 47
" mails and express	17,617 95
" rents of track, machinery, etc...	21,720 79
" interest, and profit and loss	2,334 18
	<hr/> \$489,437 92

And the expenses were:—

Maintenance of way	\$47,540 66
" motive power	65,298 69
Train expenses	44,873 43
Station "	41,627 08
Office "	21,273 83
Machine shop	3,762 33
Miscellaneous	15,395 41
	<hr/> 239,771 43

Leaving net earnings	\$249,666 49
Less interest on bonds	\$99,627 38
Taxes for six months	5,314 99
	<hr/> 104,942 37

Surplus income	\$144,724 12
Compared with the previous year, the gross earnings show an increase of	\$2,016 65
The decrease in expenses was	31,762 10

And the increase in net income	\$33,778 75
In the subjoined balance sheet, the assets of the company are stated at	\$167,178 60
And the current liabilities at	83,910 28

The excess of assets being

—a large portion of which being unavailable for several months, it was deemed prudent by the board to pass the dividend, hoping within the ensuing six months to be able to resume the payment of them and have a surplus sufficient to guard against any future failure.

Nothing had been charged to construction account during the year. The floating debt of the company had been reduced to \$24,075, with cash on hand to meet the same at maturity.

The report made to the stockholders, at their semi-annual meeting in October last, showed that the company had invested in depreciated railroad stocks and bonds of connecting roads, the sum of \$305,076 10. In accordance with the recommendation of the committee appointed by the stockholders at their last annual meeting, the undivided net earnings to March 31, 1859, have been credited to this and other bad and doubtful accounts, thus wiping out the total amount of subscriptions to connecting roads, and bringing the stock of the company to par on their books, after deducting sufficient of the assets to pay all outstanding liabilities. The balance remaining to the debit of stocks and bonds, is \$28,747 26, which is estimated to be worth that sum.

The company own 22 locomotives; 26 first class, 2 second class, 8 mail and baggage, 223 freight, 91 platform, 21 cattle, and 79 gravel and hand cars.

During the year, 132 tons of rails have been renewed, 15,385 cross-ties, 13,292 lbs. of spikes, 18,279 lbs. of chairs, and 18,986 ft. of lumber for culverts and fencing. From 500 to 700 tons of rails are now required to replace those worn out.

CONDENSED BALANCE SHEET.		DR.
Capital stock	\$2,155,800	00
1st mort. bonds, due 1867	461,000	00
2d mort. bonds, due 1880	950,000	00
Interest on 1st mortg. bonds	525	00
Do. 2d do.	5,425	00
Unpaid dividends	2,592	95
Bills payable	24,075	00
Due R. R. Companies	31,661	68
Due individuals	8,296	33
Pay-roll, March	11,334	32

\$3,650,710 28

Cr.		
Construction	\$2,648,296	38
Equipment	504,892	35
Real estate	266,198	85
D. & W. R. R. bonds	26,000	00
Cin., Ham. and Dayton R. R. stock	2,247	26
Middletown Bridge stock	500	00
Wood and material for repairs	35,396	84
Bills receivable	54,253	66
Due from Railroad Companies	17,429	18
Do. Individuals	12,351	02
Do. P. O. Department	3,603	25
Cash and cash items	79,541	49

\$3,650,710 28

The officers of the company are:—

S. S. L'HOMMEDIEU, *President*, Cincinnati.

GEO. CARLISLE, *Vice President*, do.

LAFAYETTE BANKING COMPANY, *Treasurer*.

FREDERICK H. SHORT, *Secretary*.

DANIEL McLAREN, *Superintendent*.

Cleveland and Toledo Railroad.

The gross earnings of this road for the fiscal year ending April 30, 1859, were:

From passengers	\$485,537	45
" freight, mails, etc.	312,618	20

\$798,155 65

And the expenses were:

Repairs of road	\$78,129	36
" locomotives	24,674	93
" cars	39,594	37
" bridges	2,216	52
" buildings, etc.	8,446	78
Taxes	19,705	76
Fuel	34,461	16
Oil and waste	7,764	94
Wages	117,809	77
General Superintendent	29,897	66
Contingencies	16,597	73
Miscellaneous	7,400	75

383,699 73

Leaving net earnings

Compared with the previous year, the gross earnings show a decrease of

The operating expenses a decrease of

The net loss being only

The number of passengers carried to all points on the road, was 279,225, being a falling off from the previous year of 66,559. The tonnage account shows an increase of 2,527 tons, but a loss of \$29,363 in freight earnings.

Of the above expenditure for repairs of road, \$12,377 88 was for repairs on the double track between Cleveland and Grafton, leased from the C., C. & C. Co. The track is represented as being in very fair condition. During the year, 39,106 new cross-ties have been laid on the Southern division, 231 tons re-rolled iron, 6½ tons spikes, and 3,427 rails repaired. In the Northern division, 7,000 new cross-ties, 3 tons spikes, and 1,494 rails repaired. The rolling stock is also in good order, 9 new stock cars have been built, and 3 coaches, 1 second class and 1 baggage car re-built. The equipment now consists of 32 locomotives, 42 pass-

enger, 10 second class and emigrant, 4 mail, 13 baggage, and 413 freight and gravel cars.

Three small bridges of a permanent character will be required on the southern division during the present season, the estimated cost of which will be about \$9,000.

The financial position of the company remains about the same as at the date of the last statement. The interest on the bonded debt has been paid, and the obligations of the company met promptly at maturity.

There has been appropriated to the sinking fund by the company during the past year the sum of \$12,285 52, and there has been purchased by the commissioners \$25,705 of the bonds of the company, making the total amount of the company's bonds purchased for the account and benefit of the sinking fund to this date \$91,860, in addition to which the Commissioners hold the company's note on demand for \$4,741 10 for coupons due and surrendered.

There is an arrearage due from the company January 1st, 1859, of \$25,524 89 on the sinking fund account. A gradual exchange of the outstanding bonds of the company, for the sinking fund mortgage bonds, has been going on, during the year, so that at the present time the outstanding bonded debt includes \$640,000 of said bonds.

The outstanding bonds of the company are as follows:—

Junction, 1st mort. 1st div. b'ds, due 1867	\$377,000
Do. 1st mort. 2d div. do. 1872	305,000
Do. 2d mort. do. do. 1862	324,000
T. N. & C. 1st mort. do. 1863	522,000
Do. 2d do. do. 1863	299,600
Junction, Income, do. 1862	61,500
Do. Lloyd's, do. 1862	5,000
C. & T. Income, do. 1863	192,950
Do. do. of July, 1854, do. 1864	409,900
Do. do. of Sept., 1854, do. 1864	373,000
Do. dividend do. 1865	199,735
Do. dividend certificates, do. 1865	4,935
Do. income, do. 1870	129,000
Do. sinking fund mort. do. 1885	640,000

\$3,842,720

CONDENSED BALANCE SHEET.

DR.		
Capital stock	\$3,843,812	50
Bonded debt (as above)	3,842,720	00
Bills payable	358,605	64
Unpaid approved bills	16,176	15
Unpaid on pay rolls	745	43
Dividends not called for	2,308	00
Unpaid accrued interest on bonds	9,170	99
Miscellaneous unsettled accounts	20,384	66
Receipts in May, not adjusted	35,698	71
Income account to balance	229,296	07

\$7,858,918 09

Cr.		
Stocks and bonds owned by company	\$258,423	94
Bills receivable	75,712	86
Real estate	33,752	63
Materials on hand	112,119	69
Due company from transportation accounts	18,960	39
Cash	20,116	90
Sinking fund	60,567	87
Collectable accounts	2,804	59
Equipment	458,194	59
Construction	6,729,056	93
Miscellaneous accounts	89,208	20

\$7,858,918 09

The officers of the company are:

J. B. WARING, *President*.

H. C. LUCE, *Treasurer*.

L. D. RUCKER, *Superintendent*.

Cleveland, Columbus and Cincinnati R. R.

The income of this company for the year ending Dec. 31, 1858, was derived from the following sources, viz:—

Freight	\$688,460	62
Passengers	343,732	13
Express and mails	43,173	04
Rents and lease of track	76,607	56
Interest on deposits, and other sources	11,666	60

\$1,113,639 95

The expenses for the year were:

Repairs of track	\$126,853	82
" locomotives	48,451	17
" cars	59,594	67
" buildings & bridges, etc.	12,714	73
Fuel	44,998	26
Oil and waste	11,146	09
Taxes	10,878	86
Conducting transport'n.	194,332	49
General expenses	18,134	14
Interest and exchange	8,256	73
Loss and damage	13,119	75

538,480 71

Net earnings

Compared with 1857, the earnings show a decrease of

And the expenses a decrease of

Making an increase in net earnings of

The reduction in gross receipts was chiefly in the passenger traffic, and is ascribed mainly to the general depression of the business of the country. The small increase in revenue from tonnage was not in keeping with the increased amount carried; this is attributable to the excessive competition of rival lines.

Although a large saving has been effected in the operating expenses, due regard has been paid to the condition of the road and its equipment—the motive power of which has been much improved, while the cars were kept in equal good condition.

The bonds of Franklin Co., assumed by this company, which fell due in January last, were paid. This leaves the company with only \$38,000 bonded, and no floating debt.

The assets and liabilities of the company on the 1st of January, 1859, were as follows:—

ASSETS.

Roads and depots	\$1,087,570	62
Equipment	684,954	94
Columbus and Xenia R. R. stock	5,550	00
Bellefontaine & Indiana R.R. stock, \$66,800—value	6,680	00
Indianapolis and Bellefontaine R. R. stock, \$70,000—value	1,050	00
Steamboat stock, \$54,000—value	7,500	00
Bellefontaine and Indiana Railroad bonds, \$2,000—value	1,200	00
Indianapolis, Pittsburg & Cleveland R. R. bonds, \$6,000—value	4,350	00
Columbus and Xenia R. R. bonds	800	00
Delaware County bonds	6,000	00
Land not used for roads and depots, Loan to Cleveland and Mahoning R. R. Co.	24,000	00
Materials on hand	110,068	02
Due from joint account with C., P. & A. R. R.	\$25,385	01
Due from agents and other companies	40,027	45
Due from P. O. Depart.	7,099	35
Bills receivable	49,927	09
Cash in hands of pay-master	4,283	10
Cash in hands of treasurer	266,537	56

393,259 56

\$5,843,275 81

LIABILITIES.	
Capital stock.....	\$1,746,100 00
Convertible bonds due Dec. 1, 1859,	38,000 00
Dividends uncalled for ...\$7,995 40	
Due other companies.....	246 89
	8,242 29
Dividend No. 15, payable Feb. 1, '59	237,305 00
Surplus earnings.....	313,628 52
	\$5,343,275 81
Gross earnings for 1858.....	\$1,113,689 95
Expenses for all purposes	538,480 71
	\$575,159 24
July dividend paid, August 1, 5 per cent.	\$237,305 00
Jan'y dividend paid, Feb. 1, 5 per cent.	237,305 00
	474,610 00
Surplus earnings for 1858	\$100,549 24
The officers of the company are:—	
L. M. HUBBY, <i>President</i> .	
E. S. FLINT, <i>Superintendent</i> .	
P. KIDDER, <i>Chief Engineer</i> .	
T. P. HANDY, <i>Treasurer</i> .	

Boston and Maine Railroad.

The report of this company for the fiscal year ending May 31st, 1859, has been issued, from which we learn that the receipts during that time were:—

From passengers	\$465,181 09
" freight	327,668 27
" rents	7,076 09
" mails	9,616 57
" interest	9,139 20
	\$818,681 22

The expenses were:—

Running Expenses.

Repairs of road	\$69,963 20
" bridges	18,334 00
" fences, gat's, etc.	2,863 25
" station build'gs, fixtures and furniture ...	20,193 83
" locomotives	28,440 34
" cars of all kinds	19,057 97
Removing ice and snow ..	853 53
Switchmen, gatemen, etc. ..	19,128 81
Passenger expenses	56,127 74
Freight do.	56,545 11
Wood	48,905 43
Sawing wood and pumping water	14,187 69
Oil	6,305 55
Waste	1,569 30
Horse power	9,233 37
Damages and gratuities ..	7,368 79
Coal for locomotives	250 00
	379,327 91

Other Expenses.

General expenses, being salaries, law expenses, etc.	\$17,387 27
Taxes, (estimated)	11,833 27
Insurance	2,975 07
Rent of Danvers railroad..	7,500 00
	39,695 61

Net, after deducting expenses.....	\$399,657 70
Charged for renewals of iron.....	\$21,845 47
Do. for depreciation of locomotives and cars.....	7,590 00
	29,435 47

Net, after deducting expenses and depreciation and iron	\$370,222 23
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The company owe no permanent debt; nothing but the monthly balances between it and other companies. Its capital account, \$407,697 41, is

represented entirely by stock. The construction account is made up as follows:

Graduation and masonry	\$882,067
Wooden bridges	371,469
Superstructure, including iron	984,524
Stations, buildings, etc.	520,723
Land, land damages, and fences	815,837
Engineering and other expenses	272,388
Locomotives	173,780
Passenger and baggage cars	60,695
Merchandise cars	133,882

Total cost of road and equipment..\$4,215,361

The cash debt of the company, \$50,000, owed to the commonwealth, contracted 20 years since, and due August 1, 1859, was paid out of the surplus earnings in October, 1858, 10 months before it fell due.

The dividends paid the past year equaled 7½ per cent.

The undivided earnings of the road, at the close of the fiscal year, amounted to \$428,930, consisting of cash, and cash balances, of \$98,567; due from other roads, \$104,418; value of road and materials on hand, \$87,555; and \$138,391 invested in construction and equipment.

This company is one of the most prosperous of the Massachusetts railroads. Its cost has been moderate, and it has been prudently and economically managed. Its earnings average about 20 per cent. annually upon its cost for 18 years past. The company has paid, annually, dividends which have averaged 6.83 per cent. In the meantime, the construction of the road has not increased since 1855. The road by this time may be well considered as a safe investment of capital.

The officers of the company are:

President—FRANCIS COGGSWELL.

Treasurer—H. B. WILBUR.

Superintendent—WM. MERRITT.

South-Western Railroad.

The earnings of this road for the fiscal year ending July 31st have been—

Earnings from freight	\$339,073
" " passengers	193,293
" " carriage of mails	15,510

Total

The current expenses were—

For repairs of road	\$43,137
For materials for same	14,514
For tools, subsistence, etc.	19,308
For fuel for locomotives	6,555
For water do.	3,365
For repairs of buildings	549
For do. locomotives	15,396
For wages of engine-men and fire-men	22,623
For oil and waste for locomotives ..	2,116
For repairs of cars	17,076
For oil and waste for same	925
For salaries, train expenses, etc. ..	45,729
Paid for damages to goods, etc.	2,673
Commissions to station agents	6,497
Incidental expenses	9,747
Total current expenses.....	210,107

Net earnings

In addition, expenditures of a permanent character to the amount of \$55,538 were made for the following objects.

New buildings	\$3,780
New passenger cars	5,950
New freight cars	14,163
For locomotive engines	20,743
Construction tools, etc., etc.	10,902

\$55,538

The total ordinary and extraordinary expenses were \$265,645,—leaving as net earnings \$282,230. The stock of the company 1st August, inst., as shown by the Treasurer's balance sheet, amounted to

The stock earned, and to be earned by contractors, will amount to

At the completion, the stock will be ..\$2,500,000

The bonds of the company, as shown by the same balance sheet, on 1st August inst., amounted to

The bonds earned and to be earned by contractors, will amount to

At the completion, the bonds will be 761,000

There should be added to the amount of bonds, for cash to be thereby raised, as shown hereafter, the sum of \$139,000. So when the road shall have been finished, the capital stock will be \$2,500,000, and the bonded debt of the company will be \$900,000, making together \$3,400,000. To pay the interest on the bonds and dividends at the rate of eight per cent. per annum, the annual sum of \$263,000 will be required.

The total length of main line open, is 162½, to be increased 44 miles by its extension to Fort Gaines on the Chattahoochee river, and to Eufala from Cuthbert station. There were opened the past year 20½ miles. The number of miles in use averaged 147.

The number of miles run by the past year were 171,758. Freight and other trains 93,109; making a total of 264,867. The number of cords of wood used was 2,684, being an average of one cord to 98¾ miles run, at a cost of 2.28 cents per mile.

The whole line is to be completed the coming year. The total amount expended on the extension from Southville has been \$845,289, and the total estimated cost of the same to Eufala and Fort Gaines is \$1,462,220.

In conclusion we make the following extracts from the Report of the President:—

The table of work done and to be done on the extension, annexed to the Chief-Engineer's report, shows that there is yet to be expended the sum of \$650,000 to finish the road. Of that sum of \$650,000, there will be payable in cash, \$407,000; the remainder will be payable in bonds and stock of the company. The funds received for extension of road, have, during the progress of the road, yielded an interest amounting to \$59,629 13. It has not been found necessary to use it in aid of dividends hereafter. The extension fund now is \$116,782 97; if we add the above item of interest, \$59,629 13, the cash fund for extension will be \$276,412 10; and if bonds to the amount of \$130,000 be sold, there will be raised the sum of \$406,412 10, the amount of cash necessary to complete the road.

As the income of the company for the year just ended after paying an extraordinary expense of \$55,538 35, has been \$282,230 20, there cannot, in the opinion of the Board, be any doubt whatever of the ability of the company to pay regularly to the stockholders at least eight per cent. per annum. It is, certainly, reasonable to expect that the net income of the road for this current year, after the payment of ordinary expenses, will be \$350,000—a sum sufficient to pay all interest, and dividend of eight per cent., and leave \$90,000 at least to meet extraordinary expenses.

The future of the company, then, is full of promise. At the end of another year, we shall be at an end of our labors in road-building. We shall have a railroad 206½ miles long of main line, and 143½ miles of sidings, well equipped and furnished with depots, and other necessary appurtenances. The Capital stock of the company, and

its bonded debt together, will not exceed \$3,400,000. The road and equipment, however, will have cost more than \$3,400,000. Its present cost, as shown by the Balance-sheet, is near \$280,000 over and above the aggregate of the stock and bonded debt; the difference has been paid out of the general earnings of the company. These general earnings, after paying dividends of eight per cent. per annum and interest on bonds, will still go in aid of finishing the road. When the road is finished, or at the beginning of the next fiscal year, (August, 1860,) it will be the duty of the Board to consider the propriety of issuing stock by way of dividend to stockholders, to such an amount over \$3,400,000 as the value of the property may exceed that sum. That the property can be placed at more than \$3,400,000, and still pay a certain dividend of eight per cent., seems to this Board, very clear. How far the value may exceed \$3,400,000 can, in August, 1860, be determined with accuracy and safety. The stock of the company, which was at the last report of the Board depressed, has since risen in the markets of Savannah and Macon, to within a trifle of par. That it will soon command a premium, and be a favorite means of investment, is as certain as that capitalists will take the pains to acquaint themselves with the condition and future prospects of the company.

It has not escaped the notice of this Board, that the people in various sections of our State, and more especially in the Southern portions of it, have, of late, been much excited in their desire to have new railroads. The success of the roads already built has tended to stimulate those desires, until almost every citizen seems to wish a railroad running by his own door. The system of railroads in Georgia now existing, and yielding fair remuneration to stockholders, may be briefly described as follows:

The city of Macon, which is very near the centre of the State, is the centre of the railroad system of Georgia. From Macon, lines of railroad run South-eastwardly to Savannah, and North-westwardly to Chattanooga, making a continuous railway from the Atlantic seaport of the State to the river Tennessee at Chattanooga. Another line (the South-western Railroad) runs from Macon to Albany, Fort Gaines, and Euftaula; another line connects Macon with Columbus; another connects Macon with Augusta, and another with the Chatahoochee at West Point. Macon is also connected by rail with Eatonton, a point twenty-two miles south of Madison, on the Georgia Railroad. The Georgia Railroad runs from Atlanta to Augusta. The Savannah road and Main Trunk make a line from Savannah through the Southern border of the State to Bainbridge and the Chatahoochee. There is a line from the Georgia Railroad, leading from Union Point to Athens, and there are short roads leading to Rome, to Washington, and to Thomaston. Such is the general system at this day. If the short road from Eatonton to Madison is built, and the system be extended from Athens to Rabun County, and the South-western Railroad line be carried to Bainbridge, the extreme South-eastern part of the State, the North-western corner, the South-western and North-eastern corners—in a word, the four corners of the State—will be united by railroads—all passing through the centre at Macon. The lines passing across the State—to wit, from West Point to Augusta, and from the neighborhood of the junction of the Flint and Chatahoochee to Savannah, with such a connection of the four corners as is indicated above, would seem to be enough to develop the State, and to gratify the most ambitious mind. A more perfect system of railroads could not be found in any State of the Union.

But the extraordinary spectacle is, at this day, presented to the people of Georgia of projects for three additional roads leading from the interior towards the sea—namely, from Macon, from Fort Valley, and from Albany; and the projectors of these roads openly confess that the people who desire them cannot furnish all the means to build them, and, therefore, look to the State for aid. These projects, founded upon the hope of State aid, disturb the minds of some of the stockholders

in this company, and, therefore, demand the notice of this Board.

No one can, even plausibly, deny these two propositions:

1st. The country between Macon, Fort Valley, and Albany, on the upper side, and Savannah, Brunswick, and the Main Trunk line, on the lower, cannot support these lines of railroad, in addition to the Central and the Main Trunk and Savannah lines; such three additional roads are not necessary to develop the resources of Georgia.

2d. The projectors of each of the three lines of road, are equally entitled, if entitled at all, to the aid of the State; Macon has as much right to ask State aid as Albany, and Albany as much as Fort Valley.

Such three lines of railroad, if built, would be antagonistic, each to the other; Albany would seek to draw everything South of Oglethorpe away from Macon, an operation which Macon would seek to prevent. Fort Valley could not possibly have any interest which was common to Albany, or to Macon. These three projected roads were started for Brunswick, ostensibly; but already, the signs are plain that they will, if built, lead to Savannah. Savannah being an established cotton market, and having perfect connections, by steam and sail vessels, with Northern ports and with Europe, would draw all the business of the country, in opposition to Brunswick, where there is no market, no capital, no population, no ships, no trade.

It will soon be apparent that the railroad line from Savannah to Thomasville, Bainbridge, &c., will cut Brunswick off from all the interior trade. This will be proven when the Brunswick and Florida Railroad Company shall have completed their line of sixty-seven miles, from Brunswick to McDonald, the point of junction with the Main Trunk. The Main Trunk is likely to reach Thomasville before the Brunswick road shall reach McDonald. The cars, with goods and produce, will pass through McDonald, between Thomasville and Savannah, without contributing anything of moment to the Brunswick road. The difference in distance between Thomasville and Brunswick and Thomasville and Savannah, is too trifling to give Brunswick an advantage; the advantages of Savannah, as an established market and port, must necessarily control the business. And so any road from the interior, striking the Main Trunk at any point, would carry for Savannah—not for Brunswick; hence it will be seen that all surveys of roads will be to the initial point, and the three roads, or any of them, will be Savannah roads, and not Brunswick roads. The road from Macon to the initial point, will be a competing road to the Central; and roads from Fort Valley and Albany would also be competing roads to the Central, whilst they would be also competing roads to the Macon road, and competing with each other.

In view of the considerations thus presented very briefly, the question may be asked, Is it probable that either of the three projected roads will be built? All, surely, cannot be built—all cannot obtain State aid; for the representatives of the people would never be guilty of the folly of giving aid to one line of road, and then giving aid to another line to compete with the first. Who will get State aid? Shall it be Macon, or Fort Valley, or Albany? The conclusion at which this Board has arrived is, that as the country requires no such roads—and as the projectors of them must, on due examination, be satisfied that such roads, if built, cannot pay, there is no likelihood of the completion of any line either from Macon or from Fort Valley, or from Albany, to the Main Trunk, or the initial point. But if the Board is wrong in that conclusion, they feel very confident in this opinion, that all the business which the South-western road commands now, will be received by it in the future. If competition from any quarter shall come, the tendency may be to a reduction in rates, but compensation will be found in the increased quantities of transportation, as the country generally progresses. The people of Savannah, who own the greater part of the stock of this company, own also the greater part of the stock of the Central Railroad line. Their friendship, there-

fore, towards our road, can be certainly calculated on.

The Coal Trade of Pittsburg.

Mr. Thurston, the Secretary of the Pittsburg Board of Trade, estimates the "coal mined in the vicinity of Pittsburg," in 1858, at 81,771,229 bushels, or 3,308,849 tons. This the *Philadelphia Mining Register* disputes, as being "enormous," and says:

Our accredited aggregate for 1858 of 1,142,278 may be somewhat under the genuine aggregate of the entire coal trade of Pittsburg for that year; but that the genuine aggregate, if ascertained, would represent the quantity put down by T., to wit: 3,308,849 tons, or near one-half that quantity we have not the remotest belief.

And, in expressing this opinion, we have not the least intention to underrate the magnitude of the coal trade of Pittsburg, which is a stupendous and magnificent trade, even when limited to its real totals; our sole purpose is to discourage a practice of exaggeration, in many cases unintentionally indulged, no doubt, yet which, even by this occasional exercise, tends to bring reproach and discredit upon the entire department of statistical matter.

The *Register* suggests that the true way of arriving at the actual figures is to ascertain the amount really received here from all sources—by river and by rail—and the amount used for manufacturing and local purposes, and thus show in the aggregate, the amount mined within the region near the city. Noting the wide difference between the two estimates, and believing the one as much too high as the other is too low, we have put ourselves to some trouble in hunting up statistics on the subject, and they justify our convictions on the subject. The amount consumed for domestic purposes cannot be ascertained, positively. In the city proper, all the coal sold to domestic consumers is sold by weight, and is weighed upon the city scales. This does not include coal delivered on continuous contract to manufacturers and other large consumers, the city ordinance exempting all coal so delivered from its operations. In the returns made by the weighmasters at these scales for the year 1858, we have, therefore, the amount of coal delivered to domestic consumers during that period within the nine wards of the city. This amount, according to figures obtained at the Comptroller's office, was 2,669,720 bushels. Outside of the city, coal is delivered by the measure of the vehicles delivering it, of which no record is kept; but as the population outside is about equal to that of the city proper, we set down the domestic consumption at the same as the city proper, making the total 4,339,440 bushels.

The amount consumed by manufactures, we are enabled to learn pretty correctly by the statistics contained in Thurston's "Pittsburg as it is." From that we learn that in 1857 the rolling mills consumed 6,187,515 bushels; the glass factories, 2,820,668 bushels; and the other factories of various sorts, 3,847,584 bushels. There has been an increase since then, both in the number of factories and the amount consumed; allowing 1,000,000 bushels for the amount used by steamboats, gas factories and water works, and we have a grand total of 14,855,767 bushels used in manufactures, &c.

The Monongahela Navigation Co. brought down in 1858 25,696,669 bushels, of which 21,871,569 bushels were for export below. There was also shipped in boats and barges, from below the dams of the Navigation Co., 3,291,666 bushels, making the total shipped below, 25,163,235 bushels.

In addition to these totals, the Pittsburg, Ft. Wayne and Chicago R. R. Co. carried west from the city, during 1858, 22,250 tons; the Pittsburg and Cleveland R. R. carried west, 28,885 tons; the Pennsylvania R. R. carried east, (not exactly from Pittsburg, but from local stations not far from the city,) 87,995 tons, and 80,000 tons for its own use; and the Beaver and Erie canal carried to Erie 128,000. Total, 342,130 tons; which, at 26 1/2 bushels to the ton, gives us 8,409,423 bushels.

We have not included in this estimate the

be attached to, a perpendicular shaft placed in the centre of this circular track. The wheels to be of the size, pattern, and make, as actually are to be used upon the road for which the rails are to be tested, and the car to be loaded with a weight per wheel equal to the greatest load they will have to sustain when in use upon the road.

The vertical shaft to be well braced and to be strongly attached to the car, so that when a rotary motion is given to the former, this motion will be participated in by the latter—a pulley being placed at the top or bottom of the shaft for the purpose of revolving said shaft by means of a stationary steam engine placed near by.

The speed of travel of the wheels to be the same as the average speed required upon the road.

The *modus operandi* of the test of rails with this apparatus, can be illustrated as follows:

Assuming the average traffic of the road to demand the going and returning of 8 daily trains upon the road, (or 4 each way,) of 15 8-wheel cars, then each rail would be ridden over by 480 wheels daily. My testing car being supported by, say, 8 wheels, of course, in that case 60 revolutions would be equal to one day's use of the rail. Supposing the circular track to measure 60 feet on its circumference, and the average speed of the trains on the road in question to be 20 miles per hour, or say 1,800 feet per minute, then it would be necessary to give the revolving car 30 revolutions per minute, to subject the rails to a trial of usage with the same speed. At this rate (60 revolutions of the car being equal to one day's use of the rails) the effect of the wear due to that time will be produced in two minutes. If two minutes is equal to one day's use, then one hour will be equal to that of 30 days, and 12 hours and 10 minutes to that of 365 days, or one year. Or in other words, experimenting during one day of 12 hours and 10 minutes, will show the effect of a whole year's use of the rail when laid on the road.

A rail which begins to laminate in 6 days 4 hours and 6 minutes of testing, is sure to do the same in 6 years 4 months and 3 days of usage.

To obtain the effect of the hammering, crushing and tearing due to the wheels, one or two of the rails composing the track should be so bent as to form depressions in the surface of the track, and also be not exactly true in its circular alignment, in order to cause a zigzag or sideway traction.

Thus all the different peculiarities of a railroad can be imitated, and the duration and corresponding value of rails and wheels be determined with great accuracy, because in the trial they are exposed to all the various strains and other elements tending to its destruction in the same combination as they would be when laid upon the road, and were subjected to its regular traffic.

The contested superiority between pear and square headed, thick and thin headed rails, hollow and solid rails, heavy and light rails, the merit of all kinds of splices, chairs, keys, and bolt fastenings, and between the great variety of car wheels, will thus soon be determined.

My object in submitting the above description of my plan of testing to the engineers and managers of railways is, in case they approve my theory, to solicit their aid in constructing such an apparatus for the purpose of ascertaining its correctness. As my aim in this is not for personal gain but for mutual protection, and for the sake of advancing engineering science, and as all railways are alike interested in its results, I request the co-operation of all. To accomplish this at the minimum cost for each, I propose that each company shall pay a sum proportional to the length of its road, and have fixed this sum at fifteen cents per mile. If all the roads from which such co-operation reasonably can be expected, contribute this amount, the sum collected will reach about three thousand dollars, which is the amount estimated to be required.

Drawings, giving details and showing the construction, will be found at my office in Mobile, or will be supplied on application of railway companies.

CHARLES T. LIERNUX,
Civil Engineer, Mobile, Alabama.

Finances of Boston.

From the report of the City Auditor for the financial year ending May 1, 1859, it appears that the total receipts into the treasury during the year were \$5,132,956 93; expenditures, \$4,419,542 37. Balance April 30, 1859, \$1,116,697 41. But this balance was chargeable with \$370,229 53 of the loan of \$100,000 to defray the cost of the new Water Main to Brookline and other sums, in all amounting to \$430,000, and also to the sum of \$208,900, the amount advanced by the Treasurer on loans not consummated. During the year there has been borrowed for city purposes, exclusive of the loan of \$100,000, obtained to pay the cost of a new water pipe, the sum of \$832,950. Of this amount \$396,350 has been for the improvement of streets and sewers; \$104,000 for school houses; \$225,600 for public lands; \$97,000 for public buildings; and \$10,000 yet to be expended for stables.

The net debt on the 30th of April, 1859, was \$7,831,984 72
Do. April 30, 1858 7,177,182 76

Net increase in 1858-9 \$654,801 96

The school expenses, exclusive of the cost of two new school houses, (\$105,186) have increased about \$9,000 over last year. The fire department has cost \$1,750 less than last year. The revenue from the water rates for the year has been \$313,694 60, against \$296,512 25 last year. The estimate for 1859 60 is \$310,000. The excess of net expenditures over the net revenue, from all sources, in 1858-9 has been \$10,359 07.

Vermont Central Railroad.

A disagreement has arisen between the bondholders, stockholders and directors of this road. A meeting of the holders of the 1st mortgage bonds was recently held in Boston, at the conclusion of which the following resolutions were read, voted upon separately, and passed unanimously, viz:

Resolved, That a committee of three bondholders be and are hereby appointed to represent and act for us as our agents, with full powers to represent us in all cases, and more especially to confer with all parties having adverse claims and interests, and to compromise, subject to ratification by majority of bondholders, the same if considered expedient; and to oppose the arrangements so subversive of our rights lately made or contemplated between our Trustees and the Vermont and Canada Railroad.

2. To hasten to its end the present suit for foreclosure, and in case this suit failed to accomplish the purposes for which it is intended, to institute any and every other process in our means to foreclose the 1st mortgage, which may in their opinion be necessary.

3. To procure the resignation or removal from office of the present trustees, who, in our opinion, are unfit longer to retain it.

4. To obtain an early and full account from the Trustees of their acts and doings, and to ascertain and obtain payment of all balances of accounts and moneys due from them, whether on contracts or otherwise.

5. To obtain an order from the courts having cognizance of the matter, that, hereafter, all moneys received from traffic on the roads be deposited in bank, and that the bonds of the receivers be increased in amount.

6. That if more expedient in their mind so to do, to obtain and procure a sale of the road, real and personal property and franchise, either by decree of the Court, or under power contained in the 1st mortgage; which sale we hereby authorize said committee to request the trustees of the 1st mortgage in our names to make; so that the whole property may be converted into stock upon the basis of the agreement heretofore entered into for that purpose, for the benefit of all the bondholders; provided, that such request is not to be made unless it appears to said committee that such a

conversion of the property by sale can be more speedily, or more beneficially effected by the sale than by the foreclosure.

Wm. Sohler, Wm. Drury, and Robert Earle, were appointed a committee to carry into effect the above resolutions.

Summary of the Performance and Cost of Locomotive Engines on the Baltimore and Ohio Railroad for July, 1859.

FIRST DIVISION.

Number of Passenger Engines.....	6
Average No. of miles run by each engine.....	2,688
Miles run to 1 cord wood, (lighting fires).....	1,093
" " " quart of oil.....	38.6
Pounds of coal consumed per mile run.....	19.7
Cost of repairs per mile run.....	5.8
" fuel " " ".....	2.7
" stores " " ".....	0.7
Total cost " " ".....	9.2

Number of Tonnage Engines, (including switching engines).....	59
Average No. of miles run by each engine.....	1,317
Miles run to 1 cord wood, (lighting fires).....	640
" " " quart of oil.....	25.3
Pounds of coal consumed per mile run.....	48.8
Cost of repairs per mile run.....	7.7
" fuel " " ".....	6.7
" stores " " ".....	0.8
Total cost " " ".....	15.2

WASHINGTON BRANCH.

Number of Passenger Engines.....	3
Average No. of miles run by each engine.....	2,320
Miles run to 1 cord wood, (lighting fires).....	568
" " " quart of oil.....	51.1
Pounds of coal consumed per mile run.....	27.6
Cost of repairs per mile run.....	5.2
" fuel " " ".....	4.7
" stores " " ".....	0.6
Total cost " " ".....	10.5

Number of Tonnage Engines.....	2
Average No. of miles run by each engine.....	2,024
Miles run to 1 cord wood, (lighting fires).....	674
" " " quart of oil.....	25.6
Pounds of coal consumed per mile run.....	28.2
Cost of repairs per mile run.....	9.7
" fuel " " ".....	4.5
" stores " " ".....	0.9
Total cost " " ".....	15.1

SECOND DIVISION.

Number of Passenger Engines.....	4
Average No. of miles run by each engine.....	3,034
Miles run to 1 cord wood, (lighting fires).....	933
" " " quart of oil.....	60.6
Pounds of coal consumed per mile run.....	20.3
Cost of repairs per mile run.....	3.4
" fuel " " ".....	1.7
" stores " " ".....	0.6
Total cost " " ".....	5.6

There are also upon this division two wood-

burning Passenger Engines;	
Average No. of miles run by each engine.....	2,712
Cost of repairs per mile run.....	1.7
" fuel " " ".....	6.7

Number of Tonnage Engines.....	36
Average No. of miles run by each engine.....	1,324
Miles run to 1 cord wood, (lighting fires).....	849
" " " quart of oil.....	30.0
Pounds of coal consumed per mile run.....	64.1
Cost of repairs per mile run.....	7.6
" fuel " " ".....	5.1
" stores " " ".....	0.8
Total cost " " ".....	13.5

THIRD DIVISION.

Number of Passenger Engines (10-wheel engines weighing 60,000 lbs.).....	4
Average No. of miles run by each engine.....	2,194
Miles run to 1 cord wood, (lighting fires).....	1,003
" " " quart of oil.....	28.8
Pounds of coal and coke (about equal quantities of each) consumed per mile run.....	62.0
Cost of repairs per mile run.....	5.2
" fuel " " ".....	5.9
" stores " " ".....	0.8
Total cost " " ".....	11.9

Number of <i>Tonnage Engines</i>	38
Average No. of miles run by each engine....	723
Miles run to 1 cord wood, (lighting fires)....	1,194
" " " quart of oil.....	21.2
Pounds of coal consumed per mile run.....	88.9
Cost of repairs per mile run.....	11.3
" fuel " " ".....	4.4
" stores " " ".....	1.1
Total cost " " ".....	16.8

FOURTH DIVISION.

Number of <i>Passenger Engines</i>	9
Average No. of miles run by each engine....	2,174
Miles run to 1 cord wood, (lighting fires)....	523
" " " quart of oil.....	34.9
Pounds of coal consumed per mile run.....	23.0
Cost of repairs per mile run.....	8.8
" fuel " " ".....	3.0
" stores " " ".....	0.7
Total cost " " ".....	12.5

There is also upon this division one wood-burning *Passenger Engine*;

Number of miles run by engine.....	3,216
Cost of repairs per mile run.....	2.0
" fuel " " ".....	4.0
Number of <i>Tonnage Engines</i>	24
Average No. of miles run by each engine....	820
Miles run to 1 cord wood, (lighting fires)....	543
" " " quart of oil.....	25.4
Pounds of coal consumed per mile run.....	52.3
Cost of repairs per mile run.....	7.7
" fuel " " ".....	3.1
" stores " " ".....	0.9
Total cost " " ".....	11.7

PARKERSBURG BRANCH.

Number of <i>Passenger Engines</i>	2
Average No. of miles run by each engine....	1,395
Miles run to 1 cord wood, (lighting fires)....	1,177
" " " quart of oil.....	30.0
Pounds of coal consumed per mile run.....	20.1
Cost of repairs per mile run.....	18.2
" fuel " " ".....	1.2
" stores " " ".....	0.9
Total cost " " ".....	20.3
Number of <i>Tonnage Engines</i>	16
Average No. of miles run by each engine....	624
Miles run to 1 cord wood, (lighting fires)....	536
" " " quart of oil.....	24.7
Pounds of coal consumed per mile run.....	54.3
Cost of repairs per mile run.....	17.5
" fuel " " ".....	3.0
" stores " " ".....	1.0
Total cost " " ".....	21.5

NOTE.—Cost of repairs includes the cleaning of engines.

HENRY TYSON,
Master of Machinery.

The following is a summary of the above statement:—

Miles run on the several divisions.	Cost of stores.	Cost of fuel.	Cost of repairs.	Total cost of fuel, stores, oil & waste, and repairs.
16,128	\$112	\$435	\$916	\$1,483
77,703	621	5,206	5,983	11,810
6,960	41	326	363	730
4,048	36	182	393	611
12,136	60	206	413	679
47,664	381	2,432	3,621	6,434
8,776	70	617	457	1,044
27,474	302	1,209	3,104	4,615
19,566	137	587	1,721	2,445
19,680	177	611	1,514	2,302
2,790	25	34	508	667
9,980	99	300	1,746	2,145
252,905	\$2,061	\$14,045	\$20,755	\$36,965
Cost per mile run in cents, .81	5.55	8.26	14.62	

If we add to the above the amount paid engineers and firemen per mile, at the rate paid last

year, 4.81 cents per mile, we shall have a total cost for maintaining and operating this department for the month of July, equal to 19.43 cents per mile. The cost of operating and maintaining this department, for 1858, was as follows:—

Cost of repairs, per mile.....	10.10
Do. fuel " " ".....	2.99
Do. oil and waste, per mile.....	1.76
Do. engine-men and firemen, do.....	4.81
Total, per mile run.....	19.66

American Railroad Journal.

Saturday, August 27, 1859.

New York and Erie Railroad.

We learn that the committee of Directors of this road have agreed to report substantially the plan contained in the last issue of the JOURNAL. There are to be some modifications, however. The mortgage debt of the Company amounts to \$17,958,500. Unsecured debt, and coupons overdue, \$7,825,150. The bills payable are reduced to \$320,000. Overdue interest on Mort. Bonds, \$211,000. Due on the 1st of September and 1st of March, on 1st and 2nd mortgages, \$245,000. These three last sums it is proposed to pay in full. The coupons due on the 3d mortgage, in September, it is proposed to extend twelve months, and to convert into stock two coupons next falling on each of the 4th and 5th mortgages.

It is proposed to make the stock \$8,827,214, made up as follows:

\$7,825,150 Unsecured Bonds at.....	\$6,260,120
11,000,000 Stock at.....	2,200,000
347,094 Coupons, as above.....	347,094
	\$8,827,214

An assessment of 10 per cent. on this amount will produce \$882,721, which will meet all the immediate liabilities of the company, as it is proposed to be organized. We defer comment till we get the report of the committee.

The Uncertainty in the Value of Railroad Property.

Every person interested in railway property in this country must have felt, by this time, the utter impossibility of placing any reliance upon its *permanent* value. If a road in which he holds securities or shares commences its operations favorably, and pays large dividends, he, of course, is so far grateful. But are these to continue? This depends upon causes or influences which he cannot control, and often much less detect. While everything is so fair on the surface, he does not know whether he is at the mercy of ignorance or selfishness, the two great rocks upon which our roads make shipwreck. Those managing them take good care often, either through ignorance or selfishness, to give no data by which he can tell what the road has actually earned, what is its present condition, or the sums likely to be called for in the future for construction or repairs. He may, as in the case of the Chicago and Rock Island, receive a dividend of *seventeen* per cent., which, at the time is taken, as evidence of the wonderfully prosperous condition of the company, but which may prove to be the last he will get for years. The excessive dividend turned to be a stock jobbing affair, made at the very time that the road was needing an immense expenditure, which have

ever since absorbed the earnings, and may continue to a long time to come. No person can tell when he is safe. In nearly all of our roads a construction account has been kept open, serving a double purpose; a pretext upon which to raise money by sales of stock or by new loans; or as an account to which to place uncomfortable items which would not look well in print, and which would tend to swell too largely the operating expenses. All goes on well so long as the money, whereby to meet this account, can be raised. When the resources fail, the dividends stop with it. Or if these are continued for a time, it is at the expense of the road, which is allowed to run down to a degree that will allow repairs to be postponed no longer. Thenceforward all that can be raked and scraped together, for years, has to go to restore the road and equipment to a passable condition.

Another great reason for distrust, is the constant and enormous fluctuation in the accounts of the various items that make up the current expenditures of our roads. In manufacturing, for example, unless the manufacturer can keep his expenditures pretty nearly uniform, one year with another, he will certainly fail, as he cannot expect corresponding fluctuations in the price of his goods. The charges of railroad companies vary but little. If their expenditures vary 2 or 300 per cent. in amount, it is plain that no estimate can be formed as to the amount of *net* earnings. For example—the Michigan Central Railroad for 1856 used wood to the value of \$273,000; the year following, the fuel consumed for same mileage, (at the cost per mile for the previous year,) would have cost only \$120,000. Similar fluctuations, though perhaps not so excessive, are to be found in other items. The case of the New York Central Railroad is almost equally pertinent. Three years ago, it cost the company 21 cents per mile for fuel. It now costs 8. The reduction is a most favorable feature to be sure; but is it to continue, or will the company soon return to the figures of 1856? The saving effected fails to inspire confidence, because it is feared that it will turn out that it was apparent rather than real. If real, will it become a *habit* on the part of those who could allow such a great waste to be committed? Is there not something radically wrong in the business qualities of men who are profuse and negligent till acted upon by the pressure of necessity, and will not their old habits return to them so soon as this pressure is removed?

We have commenced the publication of *analysis* of the operations of railroad companies, covering a period of five years. In this period there have been two great extremes of inflation and depression. A picture of the operations of our railroads during it will, of course, show two equally great extremes of wastefulness and its opposite. We have many well-managed roads. We cite two such examples this week. These examples cannot fail to react upon others. Our railroads have now been in operation a sufficient length of time to have a history. We now propose, week by week, to place this history before the public.

Traffic of Railroads.

There seems to be a general improvement in the traffic of railroads throughout the country. We think our roads have seen their darkest day as far as their business is concerned.

Analysis of Railroad Reports--Cleveland, Columbus and Cincinnati Railroad.

We give below an analysis of the operations of this company for a period of five years ending Dec. 31, 1858.

The result is, on the whole, an uncommonly favorable one. The cost of the road has been kept within moderate figures, being \$33,841 per mile. The construction account has increased only \$226,408 in the five years. This increase has been met out of the earnings; the liabilities of the company to the stockholders and creditors being \$27,678 less than at the close of the fiscal year in 1854. The following statement will show the cost of the road and the liabilities of the company for the past five years:

	Cost of Road & Equipment.	Liabilities to Stockholders & Creditors.
1854	\$4,546,113	\$4,775,579
1855	4,613,722	4,619,438
1856	4,731,626	4,844,709
1857	4,752,319	4,836,626
1858	4,772,521	4,748,100

The dividends of the company have averaged 10 per cent. for the five years. The available surplus on hand at the close of the year was \$313,628.

This is one of the few of our Western railroads that has neither allowed its construction account, nor its liabilities, to increase for a period of five years. At the same time, both the road-bed and machinery have been well maintained. The company have uniformly pursued a prudent and conservative course, and hence the satisfactory result that has been obtained. It has been enabled to continue large dividends where nearly every other Western railroad was compelled to forego them. If it did not have so brilliant a commencement as some, it has held out far better.

The cost of maintaining the several departments of service has been comparatively low. The total cost of operating the road has been 88.93 cents per mile. To this, perhaps, should be added about \$200,000 for extraordinary expenditures, that should have been embraced in the current expenses. This small sum, however, would not influence the general result.

The cost of maintaining and operating the Locomotive Department, has equaled 25.30 cents per mile, against 40.58 on the Galena and Chicago; 32.79 on the Michigan Central; 33.49 on the New York Central; and 20.04 on the Terre Haute and Richmond. We presume no good reason exists why this department on the C. C. & C. road cannot be as cheaply maintained as upon the Terre Haute and Richmond.

We have estimated the wages of enginemen and firemen at five cents per mile. The company in its account does not distinguish the amount paid to them, from the gross sum paid for operating expenses. Our estimate is probably very nearly correct.

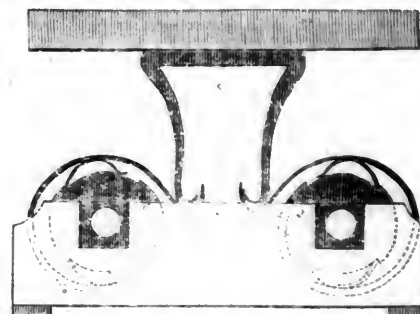
The result in the present case being so satisfactory, something may be excused to the manner in which it is stated. The reports, both in matter and form, are entirely unworthy so respectable a company. Regular balance sheets should be given from the Ledger, showing the general condition of the company, and also of the current operations of the road from year to year, so that one can see at a glance all the changes in its financial condition, and the disposition made of the net earnings. The company owe it a duty to the public to elaborate its affairs, so that other roads may see how success has been obtained on this.

Year.	Length of road.	Cost.	Gross earnings.	Current expenses.	Net earnings.	Miles traveled by all the trains.	Cost of locomotive repairs.	Do. per mile run, in cents.	Cost of fuel.	Do. per mile run, in cents.	Cost of oil and waste.	Do. per mile run, in cents.	Wages of enginemen and firemen.	Do. per mile run, in cents.	Cost of maintaining and operating the locomotive department.	Total cost per mile for do.	Ratio to the entire cost of operating the road.	Cost of repairs of track.	Do. per mile of road.	Do. per mile run, in cents.	Proportion of same to the total cost of operating the road.
1854.....	141	\$4,546,113	\$1,293,562	\$651,453	\$642,109	712,478	\$64,195	9.00	\$54,878	7.71	\$22,448	3.15	\$55,623	5	\$177,144	24.85	26	\$177,477	\$1,258	24.91	27
1855.....	141	4,613,720	1,290,295	658,239	732,056	603,088	70,740	11.72	57,629	9.56	15,064	2.50	30,154	5	177,687	26.77	32	77,204	647	11.14	14
1856.....	141	4,731,626	1,326,754	628,949	700,804	744,856	69,680	9.36	68,578	9.21	13,272	1.78	37,242	5	188,782	25.83	30	103,190	678	10.43	16
1857.....	141	4,752,319	1,149,741	635,002	514,740	748,767	65,381	9.72	66,166	9.74	13,296	1.96	33,937	5	179,780	26.41	28	140,809	984	20.45	22
1858.....	141	4,752,521	1,118,639	538,480	576,159	647,886	48,421	6.48	44,996	6.94	16,146	1.56	32,891	5	183,717	19.97	25	126,853	900	19.58	23½
		\$6,106,991	\$3,013,123	\$1,013,123	\$3,094,868	3,387,015	\$319,427	9.46	\$292,247	8.65	\$4,226	2.19	\$139,347	5	\$867,016	25.30	28½	\$616,013	\$873	18.18	20½

Statement showing some of the leading items of the cost of operating the Cleveland, Columbus and Cincinnati Railroad, for a period of five years ending in 1858.

A New Spring.

We give below a cut of a tracing of a new spring, invented by H. Gardner, Esq., Civil Engineer, which it is proposed to apply to all purposes where springs are used. It is claimed that it combines the right degree of sensitiveness and rigidity. The form of the spring will be seen at once by a glance at the cut. It occupies a very small space, while, at the same time, it has a very long movement; the degree of elasticity being controlled, in part, by the small elliptical springs resting against the cylinder or hub. A number of these springs are now being manufactured for our city cars, as well as for railroad cars and carriages. Their real merit of course is to be tested by their use, of which trials are soon to be made.

**The Great Eastern.**

This great ship is now completed, and is to make her first trip to Portland, Maine, leaving London early in September. She is the great nautical wonder of the world.

Analysis of Railroad Reports--Terre Haute and Richmond Railroad.

Below we give an analysis of the reports of the Terre Haute and Richmond railroad for five years ending November 30, 1858.

The result is more than commonly favorable. The net earnings for the period given have been 57½ per cent. of the gross earnings. The expenses include all extraordinary expenditures since 1856, as the construction account has not been increased in the meantime. The extraordinary expenditures for 1857 amounted to \$65,108, the greater portion of which went to the renewal of bridges and culverts, which accounts for the increase in this department over 1856. The extraordinary expenditures for 1858, amounted to \$15,697, and are charged to the earnings. As the road and running stock are well maintained, the figures given may be relied on as expressing, correctly, the operations of the company from year to year.

The cost of maintaining and operating the locomotive department has been almost exactly 20 cents per mile run. The most satisfactory feature in this department is the uniformity of expenses for the various items that make up the aggregate from year to year. This fact shows that it has been looked after and conducted with an uniform degree of ability and faithfulness. There has been no such dancing from one extreme to another equal to 2 or 300 per cent., sometimes, that we have seen on the Michigan, and New York Central. The uniform average is about as low as any of our companies have been able to reach in their most extraordinary efforts at economy, and does not equal one-half that of the Galena and Chicago railroad for a similar period.

The dividends paid during the five years have equalled 15 per cent. per annum.

Years.	Length of road.	Cost of road.	Earnings.	Current Expenses.	Net earnings.	Miles run by all the trains.	Cost of locomotive repairs.	Do. per mile run, in cents.	Cost of fuel used.	Do. per mile run, in cents.	Cost of oil and waste.	Do. per mile run, in cents.	Wages of enginemen and firemen.	Do. per mile run, in cents.	Cost of locomotive department per mile run, in cents.	Cost of repairs of track.	Do. per mile of road.	Do. per mile run, in cents.	Station expenses.	Do. per mile run, in cents.	Train service.	Cost per mile run, in cents.	Per centage of expenses to gross receipts.
1854.....	73	\$1,465,321	\$299,692	\$84,492	\$155,500	116,473	\$6,169	5.29	\$6,428	5.52	\$2,434	2.08	\$7,008	6.03	19.42	\$18,217	\$250	15.64	\$8,522	7.31	\$7,608	6.53	35
1855.....	73	1,502,166	287,512	103,833	183,619	161,113	9,213	5.73	6,620	5.92	2,434	1.51	9,522	6.59	16.41	19,045	280	11.83	9,833	6.10	9,522	5.59	36
1856.....	73	1,611,450	531,335	159,438	371,456	186,087	9,192	4.93	9,569	5.12	2,647	1.42	12,486	6.11	18.18	52,262	730	28.08	12,721	6.84	12,486	6.71	80
1857.....	73	1,611,450	451,271	275,192	206,079	256,717	18,865	7.26	20,065	7.76	3,357	1.20	17,089	6.68	22.80	100,151	1,373	38.56	18,102	6.89	16,910	6.51	57
1858.....	73	1,611,450	350,274	193,825	186,449	253,742	16,419	6.43	19,110	7.50	1,974	0.77	16,150	6.33	20.08	60,072	823	23.57	15,044	5.89	15,259	5.99	51
		\$7,501,837	\$1,920,284	\$817,240	\$1,103,148	978,132	\$59,888	6.12	\$60,762	6.21	\$12,846	1.31	\$62,565	6.40	20.07	\$249,747	\$648	26.53	\$61,222	6.52	\$61,785	6.31	424

Statement showing the cost of maintenance of several departments on the Terre Haute and Richmond Railroad for five years ending November 30, 1858.

Cincinnati Stock Sales.

By KIRK & O'NEVER.

For the week ending August 22, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	68	82
Covington and Lexington, 2d Mortgage..	75	85
Cinc. Ham. and Dayton, 2d Mortgage ..	75	85
Indianap. & Cincinnati, do.	75	82½
STOCKS.		
Cincinnati, Hamilton & Dayton	87	
Columbus and Xenia	82	
Indianapolis & Cincinnati	50	
Little Miami	93	

Journal of Railroad Law.

CARRIERS OF PASSENGERS. THEIR LIABILITY FOR ACCIDENTS.

The case of *Bowen vs. The New York Central Railroad Company*, lately decided in the New York Court of Appeals, determined some important principles of law relative to the liability of common carriers of passengers for accidents. The action in that case was brought to recover for injuries sustained by plaintiff, a passenger, over defendants railroad, through the car in which he was riding being thrown off the track and down an embankment.

On the trial, the plaintiff, under the charge of the judge, recovered a verdict. The defendants, however, excepted to the charge, and took an appeal upon their exception. The facts of the case are fully stated in the opinion.

JOHNSON, C. J.—The case disclosed by the bill of exception is, that the plaintiff, a passenger on the defendants railroad, was injured under these circumstances: As the train was passing Bergen station, the engine struck a cow which had strayed upon the track, killing the cow, and dragging her body about one hundred feet, where it was left by the side of the track. At that point the rear truck of the rear car, in which the plaintiff was riding, was thrown off the track, and the car, after running on in this condition some thirty rods, became detached from the train, and was turned over and thrown down a descent of five or six feet, and badly broken. There was nothing to prevent cattle passing from the highway to the place where the engine came in contact with the cow. The Judge at the trial charged as follows: "The law presumes, in this case, that the overturning of the car, and the consequent injury to the plaintiff, resulted from the defendants negligence; that this presumption can only be rebutted by evidence on the part of the carrier that the accident occurred from circumstances against which human prudence and foresight could not guard." The defendants excepted. The exception assumes that the carrier is rightfully charged with the burden of exculpating himself from presumable negligence, and brings in question only the rule of care and diligence, which the charge prescribes as the test of his liability. The rule thus stated exempts the carrier from responsibility for those accidents only which occur from circumstances against which human prudence and foresight could not guard, and holds him bound to employ the utmost prudence and foresight in avoiding and guarding against accidents. It is contended on the part of the defence that the rule laid down at the trial, imposes upon the carrier of passengers the obligations which attach to the carrier of goods, and makes him, practically, an absolute insurer of the safety of passengers. The criticism upon the rule is founded upon what I consider a misinterpretation of the language of the Judge. He must not

be understood to say that, if the jury, looking back at the circumstances of an accident, can see that some course of conduct, or precaution, would have prevented its occurrence, the carrier is liable for having failed to pursue that course, or omitted that precaution. In this sense, and in this sense only, is the position of the defendants counsel accurate, that human prudence and foresight can guard against every danger not resulting from the act of God, or public enemies.

The judge was speaking of prudence and foresight to be exercised before the accident, and without knowledge that it was about to occur. Nor can his language be deemed inconsistent with the idea that railroad cars are to be run, and run at speed, or to require that railroad companies, for the mere purpose of securing safety to passengers, shall not do all that they are intended to do when they are established. But assuming this, he said, in substance, that the utmost prudence and foresight were to be manifested in guarding against accident.

In this he was sustained by the language of the elementary books and the cases. Thus, in *Story on Bailments*, it is said, passenger carriers bind themselves to carry safely those whom they take into their coaches, as far as human care and foresight will go, that is for the utmost care and diligence of very cautious persons. (§601.) And again, that after the onus has been cast upon them, they are bound to show that there has been no negligence whatsoever; and that the damage or injury has been occasioned by inevitable casualty or by some cause which human care and foresight could not prevent. (*Id.*, §601, a; 2 Greenl. Ev., §222; *Angel on Carriers*, §569; *Christie vs. Griggs*, 2 Camp., 79; *Laing vs. Colder*, 8 Barr, 479; *Ingalls vs. Bills*, 9 Metc., 15. *Hegeman vs. Western Railroad*, 3 Kern, 24.) In all these books and cases, and others might be added were it needful, the same expressions, in substance have been used as were employed in this case to mark the line of the obligation of a passenger carrier. "As far as human care and foresight will go," has become almost a familiar form of expression in stating the rule of duty. If any fear was entertained that the jury might not correctly apprehend the force of the rule, and understand the judge to speak, not of prudence and foresight to be exercised before the event, but after it, and as affirming that if they could then see that particular precautions would have prevented the particular accident, though its likelihood could not be foreseen, and did not, therefore, need to be guarded against, some request should have been made to the judge which would have called his attention to the misapprehension which was thought possible. Under those circumstances he would, we must assume, have added such explanations or limitations as might have been legally required. Of course, carriers of passengers are not insurers of the safety of their passengers; but measuring the duty of care, in degree, by the dangers which attend railroad carriage, it is plain that the utmost foresight as to possible dangers and the utmost prudence in guarding against them, are the only limits which a decent regard to the safety of men, and a conformity to the established principles of the law, allow to be fixed to the responsibility of those who conduct and manage railroads.

Ship Canal Across the Isthmus of Darien.

A party of American Engineers, under the charge of the Navy Department, are about to proceed to the Isthmus of Darien with instructions to search for a practical route for a ship-canal across the Isthmus of Darien, are instructed to explore the coast of the Caribbean sea, with a view to test the statements of Gisborne and Cullen (Englishmen) that there is such a depression of the Eastern Cordillera as to admit of the easy construction of a ship-canal—the country west thereof to the Pacific being without any considerable elevation. Should the party not be able to find the gap of depression referred to, by reason of the overlapping of mountains or other causes, they will, doubtless, be instructed to proceed to the Pacific side of the continent and seek a practical route for a canal along the line traversed by Surgeon Caldwell, U. S. N., in 1857. This gentleman, inspired by the faith of old residents in respect to the existence of a region nearly level stretching across the continent above the headwaters of the Chimcanagua, undertook the labor of a practical test. He proceeded with a small party from the excellent bay of San Miguel, several miles in a north-easterly direction, up the navigable river Savana, and thence east, across the country to a point regarded as not far in a direct line from the Caribbean sea. Here, on account of dearth of provisions, Dr. Caldwell was forced to close his tour and return to the Pacific coast. His conclusions, as reported to the Navy Department through his commanding officer, Com. Mervine, are as follows:

1. That the summit level of a route from Principe northerly to the Atlantic is within eight miles of the Savana river, and being but 160 feet above the ocean level, will not prove insuperable to engineering skill in constructing a ship canal.
2. That there is a low tract of land extending from the summit level east to the Atlantic.
3. That a gap in the Eastern Cordillera exists near the north-western limits of the Caledonia Bay, on the Caribbean sea. From tree tops near the summit level referred to, such gap in the mountain was described and through it the great sea beyond. This was afterwards lost to the view of the explorers by the overlapping of mountain ranges.

The new exploring party are to have every desirable facility for prosecuting their survey, and among other things a balloon, from which observations of the country may be taken by experienced aeronauts, through the use of what is called an "instant type." This gives the most minute objects, which are brought out by use of the microscope. Ravines, gaps or depressions thus discovered, may, it is held, be easily found and explored, so as to demonstrate reliably whether or not there is such a route as has been so often asserted by both British and American officers.

Buffalo Convention.

The convention of Railroad Companies, which met at Buffalo, did not accomplish much. The convention, however, separated with the best of feelings. The Western Railroads met at Cleveland, on Thursday, to act upon the proposition of the Eastern lines. We believe the day of strifes and competition to be pretty nearly over.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
BOSTON, June, 1851. 29 Central Wharf.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,

10 Wall st., near Broadway, N. Y.

500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

New York, July 9, 1859.

**FULTON FOUNDRY AND MACHINE WORKS,
P. F. GEISSE,
WELLSVILLE, OHIO.**

STEAM ENGINES of every variety built to order. STEAM BOATS and STEAM FERRY BOATS contracted for in whole.

PUTNAM'S PATENT Turn-Tables (a very superior and simple table) of all sizes built to order at very reasonable rates.

Car Wheels of a quality superior to any ever yet made. I am now manufacturing from the best material, and annealed by a process patented by me in February, 1859, which renders them almost equal to wrought iron. Car Wheels, Steam Engines and all kinds of machinery furnished at as low, if not lower rates than can be found elsewhere.

Rights to manufacture Car Wheels under P. F. GEISSE'S annealing process may be obtained from the Patentee at Wellsville, O., or from T. Culbertson, No. 8 Fourth Avenue, N. Y.

Testimonials from the Superintendents and Master Mechanics of the Cleveland and Pittsburgh, Little Miami, and Stouhenville and Indiana Railroads, as to the superior quality and durability of these Wheels will be furnished on application.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH PORT.

**C. CONGREVE & SON,
13 Cliff st., N. Y.**

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

**VOSE, LIVINGSTON & CO.,
9 South William st.**

New York, Aug. 1, 1858.

RAILROAD IRON.

**THE RENSSELAER IRON COMPANY,
TROY, N. Y.,**

OFFER RAILS of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
**JOHN A. GRISWOLD, Agent,
TROY, N. Y.**

New York Agency:

**RUSSING, CROCKER & DODGE,
32 Cliff St.**

**MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.**

**IRON AND STEEL
IN ALL THEIR VARIETIES.**

ROILER PLATE. CAR AXLES.
BOILER RIVETS. RAILROAD IRON.
CUT NAILS AND SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.

LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.

CAR SPRING STEEL.

Far superior to the ordinary kind.

FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

**SALTUS & CO.,
45 Cliff st., New York.**

A GENTLEMAN who has upwards of 20 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.

Address S. box 962 Baltimore Post Office. Sm22

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

**JAMES TINKER,
54 Exchange Place,
NEW YORK.**

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

**LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.**

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. Y.

Address **J. H. SCRANTON, President,
Scranton, Pa.**
or **DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.**

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

**MEAD & BELL,
17 William st., N. Y.**

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or exship at ports in the United States.

**M. K. JESUP & COMPANY,
44 Exchange Place.**

New York, 1st June, 1859.

RAILROAD IRON.

**WOOD, MORRELL & CO.,
HAVING** leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

**PHILADELPHIA, NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.**

**THE
RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,**

MANUFACTURERS EXCLUSIVELY OF

RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

**ALBERT G. SMITH,
President of the Incorporation**

February, 1858.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms. Address

**N. WILKINSON, Secy,
WHEELING, VA.**

JOS. R. ANDERSON,
JOHN F. TANNER,
R. ARCHER,
R. S. ARCHER.

TREDEGAR IRON WORKS, RICHMOND, VA.

WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL METAL—

BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES OR SEPARATE.
CANNON AND PROJECTILES, ALL KINDS,
IRON AND BRASS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our **SPIKE AND BOLT FACTORY**, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

The Machinery Department of our Establishment is under the supervision of **THATCHER PERKINS, Esq.**, for 13 years the Master of Machinery on the Baltimore and Ohio Railroad, and late of the concern of SMITH & PERKINS, Locomotive Builders, Alexandria, Va.

J. R. ANDERSON & CO.

SANDERSON, BROTHERS & CO., MANUFACTURERS OF THE CELEBRATED CAST STEEL, FOR MAKING SUPERIOR TOOLS, SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,
Armitage's Genuine Mousehole Anvils, etc.
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TYLER, DAVIDSON & CO., Cincinnati, O.
HISS & COLE, Baltimore, Md.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the **FARNLEY IRON** is precisely the same as that of **LOW MOOR** and **BOWLING**, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

BEERS' 'CAST IRON ENDLESS RAIL,' FOR CITY RAILROAD.

Patented August 24, 1858, and May 10, 1859.



THIS Road is constructed exclusively of **Iron**, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

ALSO
BEERS' 'ELASTIC IRON RAILWAY,' FOR LOCOMOTIVE USE.

This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from undulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$9,000 to \$11,000; out of which \$3,000 will be saved on the first cost of equipment, and character of grading. The undersigned is prepared to construct, either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

S. A. BEERS, C. E., Brooklyn, N. Y.

A specimen of these Roads may be examined at 55 Liberty st., NEW YORK.

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WELSH or **Staffordshire** make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER,

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BALTIMORE.
And 17 Nassau st., New York.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.

New York, June, 1859. **M. K. JESUP & COMPY,**
44 Exchange Place,

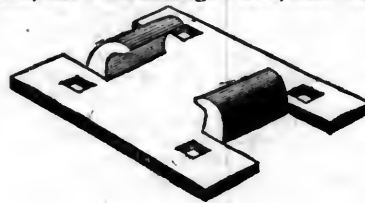
NEW YORK RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "New York Wrought Iron Railroad Chair Company," and also the entire machinery for manufacturing their improved **Wrought Iron Railroad Chair**, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best **Wrought Iron Chair** now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned WITH the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

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New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R. R. Co., etc., etc.

Messrs. **M. K. JESUP & CO., 44 Exchange Place, NEW YORK**, are the only parties authorized to act as our Agents.

Mr. **JACOB ROWE**, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 5 inches bore, with Screw and Socket Connections, T's, L's, Stops, Valves, Flanges, etc., etc.

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**MORRIS, TASKER & CO.,
PASCAL IRON WORKS.**

Established 1821.

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RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. **GUEST & Co.**, the proprietors of the **Dowlais Iron Works**, near Cardiff, South Wales, are duly authorized to contract for the sale of their **G. L. Railroad Iron**, and **Common Bars**, on most advantageous terms.

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THE ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS, of every variety of pattern.

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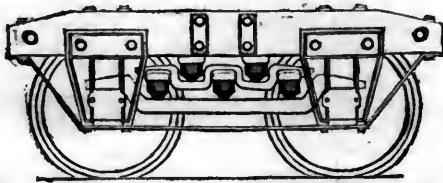
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6m35

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CONICAL VOLUTE STEEL CAR SPRING,
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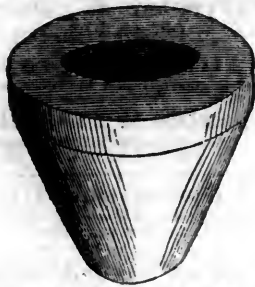
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MANUFACTURERS OF
LOCOMOTIVE, CAR AND TANK
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Will be happy to furnish a SET OF SPRINGS to such companies as may wish to try their Durability and Elasticity, by writing us the Length, Width, Curve over all, and the weight which they are to bear.

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MANUFACTURERS of the PATENT ELASTIC CONE SPRINGS for Railway Cars. This Spring is new, and simple in its construction, and possesses superior advantages. It is manufactured from the best quality of India Rubber prepared under the JOSEPH Patent, and is less expensive, and at the same time affords more ease, than other shaped springs. It can be fitted to all descriptions of cars without alteration or expense.

Patent Reversible Baggage Check.



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BAGGAGE CHECKS
of every description at the shortest
notice. Also, Oil, Wood and Coal
TICKETS OF BRASS.

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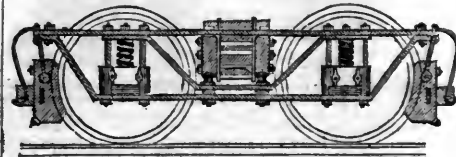


MANUFACTURED

BY THE

PATENTEE,
CARLOS FRENCH,
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THESE SPRINGS are now in use on many of the leading Railroads East, South and West.
Samples can be examined and Price Lists obtained at
No. 5 Gold st., NEW YORK.



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(SUCCESSORS TO DWIGHTS, FRENCH & CO.)
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ARE prepared to fill, at short notice, of the best materials and workmanship, orders for Wrought and Cast Iron Work, fitted ready for use, for the building or repairs of Passenger and Freight Cars, complete or in part.
A sample wrought iron truck can be seen at our office.
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We also manufacture—
BEST FAGGOTTED CAR AXLES.
SALISBURY IRON CAR WHEELS.
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RAILROAD JACK SCREWS, ETC.

RAYMOND FRENCH, President, Seymour, Conn.
WM. H. MARSHALL, Treasurer, No. 5 Gold st., N.Y.

**SAFEGUARD
INSURANCE COMPANY.**
OFFICE, 12 Wall st., NEW YORK;
409 Walnut st., PHILADELPHIA.
CAPITAL, \$200,000.

THE SAFEGUARD INSURANCE COMPANY having retired that portion of the Capital Stock which was based upon Securities out of this State are now prepared to continue the Insurance business, and will insure against loss or damage by Fire, on Houses, Merchandise, Leases and the risks of Inland Navigation, on as favorable terms as other Companies.

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Regular sales at public auction at the MERCHANTS' EXCHANGE.

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BUYERS and SELLERS MINING SHARES, MINES and MINERAL LANDS on commission, will examine Mines and Mineral Lands in any part of the United States, and report on their value, etc., etc.

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Particular attention given to Lake Superior business.

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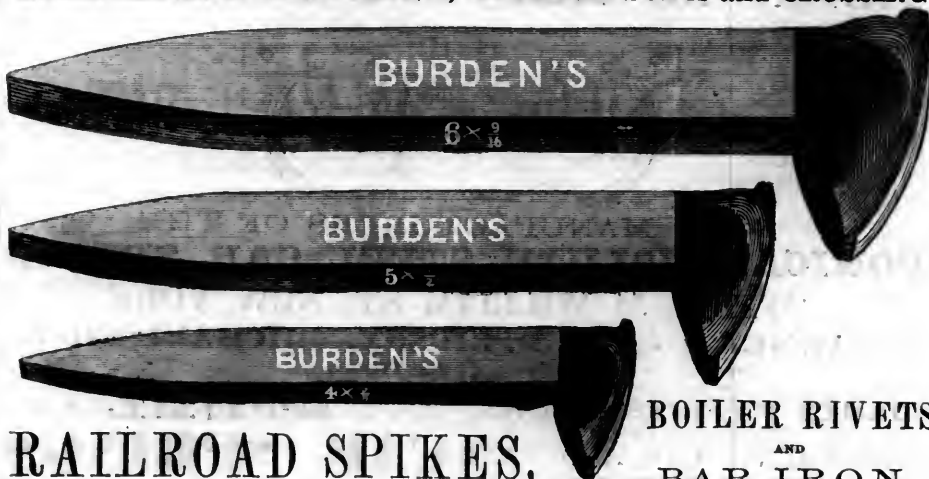
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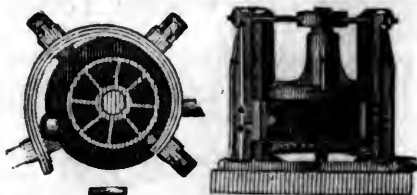
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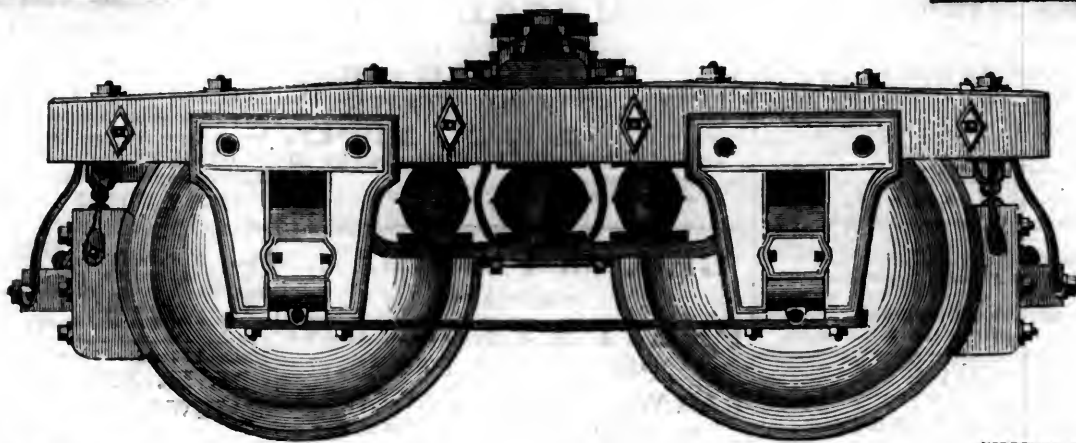
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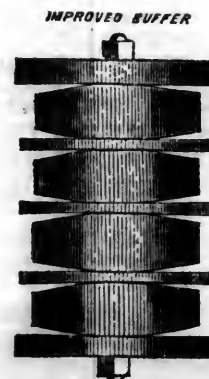
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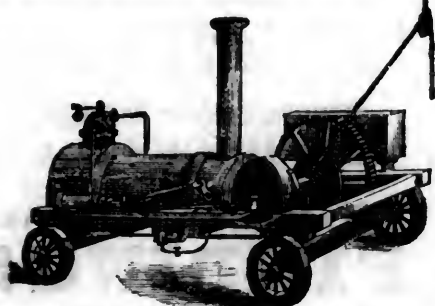
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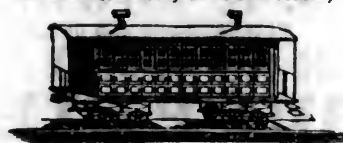
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 36.]

SATURDAY, SEPTEMBER 3, 1859.

[WHOLE No. 1,220, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, September 3, 1859.

New York and Erie Railroad.

We give below the report of the committee of directors of this road, appointed to present a plan for the re-organization of the company and the action on the same by the directors.

To the Bond and Stockholders of the New York & Erie Railroad Company:—

The embarrassments of the company and the action of its creditors having resulted in the appointment of a receiver, the directors have lost no time in endeavoring to mature a plan by which the interests of all would be promoted. The most practicable means of harmonizing the various interests involved is contained in the following report of their committee. The committee appointed to devise a plan to extricate the New York and Erie railroad from its present difficulties, report that the capital stock and indebtedness of the company are represented as follows:—

First mortgage bonds	\$3,000,000
Second do.	4,000,000
Third do.	6,000,000
Fourth do.	3,705,000
Fifth do.	1,253,500

Total mortgage debt	\$17,958,500
Unsecured bonds, and interest due on them	7,825,150
Capital stock	11,000,000
Total	\$36,883,650

Bills payable, for the payment of which \$1,500,000 fourth mortgage bonds are pledged, \$320,000

[The payment of the amount due to employees for past services, and for materials and supplies, is provided for in the order of the court appointing a receiver, for which all the earnings up to 1st of December will be required.]

Coupons due on mortgage bonds	211,000
Coupons to fall due:—	
September 1, on second mortgage bonds, Do. third do.	140,000
October 1, on fourth do.	210,000
November 1, on first do.	129,675
December 1, on fifth do.	105,000
	43,872

Total

To pay this sum of \$1,159,547, and to reduce the bonded debt and capital stock of the company, the committee propose the following plan:

Convert the unsecured bonds and interest \$7,825,150 at 80 per cent. into new stock at par	\$6,260,120
Exchange old stock, \$11,000,000 at 20 per cent. into new stock at par	2,200,000
	\$8,460,120

Assess this \$8,460,120 of new stock 10 per cent. and give new stock at par

Convert two coupons from each of fourth and fifth mortgage bonds, due half in Oct. and Dec., and half in April and June next, into stock at par, 347,095

	1,193,107
New stock	\$9,653,227
Bonded debt	17,958,500

Thus reducing the entire debt and capital stock of the company to ... \$27,611,727—with the exception of \$210,000 due on 1st Sept. for third mortgage interest, for the payment of which a delay of twelve months is asked.

This plan, of course, contemplates that the second mortgage bonds will be extended either by exchange from the remaining bonds of the third series held for that purpose, or by a new sheet of coupons.

Why should this plan or any similar one be adopted? will be the question asked by those interested.

To the holders of the bonds secured by mortgage we may urge the equity of extending to the unsecured creditors and stockholders the benefit of the property pledged to them beyond the amount necessary to secure their debts. They are

asked to part with no security; their overdue interest is provided for, and all the guarantee of prompt payment in the future that an improved organization on a reduced capital can give will be secured to them.

Whereas, in all probability, if an attempt be made to cut off by foreclosure entirely the unsecured debt and stock such an immense interest will oppose every obstacle that legal ingenuity can invent to thwart the foreclosure, and for years to come this property, the value of which depends so much upon skilful management, will be left to the management of the courts and lawyers; and the revenue, if any, will be kept under the control of the courts, until the legal rights of all the parties are determined. Five years would, in all probability, be as short a time as so large and intricate a subject could make the circumlocution of our courts, during all of which time the receiver must operate the road under the orders of some thirty or forty different judges. That much revenue can be expected from a road thus managed—no matter how good the receiver—is not to be even hoped for.

To the unsecured creditors and stockholders the inducement is still greater.

Their condition at the end of the protracted litigation above alluded to would probably be a total loss of their interest, with the addition of large expenses, while by paying the small assessment, for which they receive new stock, they at once come into possession of the road, and control its management under the new organization.

Taking the gross receipts of the road for the last twelve months, (\$4,500,000,) and it is hard to conceive of any casualty that would ever again reduce them so low; the net result shows more than sufficient to pay 7 per cent. per annum on over \$20,000,000, besides expending during that period \$760,000 on the road; and the statement for the last six months shows even a more favorable result.

By this compromise, if promptly carried out, the stock would, in the opinion of the committee, soon be a dividend paying investment, and the bonds of the company at once take a high position in the market among the favorite railroad securities of the country.

Respectfully submitted,

SAMUEL MARSH,
DANIEL DREW,
E. J. BROWN,
HERMANN GELPCKE,
E. K. ALBERTUS.

New York, August 27, 1859.

In submitting the foregoing plan to the creditors and stockholders, the Board of Directors are aware of the difficulty of bringing so many interests, represented by so many parties, to concerted action. The peril in which many of the interests

are placed by the pending legal proceedings calls for prompt action. Those who consider their bonds secured by a pledge of the franchises of the company, if left to the conclusion that they must rely upon the prosecution of their legal rights in the courts, will, of course, suffer no delay in thus enforcing their claims; whereas, by the plan proposed, they will see that their interest will be sooner paid, and their rights more certainly protected, than by the law's delay and uncertainty. But this must be evidenced by immediate action, and it is to induce such action, and to place before those interested a basis of amicable and equitable adjustment that the Directors make the foregoing suggestions, and that they now call on the creditors and stockholders to take prompt measures to protect their several interests, as far as they can be protected by the property and franchises of the company.

In furtherance of this object the Directors have prepared this recommendation in the form of a circular, and directed their Secretary to transmit a copy to the bond and stockholders so far as known, and to furnish copies to all parties calling therefor, and they respectfully solicit that each party interested in the bonds, or who approves of the plan here recommended, should signify such approval to the Secretary, No. 45 Wall street, with as little delay as possible.

By order of the Board.

We take it that some plan similar to the above will be adopted, if any can be; though, with the concern in the hands of the law, it is hard to tell what will be done, or how soon the road can be brought to a sale. It is upon effecting such sale, under the 4th or 5th mortgage, that all plans must be predicated. If a sale be effected, the only option left to the unsecured parties will be to come in and get something, or stay out and get nothing. Should any one decline to convert his bonds or stock, and pay such assessment as may be laid upon it, his option will probably be thrown open to the public, upon some terms not yet indicated.

The unsecured bondholders may object to the proposed reduction of 20 per cent. on the conversion of their bonds into stock. Were it not for sharing the new stock in common with the old stockholders, thereby diluting their bonds still farther, they will be the gainers by having their interests represented by stock which will give them the control, management and income of the road, subject only to the rights of the mortgage bondholders. They are now subject to them without any control or voice in the management of its affairs. It is probably for the interest of the unsecured bondholders not to cut off the stockholders entirely, but to let them come in at a nominal rate, to insure their co-operation and good will. These are worth something—how much, we do not pretend to say. We apprehend, however, that the action of the unsecured bondholders will not be influenced so much by the particular manner in which the general plan to be adopted may be modified, as upon the probable future net income of the road. They are in that position, and in that frame of mind, in which they would gladly accept six, or five, and perhaps four per cent. on their investment, could that rate be secured to them. The first question asked will be, "What expectations can we reasonably entertain, provided we accede to the scheme proposed?" What is the answer that can be given to this question?

The first and most important condition to a favorable one, fortunately exists in the very large income which, under the most adverse circumstances, the road has shown itself to be capable of

earning. For the six years past the gross and net incomes have been as follows:

Year.	Gross income.	Current expenses.	Net earnings.
1854	\$5,359,958	\$3,007,516	\$2,352,442
1855	5,488,993	2,861,875	2,627,118
1856	6,348,990	3,201,996	3,146,994
1857	5,742,606	4,054,631	1,687,975
1858	5,151,616	*3,000,000	1,279,708
1859	*1,500,000	3,871,908	1,500,000
	\$32,592,163	\$19,997,926	\$12,594,237

* Estimated.

The net earnings for the 6 years have equaled \$2,099,000 annually, being the interest on very nearly 30,000,000 of dollars! With its finances restored, and the road in good order, it certainly ought to do as well for six years to come. The expenses have been almost exactly 60 per cent. of the gross earnings. A similar per centage for six years to come would pay the interest on all the indebtedness, and allow the accumulation of a handsome surplus.

The difficulty is not so much with the road as with its management. It can take care of its indebtedness could the parties be found who could make all that is capable of being made out of it. It is a burning shame that there cannot be found the capacity requisite to render a great work successful, simply by saving what it earns.

English vs. American Rails.

EDITOR RAILROAD JOURNAL.

From the extensive circulation given to the letter written by the superintendent of the Central Georgia railroad respecting the trial of English and American rails, it might be supposed that the question as to the quality of the two makes, had abruptly changed in favor of the American, and that hereafter the English make will become obsolete in this country.

The letter only shows that one lot of American rails are wearing better than a lot of English, while the reverse of this is the case in a score of instances on various roads in this country. The English rails are reported to have cost \$5.00 per ton above current price, it would be interesting to know whether they were purchased from stock in this country or made to the order of the C. G. R. R. Co. as no doubt the American were. The writer offers to put to the test 56 lbs. rails of English make (because he has a sample of that size) against the same size of any American manufacture, before a committee of engineers.

First, by placing a rail upon blocks four feet apart and then putting twelve tons upon it, the deflection not to exceed one-tenth of an inch which the rail must recover when the pressure is taken off.

Second, to place a rail under the same circumstances and subject it to a weight of thirty tons for five minutes.

Third, to allow a weight of six cwt. to fall on the rail at a height of seven feet, three times.

Fourth, to increase the third test to one ton.

Fifth, to place the rails side by side on any road the committee may designate where the engines are of the greatest weight and the traffic known to be of the heaviest description.

That the American mills are turning out some of the best quality of rails there can be no doubt, and that they will ultimately supply every home demand is no less certain; but that time has not yet arrived, and until the American rails have

performed a daily service for twenty years, they will not have reached the practical test and proof that English make are now subject to. R. O.

Foreign Commerce of New York.

In the year 1821, the Foreign Imports of this State were only 23 millions out of 62 millions for the whole country, or nearly three-eighths of the whole. In 1831, this proportion had increased to over fifty per cent.; in 1841, to nearly 60 per cent., and in 1857, to about two-thirds the whole. From the annual report of the Chamber of Commerce of New York, the following summary is taken, showing the Imports and Exports of the State of New York, compared with those of the United States for the separate years 1821, 1831, 1841, 1851, 1857, 1858, with the Imports per capita of the United States:

IMPORTS.			
Year.	United States.	State of N. Y.	Pr. ct.
1821	\$62,585,000	\$23,629,000	37.75
1831	103,191,000	57,077,000	55.31
1841	127,946,000	75,713,000	59.18
1851	216,224,000	141,546,000	65.53
1857	360,890,000	236,493,000	65.53
1858	282,613,000	178,475,000	63.00

EXPORTS.			
Year.	United States.	State of N. Y.	Pr. ct.
1821	\$64,974,000	\$13,160,000	20.25
1831	81,310,000	25,535,000	31.40
1841	121,851,000	33,139,000	27.20
1851	218,388,000	86,007,000	39.38
1857	362,960,000	134,803,000	37.14
1858	324,644,000	108,340,000	33.33

The following table shows the total Exports of the United States and of the State of New York, for each period of ten years, 1821-1830, 1831-1840, 1841-1850; and for the eight years, 1851-1858, with the per centage of the latter compared with the former:

Years.	Exports of the U. S.	Exports of N. Y. to U. S.	Pr. ct. of N. Y. to U. S.
1821-1830, 10 y.	\$765,748,752	\$215,833,356	28.19
1831-1840, 10 y.	1,092,341,903	279,588,191	25.60
1841-1850, 10 y.	1,260,564,583	385,322,935	30.57
1851-1858, 8 y.	2,206,990,455	850,218,771	38.52

The following table shows the total Imports of the United States and of the State of New York, for each period of ten years, 1821-1830, and for eight years, 1851-1858, and the per centage of the latter compared with the former:

Years.	Tot. Imports of the U. S.	Tot. Imports of New York.	Per cent.
1821-1830, 10 y.	\$798,633,427	\$363,379,563	45.50
1831-1840, 10 y.	1,302,676,084	753,921,699	57.87
1841-1850, 10 y.	1,267,788,782	757,571,840	59.71
1851-1858, 8 y.	2,221,323,155	1,437,482,962	64.72

In order to illustrate more fully the important changes in the Foreign Trade of New York, compared with that of the whole Union, we annex the results for each year from 1821 to 1858. These details form a part of the chapter on New York Commerce, in the annual report of the Chamber:

IMPORTS.		
Year.	United States.	State N. York.
1821	\$62,585,724	\$23,629,216
1822	83,241,541	35,445,628
1823	77,579,267	29,421,349
1824	80,549,007	36,113,723
1825	96,340,075	49,639,174
1826	84,974,477	38,115,630
1827	79,484,068	38,719,644
1828	88,509,824	41,927,792
1829	74,492,524	34,743,307
1830	70,876,920	35,624,070
Total	\$798,633,427	\$363,379,563

IMPORTS.

	United States.	State N. York.
1831.....	\$103,191,124	\$57,077,417
1832.....	101,029,266	53,214,402
1833.....	108,118,311	55,918,449
1834.....	126,521,332	73,188,594
1835.....	149,895,742	88,191,305
1836.....	189,980,035	118,253,416
1837.....	140,989,217	79,301,722
1838.....	113,717,402	68,453,206
1839.....	162,092,132	99,882,438
1840.....	107,141,519	60,440,750

Total.....\$1,302,676,034 \$758,921,699

1841.....	\$127,946,177	\$75,713,426
1842.....	100,262,087	57,875,604
1843.....	64,753,799	31,366,540
1844.....	108,435,035	65,079,516
1845.....	117,254,564	70,909,085
1846.....	121,691,797	74,254,283
1847.....	146,545,638	84,167,352
1848.....	154,998,928	91,525,141
1849.....	147,867,439	92,567,369
1850.....	178,138,318	111,123,524

Total.....\$1,267,782,782 \$757,571,840

1851.....	\$216,224,932	\$241,546,538
1852.....	212,945,442	132,329,306
1853.....	267,978,647	178,270,999
1854.....	304,562,381	195,427,933
1855.....	261,468,520	164,776,511
1856.....	314,639,942	210,162,454
1857.....	360,890,141	236,493,485
1858.....	282,613,150	178,475,736

Total.....\$2,221,323,155 \$1,437,485,962

EXPORTS.

	United States.	State N. York.
1821.....	\$64,974,382	\$13,160,918
1822.....	72,160,281	17,100,482
1823.....	74,699,030	19,088,990
1824.....	75,986,657	22,897,134
1825.....	99,535,388	35,259,261
1826.....	77,595,322	21,947,791
1827.....	82,324,827	23,834,137
1828.....	72,264,686	22,777,649
1829.....	72,358,671	20,119,011
1830.....	73,849,508	19,697,983

Total.....\$765,748,752 \$215,833,256

1831.....	\$81,310,883	\$25,535,144
1832.....	87,176,943	26,000,945
1833.....	90,140,433	25,395,117
1834.....	104,336,973	25,512,014
1835.....	121,693,577	30,345,264
1836.....	128,663,040	28,920,638
1837.....	117,419,376	27,338,419
1838.....	108,486,616	23,008,471
1839.....	121,028,416	33,268,099
1840.....	132,085,946	34,264,080

Total.....\$1,092,841,903 \$279,588,191

1841.....	\$121,851,803	\$33,139,833
1842.....	104,691,534	27,576,778
1843.....	84,346,480	16,762,664
1844.....	111,200,046	32,861,540
1845.....	114,646,606	36,175,238
1846.....	113,488,516	36,935,413
1847.....	158,648,622	49,844,363
1848.....	164,036,436	53,351,157
1849.....	145,755,820	45,963,100
1850.....	151,898,720	52,712,789

Total.....\$1,260,564,583 \$385,322,935

1851.....	\$218,388,011	\$86,007,019
1852.....	209,658,366	87,484,456
1853.....	230,976,157	78,206,290
1854.....	278,241,064	122,534,646
1855.....	275,156,846	113,731,238
1856.....	326,964,908	119,111,500
1857.....	362,960,682	134,803,298
1858.....	324,644,421	108,340,924

Total.....\$2,206,990,455 \$850,218,771

Grand Trunk Railway--Portland Division.

The Portland division of the Grand Trunk railway is receiving improvements that will make it one of the most substantial railways in this country. There is now no road operated with greater regularity and safety, or that is more popular with the traveling public.

For two or three years past, the company have been re-building the bridges on the road in a most substantial manner. During the present year two expensive iron bridges have been constructed, one over the Connecticut and the other over Wild river. Another is in progress over the Presumpscot. That over the Connecticut consists of four spans of 80 feet each. The girders are 7 feet high, 2 feet wide, with plates 3-8 inches thick; top plates 7-16, 9-16, 5-8 and 11-16 thick; bottom plates 3-8, 1-2, 9-16 and 5-8 thick, equal to 1 18-20 tons breaking weight for one girder.

The Wild river bridge is on the same plan, but with 6½ inch girders. The plates of these bridges are of Pennsylvania rolled iron, built and put together by the Portland company.

The following is a list of some of the principal bridges on the road, together with their cost, and the material of which they are constructed.

	Material.	Cost.
Presumpscot.....	Iron.	\$60,000
North Yarmouth.....	Iron.	30,000
The bridge across Royal river.....	Iron.	24,000
Danville Junction.....	Iron.	16,000
South Paris.....	Wood.	25,000
Bacon Falls.....	Stone.	12,000
Whitman.....	Wood.	6,000
Walker's Mills.....	Wood.	4,500
Bethel.....	Iron.	16,000
Wild River.....	Iron.	55,000
Dummer.....	Wood.	16,000
Northumberland.....	Iron.	10,000
Connecticut River.....	Iron.	55,000
Nulhegan, one and two.....	Wood.	7,000

Michigan Southern Railroad.

The monthly earnings of this road for the present year compared with those for 1858 have been as follows:—

	1858.	1859.
January.....	\$106,737	\$104,179
February.....	97,312	106,059
March.....	160,612	142,158
April.....	206,505	144,512
May.....	187,799	137,518
June.....	178,927	122,106
July.....	149,603	102,027

\$1,087,495 \$858,151

Loss for the 7 months.....\$229,327

A corresponding loss for the balance of the year will make the total earnings for the year about \$1,600,000, against \$2,019,424 for 1858. The current expenses including the damages for the late accident will, probably, fully equal \$1,200,000, presenting a very uncomfortable prospect for the coming year. There was paid last year to interest and sinking fund, \$775,981. The current expenses last year were \$1,242,152.

The conclusion which these figures force upon a person is that the company is in a perilous position. Nothing but extraordinary skill in its management can enable it to meet the interest on its indebtedness. The present managing directors are a perfect set of old fogies, and if continued in office, will, in our opinion, certainly run the concern ashore. If the bondholders would be certain of their interest, they will do well to keep a sharp look after this road. We fear the stockholders of

either class have but little motive to busy themselves about the road.

Aid Granted by the State of New York for Internal Improvements.

The amount of money expended by the State of New York, for internal improvements, has been as follows:

For the New York Canals.....	\$8,401,403
" " Enlargement of the Erie Canal.....	46,746,021
" " Construc'n of the lateral canals.....	14,719,713

Total for the canals.....\$69,868,137

For the New York and Erie Railroad.....	\$3,000,000
" " Ithaca and Owego Railroad.....	315,200
" " Canajoharie and Catskill R. R.	200,000
" " Hudson and Berkshire Railroad.....	150,000

\$3,665,700

These sums granted to railroads have been either given outright, or have been lost by the failure of the railroad.

In addition the State loaned its credit to the following roads, which is either well secured, or has been repaid.

To the Topawanda Railroad.....	\$100,000
" " Auburn and Syracuse Railroad.....	200,000
" " Long Island Railroad.....	100,000
" " Schenectady and Troy Railroad.....	100,000
" " Auburn and Rochester Railroad.....	200,000

\$700,000

Muscoogee Railroad.

The Columbus Branch of the Southwest (Ga.) Railroad diverges from the main line at Fort Valley, 28 miles below Macon, and runs thence to Butler, in Taylor County, a distance of 15 miles. Thence to Columbus, 50 miles, the line is continued by the Muscoogee Railroad Company. The report of the officers of this company for the fiscal year ending July 31st, 1859, was submitted to the stockholders on the 8th August. From this we learn that the receipts from all sources during the year were:

From Freights.....	\$135,775 00
" Passengers.....	57,273 90
" Mails and dividends.....	9 665 58

\$202,714 48

The expenses for same time were:

Maint'ce of motive power.....	\$20,722 03
" " cars.....	7,473 47
Repairs of road and br'dgs.....	27,414 15
Wood and water.....	5,869 05
Miscellaneous.....	31,219 61

92,198 31

Net earnings.....	\$110,516 17
Less int. on \$249,000 bds.....	\$17,430 00
Less dividends on preferred stock.....	3,377 50
Do. guaranteed stock.....	4,800 00—25,607 50

Balance.....\$84,908 67
To which add balance from last report 41,435 27

\$126,343 94
Loss dividend in Feb. last on general stock.....22,448 00

Surplus profits.....\$103,895 94

From which a dividend of 4 per cent. on 5,612 shares of general stock was declared on the 8th of August last.

The gross receipts of the past exceed those of the previous year by.....\$55,418 01
While the expenses have increased only 8,374 15

Making a net increase of.....\$47,043 86
Included in these expenses are \$13,717 81, for

repairs of engines, cars, road and bridges, caused by the disaster at Randall's bridge in December last. Deducting this amount, from the expenses, will leave the cost of working and keeping up the road \$78,480 50, which is a decrease of \$5,324 66 as compared with the previous year.

The expenses of keeping up the road will be much greater this than the past year, as it will be necessary to lay one and a-half miles of new rail, to complete the repairs at Randall's and Cox's Creeks; also the connection of the Montgomery and West Point Railroad at Columbus, the cost of which is to be borne equally by the two companies. The benefits to be derived from this connection, it is believed, will reimburse the company in two years by an increase of business and the saving in drayage and omnibus fare.

GENERAL STATEMENT.

Capital stock	\$561,200 00
Preferred "	48,250 00
Guaran'd "	60,000 00
Old scrip not returned	500 00
Bonds issued at 7 per cent.	249,000 00
Dividends unpaid	4,022 75
Surplus profits	103,895 04

\$1,026,868 69

Construction	\$774,244 15
Equipment	162,534 23
Stocks and bonds	20,800 00
Negro property	428 00
Bills receivable	4,394 60
Cash and cash assets	64,467 71

\$1,026,868 69

The officers are:

J. L. MUSTIAN, *President and Superintendent.*
J. M. BIVINS, *Treasurer.*

Williamsport and Elmira Railroad.

This road is in trouble, and the managers propose the following plan for its relief:

To ask the 1st mortgage bondholders to fund four coupons for two years, say including January 1, 1861—and that they should receive for the same, six per cent. bonds of the company, secured as follows, on which interest should be paid semi-annually as due, commencing with January 1, 1860—so far as due. This, with the scrip already received for 1858 coupons, would amount to two hundred thousand dollars, and in the new mortgage to be drawn would be first secured.....\$200,000

That the chattel bondholders receive in six per cent. bonds secured, under above mortgage, on the real estate, and under a 1st mortgage on the chattels, as at present, seventy per cent. of their bonds, now five hundred thousand dollars, bearing interest from April, 1861—interest, and balance of principal, in a preferred stock.....350,000

That the seconds, now seven hundred thousand dollars, should take six per cent. bonds for fifty per cent., to be issued under above mortgage, bearing interest and balance of principal in a preferred stock.....350,000

That the net income of the road, for two years, be applied to the extinguishment of the floating indebtedness of the company, which, with the collaterals released, and the remaining one hundred thousand dollars of the million bonds now proposed to be issued, would, it is estimated, entirely discharge this floating debt; any deficiency, however, to be liquidated proportionately in a preferred stock.....100,000

Total\$1,000,000

This would make, in addition to the present 1st

mortgage, a 2d mortgage of one million dollars, bearing interest at 6 per cent., and, we believe, the road will earn, two years hence, \$130,000 a year, or the interest on both mortgages.

The liabilities of the Co. will then consist of—
First mortgage, as at present.....\$1,000,000
Second mortgage, as proposed.....1,000,000
Preferred stock, estimated.....850,000
Common stock, now \$1,500,000, to be reduced one-third.....1,000,000

Total\$3,850,000

It will thus be seen that the total capital of the road, fully equipped, would be less than \$50,000 per mile; of which, about \$25,000 per mile would be represented in mortgage debt, and the remainder in stock.

So soon as the reviving business of the country should enable the road to pay more than the interest on its indebtedness, the preferred stockholders would realize it. And the value of the common stock of the company would, as reconstructed under the above arrangement, undoubtedly be greater than it can possibly be while incumbered with so great a load of floating debt as has always rested over it.

This plan, which has been prepared after great deliberation, and on consultation with a number of the parties largely interested, appears to the managers the only course which can save the company from the disastrous results of litigation and ultimate foreclosure.

Machinery Department of the Sandusky, Dayton and Cincinnati Railroad.

The following is a recapitulation of the operations of the machinery department of the Sandusky, Dayton and Cincinnati Railroad for the year ending June 30, 1859:

LOCOMOTIVE ENGINES.

Miles run by all the trains.....	532,130
Cost of repairs, labor and mat'l	34,411
" " " " pr. m. run	6.46
" " oil and waste used.....	4,416
" " " " per mile run.....	.82
Total cost of repairs, oil and waste.....	38,821
" " " " pr. m. run.....	7.25

There was during the year rebuilt, eight, and one new engine, except the frame, partly built at a cost of \$16,204 69. This was an extraordinary expense, which is included in the repairs of engines, but should be deducted to compare the cost with previous year, 1858, as nothing but the actual repairs is included in that year. The cost per mile run for repairs for the year ending June 30th, 1858, was .564 cents per mile. With this extraordinary expense for the year ending June 30th, 1859, the running expense was .646 cents per mile, or an increase of .082 per mile over 1858. Deducting this extraordinary expense, shows the actual cost for repairs to be .342 per mile, or a decrease of .222 per mile run.

In the charge for repairs is embraced the oil and waste used in the shop, and in the repairs of machinery, tools, etc., etc.

REPAIRS OF CARS, BUILDINGS, TOOLS, ETC., ETC.

Cost of repairs of Freight cars.....	\$23,380
" " Passenger cars	6,010
" " Buildings.....	2,263
" " Stationary engines.....	1,544
" " Tools, etc.....	4,389
" " Railroad iron.....	4,337
" " Locomotive engines and oil & waste, as stated above	38,821

Total cost of maintaining department of machinery.....\$80,544
Do. for 1858.....93,810

Decrease\$13,266

EXTRAORDINARY PERFORMANCES.

Engine Berwick, J. Window, Engineer, run, on freight trains, 19,628 miles, costing for repairs .156 per mile run.

Engine Warren, E. M. Frederick, Engineer, run, on freight trains, 18,690 miles, costing for repairs .182 per mile run.

Engine Belmont, A. Bovee, Engineer, run, on freight trains, 16,055 miles, costing for repairs .157 per mile run.

Engine St. Lawrence, J. Lansdown, Engineer, run, on passenger trains, 19,906 miles, using 460 pints of oil, or one pint to .5039 miles.

Engine Mississippi, C. E. Clark, Engineer, run on passenger trains, 19,906 miles, using 460 pints of oil, or one pint to .4327 miles.

Engine Niagara, H. Brooks, Engineer, run, on passenger trains, 20,326 miles, using 496 pints of oil, or one pint to .4097 miles.

The average number of miles run to the pint of oil was .2026.

The total force employed in repairs was 132 hands; and including enginemen and firemen, 186.

The Superintendent of the road is John W. Hudson—Master Machinist, Charles H. Sult.

Locomotive Department of the Illinois Central Railroad.

The cost of maintaining and operating the locomotive department of the Illinois Central railroad for the month of July was as follows:

Miles run by passenger trains	79,562
Do. freight do.....	51,563
Do. construction do.....	27,203
Do. wood do.....	2,958
Do. switching do.....	17,697

Total miles.....178,983

Pounds of waste used	2,297
Gallons of oil do.....	1,451
Cords of wood do.....	3,130
Tons of coal do.....	651

Wages of enginemen and firemen.....	\$7,126
Repairs of engines	8,918
Value of oil and waste.....	1,384
Do. wood and coal.....	14,660
Cleaning engines.....	1,143

Total cost.....\$33,231

Cost of oil and waste per mile run.....	.77
Do. wood and coal do.....	8.19
Wages of enginemen and firemen.....	do. 3.98
Cost of repairs	do. 4.98
Cleaning engines	do. .63

Total cost per mile run.....18.55

Average number of cars per train.....	8
Do. miles to pint of oil.....	15.42
Do. do. cord of wood.....	47.86
Do. do. ton of coal.....	44.73

The value of wood on tender is rated at \$4.31 per cord; of coal \$1.80 per ton.

Re-building, superintending, teaming and other expenditures appertaining to repairs are included in the above aggregates.

The cost of the different items for July compared with the six months ending June 30, is as follows:—

	For July.	For the half-year.
Cost of oil and waste.....	.77	.81
Do. wood and coal	8.19	8.93
Wages of enginemen and firemen.....	3.98	3.88
Cost of repairs.....	4.98	5.57
Cleaning engines .....	.63	.66
Total.....	18.55	19.85

Locomotive Department on the Louisville and Lexington Railroad.

The cost of maintaining the locomotive department in this road the past year was as follows:—

	Cost per	Cost, mile run.
Fuel	\$18,617	7.94
Stores	2,023	86
Repairs	18,517	7.94
Oil and waste	4,456	1.90
	\$43,613	18.64

Adding 5 cents per mile for engine-men and firemen, the total expense of this department for the year would be 23.64 per mile run. The total number of miles run was 234,323.

Journal of Railroad Law.**RIGHTS OF PERSONS EMPLOYED BY RAILROAD COMPANIES—ACTIONS FOR DAMAGES.**

It is now a well-established rule of law, and one of considerable practical importance in the management of railroads, that one servant or agent of the company cannot maintain an action against the company for an accident happening through the negligence of a fellow servant. If the switch-tender mismanages his switch, and the consequence is a collision of trains, whereby the engineer, conductor and passengers are injured, the passengers may sue the company for damages; but the conductor and engineer cannot. The reason is, that in accepting employment on the road, the latter are understood in law to take the risk of accidents resulting from the negligence of their fellow-servants.

This principle receives a striking illustration in the case of *Boldt agt. The New York Central Railroad Company*, recently decided in the New York Court of Appeals. The plaintiff sued for damages for injuries received through the alleged negligence of the defendants servants in running a locomotive upon him.

Upon the trial, it appeared that the defendant was engaged in the construction of a new track parallel to, and about six feet distant from its old track, which was then in use. At the time of the accident, the new track had not been completed, and no trains had run upon it, except some conveying gravel for ballasting. The plaintiff was a laborer who had been employed about a month, under the direction of an agent of the defendant, in graving and leveling the new track, being hired for this purpose only. He was walking, early in the morning, from his residence along the new track to the place where he was to work, when he was overtaken and struck down by a train of passenger cars, running upon the new track in consequence of the old track being obstructed by an engine disabled upon it, from an accident on the previous night. The defendant moved for a non-suit, which was refused, and an exception taken.

On appeal from the decision of the Court below, it was decided that the plaintiff could maintain no action. The following are the reasons of the Court sustaining this conclusion:

JOHNSON, CH., J.—The general rule that an employer is not responsible to one employee for injury occasioned by another employee, engaged in the same general undertaking, is firmly settled in this State. (*Sherman vs. Rochester and Syracuse Railroad Company*, 17, N. Y., 153; *Russell vs. Hudson River Railroad Company*, *id.* 134, and cases therein cited.) The plaintiff was employed to labor in graving and ballasting a new track,

which was on the same road-bed with, and about six feet distant from, the old track, and was injured by a train of cars of the defendants running on the new track, on which no train of cars had before been run. The plaintiff who suffered and the persons who caused the injury were in the service of one employer,—the railroad company—the plaintiff in preparing a track and the others in running trains, but both in the common enterprise of maintaining and operating the railroad. If the plaintiff had been engaged in repairing the old track and the injury had occurred to him while digging gravel for that purpose, on the site of the new track by the cars being thrown from the track and falling upon him, his case could not in principle have been distinguished from that of a switch-tender or other person employed in the company's service about the track, and injured in such service. Nor can I conceive that a different principle would apply in case the same accident occurred while the injured person was employed in preparing a new track on the site of the gravel pit, instead of digging gravel to repair the old track. In each case the liability to injury would be incident to the employment. In accepting service on such a new track, in the case supposed, he must be taken to have known that his employers were engaged in running cars on the old track, and that he was, therefore, to incur such hazard as might be occasioned by the negligence of their employees. So in the case at bar, he must be taken to have contracted with reference to the possibility of cars being run on the new track, whenever it became so nearly finished as to render such running practicable. When the plaintiff was injured, he was walking on the new track from his house to his work, but he was in the defendants' employment and doing that which was essential to enable him to discharge his particular duty, viz: going to the spot where it was to be performed, and he was moreover going on the track where, except as the servant of the company, he had no right to be, he was there as the employee of the company, and because he was such an employee. Upon this point as well as upon the other, *Gillshanon vs. Stoney Brook Railroad Company*, (10, Cush., 228), and the cases before cited, lead to the result that the recovery was not warranted by law.

Steamboat Arrivals at St. Paul.

The following table will show the number of arrivals at St. Paul during the last fifteen years, and the increase or decrease of the preceding year:

In 1844 there were	41 arrivals.	
In 1845 " " "	48 " "	increase 17 pr. ct.
In 1846 " " "	24 " "	decr'se 50 " "
In 1847 " " "	47 " "	increase 96 " "
In 1848 " " "	63 " "	" 34 " "
In 1849 " " "	85 " "	" 35 " "
In 1850 " " "	104 " "	" 25 " "
In 1851 " " "	109 " "	" 14 " "
In 1852 " " "	171 " "	" 44 " "
In 1853 " " "	235 " "	" 32 " "
In 1854 " " "	310 " "	" 32 " "
In 1855 " " "	563 " "	" 49 " "
In 1856 " " "	759 " "	" 35 " "
In 1857 " " "	965 " "	" 27 " "
In 1858 " " "	1,090 " "	" 13 " "

—showing an average annual increase during the last fourteen years of 28 per cent.

The number of boats engaged in the trade in 1850 were 7; in 1851, 11; in 1852, 17; in 1853,

23; in 1854, 38; in 1855, 68; in 1856, 79; in 1857, 99; in 1858, 62—showing an average annual increase of 30 per cent.

The following will exhibit the dates of the arrival of the "first boat" through the lake, for the last fifteen years:

1844—Steamer Otter, Capt. Harris	April 6
1845— " Otter, Capt. Harris	April 6
1846— " Lynx, Capt. Atchison	March 31
1847— " Cora, Capt. Throckmorton	April 7
1848— " Senator, Capt. Harris	April 7
1849— " Highland Mary, Atchison	April 9
1850— " Highland Mary, Atchison	April 19
1851— " Nominee, Capt. Smith	April 4
1852— " Nominee, Capt. Smith	April 16
1853— " West Newton, Capt. Harris	April 11
1854— " Nominee, Capt. Blakely	April 8
1855— " War Eagle, Capt. Harris	April 17
1856— " Lady Franklin, Lucas	April 18
1857— " Galena, Capt. Laughton	May 1
1858— " Grey Eagle, Capt. Harris	March 25

And the following shows the time of departure of the "last boat," and the number of days navigation during a series of years:

1849, November 19	224 Days of Navigation.
1850, " 18	213 " "
1851, " 20	230 " "
1852, " 10	208 " "
1853, " 22	225 " "
1854, " 23	229 " "
1855, " 19	216 " "
1856, " 10	206 " "
1857, " 14	198 " "
1858, " 16	236 " "

The following table shows the annual aggregate amount of tonnage (Custom House measurement) for each year, and the annual rate of increase since 1850:

1850	16,640	
1851	19,255—	increase 15 per cent.
1852	27,308—	" 41 " "
1853	39,170—	" 43 " "
1854	51,740—	" 32 " "
1855	87,812—	" 69 " "
1856	124,140—	" 41 " "
1857	194,268—	" 59 " "
1858	231,984—	" 18 " "

Town Bonds to the Albany and Susquehanna Railroad.

The Schoharie *Republican* states that Judge Gould has rendered his decision in the case of the Albany and Susquehanna Railroad Company at certain towns in Schoharie County. Suits were commenced last fall by citizens of the towns of Seward, Richmondville, Cobleskill, and Schoharie, respectively, against the Commissioners of each of the above-named towns, and against the Supervisors of Schoharie County, to restrain the issuing of bonds by said towns, or the raising of moneys by the Board of Supervisors, to pay interest on bonds to be issued by said Commissioners, for the purpose of aiding in the construction of the Albany and Susquehanna Railroad. An injunction was granted by Judge Gould, during the sitting of the last Schoharie Circuit in Schoharie County, which was subsequently dissolved by Judge Gould himself, upon a motion made for that purpose by the railroad company. Among other questions raised by the pleadings in these several suits, it was claimed by the plaintiffs that "the consent of a majority of the tax-payers, representing a majority of the taxable property" in the several towns, had not been obtained, and the bonds of the several towns could not, therefore, be issued in aid of the company. The cases were noticed for trial at the Schoharie Circuit, but could not be reached upon the calendar, and they were accordingly referred, by consent of parties, to Judge Gould to hear and decide the same. The cases were argued at Sharon Springs during the latter part of July last, and the *Republican* now learns from a private source that Judge Gould has decided each case in favor of the railroad company.

Galena and Chicago Railroad.

The comparative earnings of this road for seven months of the current fiscal year have been as follows:

	1859.	1858.
January.....	\$63,256	\$85,319
February.....	66,138	74,180
March.....	100,203	93,920
April.....	90,041	141,292
May.....	119,321	157,953
June.....	110,656	203,153
July.....	89,856	157,287
	\$639,471	\$913,104
		639,471

Loss.....\$273,633

The total earnings for 1858 were \$1,547,561. A corresponding reduction for the ensuing five months would reduce the earnings for the year to a little below \$1,100,000. The earnings for 1857 were \$2,416,343. The immense reduction shows the prostration of business in the west.

The net earnings for the past year were \$620,329. The per centage of expenses to gross earnings, 60. The amount paid last year for interest, sinking fund and improvement account was \$374,405; leaving a balance of \$227,924. A dividend of 4 per cent., amounting to \$241,024, was paid during the year.

Assuming the same ratio of expenses the present, as the past, year, the net would be about \$450,000, on gross earnings of \$1,100,000, leaving little for dividends. The result will probably be considerably more favorable, as the earnings for the balance of the year will probably exceed these for the past.

The Effect of Speed upon Weight.

(From the *London Athenæum*, Feb. 26, 1859.)

I have waited to see whether any one would point out the fallacy of Stephenson's statement (*Athen.* No. 1,633, p. 217,) that either iron or ice will bear a weight passing over it at a greater velocity, which it could not bear if it went slower; and that "when it goes quick, the weight in a manner ceases." The very reverse of this is the truth, as was clearly established by the "Iron Commission," which was appointed a few years since, to inquire into the causes of the breaking down of the iron bridge over the Dee. And the principle so established is now universally acted upon throughout our railways; the speed of the trains, upon approaching bridges of any considerable length, whether of iron or wood, is usually slackened to 8, 6, or even 4 miles an hour, according to circumstances; and the same rule, viz, of going slow, and not of going quick, is always observed in passing over an unsound part of an embankment. I was myself present at some very interesting experiments made by this Commission at the iron bridge of the South-eastern Railway, near Epsom, in the presence of Lord Wrottesley, Sir W. Cubitt, the Astronomer Royal, and several others. Prof. Willis had contrived a very ingenious apparatus, which, fixed to the centre of one of the iron girders, measured and registered the deflection of the bridge at the passing over of any weight. An engine with a heavily-laden tender was then passed over the bridge at speeds varying from 10 to 60 miles an hour, and it was found that the greater the speed the greater was the deflection of the girder.

K. A. W.

Dubuque and Pacific Railroad.

We learn that the negotiations that were pending between this company and OLIVER P. Root, Esq., of Oneida, N. Y., for the building of 40 miles of road, have been concluded on terms satisfactory to all parties. Mr. Root agrees to complete the road to Manchester, (47 miles from Dubuque,) by the 1st of October next; to Winthrop (60 miles from Dubuque) by the 1st of November next; to a point 75 miles from Dubuque by the 1st of December next; and to a point 80 miles from Dubuque by the 1st of January next. The contract recognizes Col. R. B. Mason as Chief Engineer, and as referee in case any difference may arise between the parties.

The Niagara Suspension Bridge.

As some reports have been circulated regarding the safety of this structure, the *Buffalo Courier* publishes the following statement, the facts of which were furnished by Mr. McKenzie, the Resident Inspector and Master Carpenter of the Bridge:

The bridge was completed and opened to traffic in May, 1855. During that year not a bolt gave way, nor was there a single day spent in any repairs. In 1856 all that was done was tightening up or loosening the stays to suit the temperature. In 1857, for the purpose of giving additional stiffness or strength to the lower floor, and not to remedy any defect, beams were placed under the lower floor, and securely bolted to the upper floor. In 1858, a portion of the inch truss rods for a distance of 350 feet in the centre of the bridge were replaced by inch and a quarter rods. This was done as an additional support to the beams. White oak was also used in some portions of the bridge instead of pine, as the latter was found to be too soft and pliable last year. This year, rubber or sprug washers have been introduced in place of the iron ones, and they are found to lend additional elasticity to the structure.

All of these improvements have been made, as we have already said, to render the bridge stiffer, and not to remedy any defect found to exist. We went across in one train, and were on the bridge when four other trains passed. Two passed while we were on the railway track, and one while under the lower floor on the scaffolding. During the passage of these several trains but little more motion was perceptible than during the crossing of an omnibus load of passengers, and it would be difficult to detect the difference except for the rumbling noise of the locomotive. We were one of a party of a dozen or so, who went across the Suspension Bridge in the first passenger car that ever crossed over. This was in 1855, and we did not perceive any more motion on Saturday, if as much, as we did at that time. We saw several trains cross and re-cross, and we did not notice that a single passenger left the cars to walk across, and the railroad conductors say that only occasionally a passenger gets out and walks, and then solely for the purpose of getting a better view of the great structure.

It is the duty of the resident inspector to examine every portion of the bridge carefully every week, and report its condition to the Superintendent. We believe the bridge to be safe and secure, and have perfect confidence in its durability.

From thirty to forty five trains a day pass over the bridge, and have passed during the past four years, and we are assured by the Inspector that the bridge sags no more now than it did during the first six months of its use; and he asserts that it is stiffer and safer now than during any period since its completion.

The story, started by the *New York Herald*, of the sagging of this structure, has called forth from Mr. J. R. Roebing, the builder, who is now a resident of Pittsburg, a flat denial, attributing it to the malice of some individual. He says:

"Being constantly kept informed, as the engi-

neer of this work, by the superintendent who has it in charge, I can inform you that the correspondent's statement is a gross misrepresentation, made either from ignorance or wilfulness, or perhaps both. I will only add that, in consequence of the contraction and expansion of the cables, the Niagara bridge rises and falls inversely with the temperature amounting to two feet for a hundred degrees. Hence the cry every summer that the bridge is giving way rapidly. This work has undergone no change since its completion, and is well taken care of, and of all the railroad bridges on this continent, it will be the last to fall."

English Emigration Returns.

A compact pocket blue book, of 240 pages, published on Friday, contains the 19th General Report of the Emigration Commissioners (1859). The report, comparing the emigration of 1856, 1857, and 1858, attempts to account for the striking decline noticeable in the number of persons emigrating from the shores of Albion, for last year it fell to 113,972 from 212,875 in 1857 (this latter figure, too, exhibiting a great difference as compared with preceding years). The commercial crisis of 1857, and the distress in the Australian colonies, are said to have been causes greatly instrumental of late in deterring persons from leaving home to try their chance across the Atlantic, or at the distant antipodes. There was also a great demand for men in England. But a more satisfactory and permanent cause of decrease is to be found, says the report, in the altered condition of Ireland. In 1851 not less than three-fourths of the whole number who left the kingdom were Irish.

Since that period the proportion has gradually declined, until, in 1857, it was only 40½ per cent. or two-fifths of the emigration, while in 1858 it fell to 38 per cent. The consequent cause here at work is to be found in the increased prosperity of the working classes in Ireland, and the constant absence of any inducement to emigrate. That it arises from no want of means to pay for passages is evident from the remittance of £172,610 for the purpose of facilitating the emigration of friends and relations during the year 1858. The mortality on board emigrant ships to North America is declining year by year; from 1854 to 1858 it fell from 74 to 19 per cent. Of the 113,972 emigrants last year, 9,704 went to British North America, 59,716 to the United States, and 39,295 to Australia; 60,309 Germans emigrated from Germany to all parts of the world in the same period—a great falling off as compared with previous years. The cause of this decline cannot be assigned with certainty at present. 17,207 emigrants to Australia last year paid their own passages, and 15,910 were assisted. 18,841 emigrants returned last year from America, and 4,863 from Australia and New Zealand.

Dr. Normandy's apparatus for distilling fresh from sea water, has been tried and found to be so satisfactory that it will be used henceforth on board all passenger ships, by express and positive order of the Privy Council. Of 4,442 adult males who emigrated to Canada, 1,651 were farmers, 1,593 laborers, and 932 mechanics.

In conclusion the Commissioners advert to the emigration of the first three months of the present year (1859) as compared with the similar period of former years. The emigration of the first three months of the eight years from 1847 to 1854 inclusive, averaged 50,604 a year, and of the twelve years from 1847 to 1858 inclusive, 43,122. In the first three months of the present year it amounted to only 17,314. The extent to which it is effected by the demands for the military and naval services seems very evident. In 1854, before the commencement of the Russian war, it was 48,565; and in 1855, 36,677; in 1856, 21,859; in 1857, in the interval between the Russian war and the Indian mutiny, 35,007; in 1858, 19,146; and in 1859, 17,314. Of the emigrants during the first three months of the year there went to the United States 10,005; British North America, 59; Australia, 6,167; and to other places, 1,083; making a grand total of 17,314.—*London Times*, Aug. 9th.

Dubuque and Pacific Railroad.

We were in error in announcing some time since the election of Col. R. B. Mason to the Vice Presidency of this company. On the 2nd ult, he was appointed Superintendent and Engineer of the company; but the election for Vice President has not yet taken place.

Passage of a Steamer from St. Louis to Fort Benton.

One of the most remarkable feats of steamboat navigation ever performed, has just been completed by the steamer *Chippewa*, which, loading at St. Louis with Indian supplies, made a consecutive trip from that city to Fort Benton, a distance of 4,000 miles. The enterprise was set on foot by Charles P. Choteau, who finally during the trip purchased the boat of her owners, having from the start insured her. She was at Fort Union when purchased, and at that point Capt. Crapster, who started with her, relinquished, and Capt. John B. LaBarge assumed command. A very interesting account of the voyage in the *St. Louis Democrat* states that on the 3d of July she left Fort Union with 130 tons of freight, 10 or 12 passengers, and a crew of 40 or 50 men. Every arrangement had been made which tended toward success, and the determination was expressed to put her through, even if it had to be done over dry bars. At only one point was the channel found so shallow as to be a serious impediment, and there the men hurried into it, dug it out with shovels; and the boat pushed on. The channel between the rocks on the rapids was found to be so narrow that there was great danger, should the boat sheer off in the least, of her being dashed to pieces. To avoid this, the anchor was placed ahead, and the boat pulled over by the capstan. On the 17th of July, the *Chippewa* reached Fort Benton, and the navigation of the Missouri river for near 4,000 miles was proved not only to be feasible, but with able commanders, of easy accomplishment. Heretofore the trip in Mackinaw boats occupied ninety days. The *Chippewa* accomplished it in fourteen days. On the 18th of July her head was turned homeward, and on Wednesday last she reached St. Louis, having been absent a period of eighty-four days.—*Det. Trib., Aug. 23.*

History of City Passenger Railroads.

In 1825, the first passenger railroad in the world was opened between Stockton and Darlington, in England, a distance of thirty-seven miles. The cars were drawn each by a single horse. From such a beginning, what do we see now? We will not at present enter into a discussion of what we consider ordinary railroads, but will confine our attention to tracing the antecedents of city passenger railroads. In 1832, the Germantown Railroad was opened, and for a time horses were the motive power. In the same year—indeed, within a few days—a part of the Columbia Railroad was put in use with horse cars also. A few months before that time, a supplement to the charter of the Northern Liberties and Penn Township Railroad Company was passed, extending the time required for the completion of the road (which had been chartered in 1829) to July 4, 1836. Long previous to this, however, the road, now the Willow street Railroad, was opened, and a line of horse cars established between Third and Willow and Columbia bridge, by a Corsican named Luiciani. The first car was called the Paul Amelia. This was, we believe, the first city passenger railroad in the world. It differed from the Germantown and other roads on which cars were run by horse power, in the fact that its cars stopped, as our city cars now do, to take up and set down passengers at any point on the line, while the others had regular stations for stopping. Such cars were afterwards run on Branson and Prime streets to Gray's Ferry, as also on Market and Broad streets. But they ceased running some years since. Had these objections, however, been removed, it must be remembered that the demands of traveling citizens were not great. The first omnibus in Philadelphia was started in 1832. In New York, horse railroad cars have run for twenty years or more on the Harlem Railroad, and for a long time without prompting imitation. Dickens, in his *American Notes*, alludes to two stout horses trotting along, "drawing a score or two of people, and a great wooden ark, with ease."

From the year 1852, efforts have been made time and again in Philadelphia, to procure from the proper authorities a charter for a passenger

railroad, but for a long time these efforts were ineffectual. All sorts of objections were made. But in November, 1855, a joint special committee of Councils, appointed to look into the matter, reported that "they were decidedly of the opinion that city passenger railroads might, by proper construction, arrangement, and use, be made exceedingly convenient and beneficial to the citizens, and that the experience of New York and Brooklyn so sufficiently attested their utility as to preclude the necessity of argument."

The Philadelphia and Delaware River Railroad Company was chartered April 4th, 1854, to build a road from a point north of Cherry street, Kensington, one square south of Berks street, to Easton. But in two years, this plan being given up, it was determined to extend the road, adapted for horse cars, to Frankford only. By an act, approved by the Governor June 9th, 1857, the company were authorized to extend their road to Southwark, over Fifth and Sixth streets, subject to the approval of Councils. After permission was given to build the road, every impediment possible was thrown in the way, and the commercial crisis intervening at that time, the cars were not run on Fifth and Sixth streets until January 20th, 1858. The whole cost of the road was about \$650,000—hard times and want of experience in the matter combining with other peculiar disadvantages to increase the expense. There are now in use by this company, on seventeen miles of single track, forty-two cars, with a complement of seven horses per car, running each day 3,542 miles on the average, and they carried, during the year past, nearly 4,000,000 passengers.—*Phila. Press.*

Marietta and Cincinnati Railroad.

The management of this road is, by recent changes, again in the control of the same influence that had possession at the time it was opened, in June, 1857. Whatever may be the extent of the embarrassments now surrounding this property, it is the great road of Southern Ohio, and will surely take its place among the most influential lines in all the West. The anti-railway mania of the two years last past has been as violent and unreasonable as was the over confidence in these works previous to that time. On this regurgitating wave, the Marietta and Cincinnati is coming up again in public favor and public confidence. As a condition precedent, of course, fictitious values must be wiped out and real values alone be recognized. When or how the real proprietary will come into possession does not yet appear, but that they will, sooner or later, there can be no doubt.

The Union Railroad, connecting the Marietta and Cincinnati at Scott's Landing with the Baltimore and Ohio at Parkersburg, is progressing to an early completion. The track will be down in a few days to a point three miles above Parkersburg. This will take the cars below all obstructions from low water.

The improvement in the road-bed, machinery, and general police of the Marietta and Cincinnati has been very marked within the last year. We are prepared, from personal observation, to say that it compares, in the matter of police and regularity of movement, with the best in the country.—*Cin. Commercial.*

Detroit and Milwaukee Railroad.

On Monday next, the two new sea-going steamers, Detroit and Milwaukee, now nearly finished at Buffalo, will leave for the upper lake. We observed that the work on the harbor at Grand Haven is being pushed with all possible despatch. Several hundred feet of piles have already been closely driven for a solid substantial pier. The expense of this improvement, (which should be done by the Government,) is all defrayed by the railroad company, and will insure a depth of water at the entrance of the harbor sufficient for all ordinary lake craft, and will prevent the formation of sand bars at the mouth of the river. As long as the affairs of this road are as ably managed as at present, there is not the least danger of any other route competing with it for the Eastern travel from the North-west.—*Milwaukee Wisconsin, Aug. 20.*

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending August 30, 1859.

BONDS.		Per cent.
Little Miami, 1st Mort.	68	82 1/2 and int.
Covington and Lexington, 2d Mortgage	78	85
Cinc. Ham. and Dayton, 2d Mortgage	78	85
Indianapolis & Cincinnati, do.	78	82 1/2
STOCKS.		
Cincinnati, Hamilton & Dayton	67	
Columbus and Xenia	82	
Indianapolis & Cincinnati	60	
Little Miami	93	

Railroad Earnings.

The earnings of the Terre Haute, Alton and St. Louis road for June and July, 1859, as compared with same time in 1858, were:—

	1859.	1858.
June	\$52,152 22	\$41,778 00
July	47,231 16	43,262 88
Total	\$99,383 38	\$85,040 88
Increase in 1859 of	\$14,342 50	

The following are the earnings of the Grand Trunk Railway of Canada for the week ending August 6th:

Passengers	\$21,244 13
Freight	15,540 15
Parcels, mails and sundries	2,349 46

Total	\$39,133 74
Corresponding week last year	36,774 27

Increase.....\$2,359 46

The receipts of the Grand Trunk Railway of Canada for the week ending August 13, were.....\$38,874 41
Week ending Aug. 14, 1858.....31,721 39

Increase.....	\$1,153 01
Total traffic from July 1st	\$250,397 68
Same period last year	239,098 25

Increase.....\$11,299 43

The traffic of the Great Western Railway of Canada for the week ending August 19, 1859, was as follows:

Passengers	\$25,316 68
Freight and live stock	8,211 81
Mails and sundries	1,401 43

Total	\$34,929 92
Corresponding week of last year	35,379 35

Decrease.....\$441 43

The following is a comparative statement of the earnings of the Northern Central Railway Company for the month of July.

	From 1859.	1858.	Increase.
Merchandise	\$24,938 20	\$21,305 02	\$3,633 18
Coal	16,898 87	13,680 35	3,218 52
Passengers	24,831 45	21,652 03	3,179 42
Mails	2,425 00	1,487 50	937 50
Sundries	78 95		78 95

Totals....\$69,172 47 \$58,124 90 \$11,047 57

The earnings of the Cincinnati, Wilmington and Zanesville railroad in June were..\$13,007 64
The operating expenses, repairing, improving, etc. 12,387 90

\$619 74

The receipts during June from all sources were \$13,841 14; and the disbursements, \$14,149 86.
In July the earnings were\$12,247 08
And the expenses..... 11,168 96

\$1,078 12

The receipts from all sources during July were \$10,640 49.

A statement of the receipts of the Virginia and

Tennessee railroad, for the month of July, 1859, compared with the receipts of July, 1858:—

July, 1859, freights.....\$19,475 08
Passenger fare, mails, etc..... 39,581 80

Received for same services, July, 1858, 43,037 11

Increase.....\$13,019 77
—Being an increase of 32 per cent.

American Railroad Journal.

Saturday, September 3, 1859.

Michigan Southern Railroad—a Dissolving View—of Dividends.

It will be interesting to take a brief review of the operations of this road, which has experienced all the extremes of inflation and collapse that have so strongly characterized some Western railroads.

It was opened from Lake Erie to Chicago, in July, 1852. In a year from that time, it was in full flower. The liabilities of the company to its stockholders and creditors, (which represented very nearly the cost of the road,) its earnings, and the dividends paid since that time, have been as follows:

Years.	Liabilities.	Earnings.	Dividends.
1853.....	\$7,444,960	\$1,573,181	12 per cent.
1854.....	10,198,914	2,158,311	22 " "
1855.....	13,160,338	2,595,631	10 " "
1856.....	17,681,968	2,714,848	10 " "
1857.....	19,336,089	2,233,745	5 " "
1858.....	19,565,407	2,015,749	

The net earnings for 1857 were represented to have been \$544,311; and for 1858, \$777,272; making for the two years, \$1,321,583. We presume the interest account, for the two years, exceeded this amount by something like \$200,000. The earnings for the present year will probably fall as low as \$1,650,000, and net earnings to \$350,000 or \$400,000.

This is a short and somewhat eventful history, but a sad one. In 1853, the company had constructed the only portion of its line capable of affording a remunerative traffic—the Main Trunk, extending from Lake Erie to Lake Michigan. Had it been content to stop here, the road would have been good property. Seven millions of dollars for 250 miles of road would not have been an excessive sum. Since that time, the capital account has been increased in one way or another, \$12,150,044, without adding a penny, probably, to the net earnings of the company.

What have been the actual earnings of the road, we have no means of telling, as the reports for 1855 and 1856 did not give the current expenditures. It will be seen that for 1853, '4, and '5, the company earned just about 20 per cent. gross, upon the nominal cost of the road. A rate of earnings equalling this per centage seems necessary to enable a Western company to pay regular dividends. Last year the earnings fell to about 10 per cent. on the cost of the road; and the present, they will be about 8 per cent.

To preserve a harmony throughout, the road has been handed over to a set of old fogies, who, with feeble steps, attend it in its downward course. The present year, a portion of the interest and sinking fund will have to be borrowed, if paid at all. The preferred stockholders have not the remotest prospect for a dividend. As matters are going, the only virtue in the old shares is the pleasant memories they carry with them.

What does it Cost to Maintain the Track of a Railroad?

Mr. FELTON, President of the Philadelphia, Wilmington and Baltimore railroad, estimates the cost of maintaining the track of this road, (the same being in good condition on the outset) at \$614 50 per mile annually. It is about 100 miles long, and is laid with a rail weighing 50 lbs. to the yard, which he considers as more economical than one weighing 60 or 65. Of this weight, 8,000 tons would be sufficient for the whole road. Supposing the rail to last 10 years, the annual renewals would equal 800 tons, costing the company, in exchange for the old rail, \$20 per ton. The ties are supposed to last seven years, and the number annually required is 35,000, costing \$9,625 annually. The fastenings, chairs, spikes, etc., etc., cost \$600 per mile, or \$6,000. The cost of laying the rails is put down at \$400 per mile, or \$4,000. The cost of labor of adjusting the track is estimated at \$250 per mile. The following statement will present this matter in a more distinct light.

800 tons of rails costing.....	\$16,000
35,000 ties.....	9,625
Chairs, spikes, etc.	6,000
Laying track.....	4,000
Adjusting track.....	25,000
	\$60,625

—equal to \$606 per mile of road, or about 14.40 cents per mile run.

To show that this estimate is not far out of the way, we take the results of the operations of two leading Massachusetts roads for 10 years past—the Boston and Worcester, and Boston and Providence. These have been in operation for nearly 25 years, and for ten years past neither one has materially increased its construction account or liabilities. In this period, the rails must have been almost entirely replaced. As the roads have been well maintained, the sum expended for this purpose may be taken as standard to show at what sum the track of a railroad may be maintained. It is very probable that it may have been, on the roads named, for sums considerably less than those actually expended.

Statement showing the cost of maintaining the track of the Boston and Worcester Railroad, for a period of ten years.

Years.	Length of r'd.	Cost of road.	Cost of repairs.	Cost of iron used for do.	Cost of rep's of bridges.	Miles run.
1849.....	114	\$1,908,332	\$19,876	\$19,529	\$6,577	460,998
1850.....	114	4,882,648	55,821	.....	5,176	436,199
1851.....	114	4,862,748	37,403	12,939	6,195	466,623
1852.....	114	4,845,966	35,178	20,421	2,220	478,819
1853.....	114	4,850,754	42,695	30,127	12,339	513,580
1854.....	114	4,856,370	46,746	72,849	7,102	551,847
1855.....	114	4,865,439	47,314	39,203	8,998	541,628
1856.....	114	4,855,118	75,104	67,708	6,922	566,454
1857.....	114	4,848,779	60,329	47,982	16,043	498,325
1858.....	114	4,930,090	57,916	37,339	6,987	534,882
Tot. cost of main't'g track.		\$508,412	\$318,097	\$76,459	5,049,145	
		348,097	75,459			

Deducting the cost of repairs of bridges, the total cost of maintaining track has been \$856,508, equal to \$751 per mile, or including bridges, \$817 per mile, and 18.46 cents per mile run annually, or 16.96 cents per mile run. The earnings of this road equal very nearly \$1,000,000 annually, chiefly from the traffic of the main line. The excess in the cost of maintaining track on this road over the estimate of Mr. Felton is \$137 annually, which is not, probably, greater than the actual difference in maintaining the tracks of the two roads, that of the Boston and Worcester being considerably the greatest owing to its larger traffic, more unfavorable climate, etc.

The operations of the Boston and Providence railroad show a result very nearly similar as will be seen by the following statement.

Years.	Length.	Cost of road.	Cost of rep's of track.	Cost of iron used.	Cost of rep's of bridges.	Miles run.
1849.....	69	\$3,370,269	\$25,136	\$948	\$8,935	241,860
1850.....	69	3,416,232	18,583	.....	.....	251,960
1851.....	69	3,459,599	22,002	7,380	2,360	252,927
1852.....	69	3,546,203	32,622	4,168	2,443	283,920
1853.....	69	3,676,041	31,198	2,952	2,755	305,731
1854.....	71	3,611,821	37,044	18,701	3,665	330,590
1855.....	71	3,667,154	40,859	21,843	3,165	316,238
1856.....	71	3,659,936	48,678	37,805	3,508	295,703
1857.....	71	3,554,458	43,724	18,212	3,508	296,374
1858.....	71	3,524,981	36,994	16,038	3,455	292,649
Tot. cost of main't'g track.		\$338,840	\$127,047	\$50,704	2,870,985	
		127,047	50,794			

The average expenditure per mile for maintaining the track of this road has been \$658 per annum, equal to 16.05 cents per mile run. Including therepairs of bridges, the cost per mile has been \$743, and per mile run, 18.06.

For how much less the tracks of these roads could have been maintained, we do not pretend. We have no doubt a more rigid economy prevails upon both roads than it did three or four years back. They no doubt suffered from the great inflation of 1852, '3 and '4. The amount charged to track, however, is moderate. If similar charges on other roads can be kept uniformly as low, a vast saving would be the result.

Dayton and Michigan Railroad.

This road, after many struggles has at last been completed, it having been formally opened to the public on the 18th instant. The road is 144 miles long, making the distance by it from Cincinnati to Toledo, 204 miles; and to Detroit, 269 miles.

The road is one of first rate importance, as it gives Cincinnati direct connection with Toledo and Detroit, and with the Canada system of railroads. Much advantage is anticipated by the Grand Trunk company from this connection. The line of the road traverses an excellent country, and if it has been built at a fair cost, there is no reason why it should not be profitable. It will prove a great advantage to the Cincinnati, Hamilton and Dayton road and will be an important auxiliary to the trade of Cincinnati.

We invite attention to the advertisement, in another column, of LUCIUS HART, Esq. The metals mentioned in the advertisement are imported by Mr. H., and furnished by him to Railroad Companies and Machinists at the lowest rates. Babbit, or anti-friction metal is largely used by them. Mr. H. supplies either the manufactured article, or the raw material from which it is made, viz: tin, antimony, copper, etc. Address LUCIUS HART, Esq., Nos. 4 and 6 Burling Slip, N. Y.

Iron Cars.

An iron passenger car has recently been constructed at Paterson, N. J., according to LAMOTHE'S Patent, for the Boston and Worcester railroad. It does not differ materially in size or appearance from the wood car of a similar class. Without the platforms, it is 46 feet long and has 30 seats. It is a little wider than the ordinary narrow gauge cars.

It is not, however, in the difference of shape or finish that this car is distinguished from others, but in the material of which it is constructed—iron.

The bottom or platform of the car "is composed of a series of longitudinal bands of iron, placed edgewise, from which others cross from side to side. The sides are also formed of longitudinal and upright bands crossing each other and strongly riveted together, the whole terminating in a spine which runs lengthwise along the roof. After the panels have been put in, it will be seen that the whole is nothing more or less than a tubular bridge of enormous strength, yet much lighter than the ordinary wooden car. The number of rivets used exceeds 9,200, and the number of feet of band iron 6,200. The latter is two inches wide by one-seventh in thickness, except under the floor and platform, where it is from four to six inches wide." This, we are aware, is a very inadequate description, but it is difficult to give one without the exhibition of a cut or model. Suffice to say that the car, so far as provision is made for strength, is composed entirely of iron disposed in a manner to get the greatest amount of strength, with the least weight; and as every plate or band used has a distinct duty to perform, it will be readily understood that the car may be as much lighter and much stronger than the wooden car, as iron is stronger than wood in proportion to its weight.

Another advantage claimed is its *durability*, the small amount of wood used, being simply for the purpose of ornament, or upholstering. Nothing but iron is exposed to the action of the weather. Well painted, it may last for an indefinite period. Exposure to the weather will have no effect upon it, either to cause it to decay, or to weaken it by the shrinkage of its parts, as in the case of wooden cars. For hot climates in particular, the iron car must prove of great advantage over the wooden one.

In cases of collisions or of accident it would, probably prove much safer than the wooden car. It might be bent up, and twisted out of shape, but it could not be broken.

We presume it can be furnished as cheaply as the wooden car. If so, there must on every account be great economy in its use. It will weigh two or three tons less, than the other. Here is

another considerable advantage. In style of finish, the one described will compare favorably with the best styles to be found on any of our roads. In fact, it may be taken as a model of graceful design, and of exquisite workmanship, which, with its intrinsic merits cannot fail to commend it to the railway public. It was built by Mr. Cundell, of Paterson, and painted by Mr. David Milne. The chief proprietor and agent is E. W. Sargent, Esq., No. 15 Broadway, New York, from whom further information may be obtained.

Interest and Dividends.

The trustees of the first mortgage bonds of the Vermont Valley railroad (Bellows Falls and Brattleboro'), have declared a dividend of 50 per cent. on the interest coupons of October, 1856, payable on the 29th.

The Florida *Sentinel* says that the funds for the payment of interest due Sept. 1, on the Florida and Atlantic and Gulf Central railroad, has been deposited in the State Bank at Tallahassee.

The following described Detroit City Bonds will be redeemed at the Metropolitan Bank, in the City of New York, September 1, 1859:

Bonds issued September 1, 1839, and numbered 1 to 86, inclusive, each \$500 \$43,000
Bonds issued April 1, 1841, and numbered from 87 to 100 and from 1 to 20, inclusive, each \$500 17,000

Total \$60,000

The Richmond and Danville Railroad Company has declared a dividend of four per cent. on its capital stock, payable on the first day of December next.

New York and Erie Railroad.

Mr. Moran has resigned the Presidency of this road, and also, we believe, his place as Director.

Hudson River Railroad.

We give on the following page a statement showing the operations of this road for five years ending September 30, 1858.

The result, so far, has been more advantageous to the public than to the owners of the road; the former have been favored with an admirable road, running at high speeds, and carrying passengers, with great safety, at the rate of two cents per mile.

The net earnings for the five years have hardly equalled the accruing interest on the company's indebtedness. The amount paid on account of the latter has been \$3,087,986, exceeding by \$53,467, the total net earnings.

The gross earnings have equalled very nearly 15 per cent. on the cost of the road, and about 17½ per cent. on the indebtedness of the company. The current expenses have equalled 66.41 per cent. of the earnings. The cost per mile for trains run has been 143.71 cents.

Compared with other roads, the cost of operating this has been excessive. This has been owing, in part, to the very large items for contingencies which for the years embraced have amounted to the following sums—

1854 \$269,813
1855 281,657
1856 284,836
1857 250,468
1858 218,038

The "contingencies," for 1855 and 1856, were made up of the following items—

1855.
Paid Harlem railroad \$72,827
" Troy and Greenbush railroad 51,846
" Troy Union 44,257
" hauling cars 40,828
" rents 20,499
" printing, etc. 6,892
" ferry boats 18,028
" sundries 26,479
\$281,657

1856.
Paid Harlem railroad \$64,467
" Troy and Greenbush railroad 77,078
" Troy Union railroad 35,181
" hauling cars by horses 42,168
" rents 29,771
" printing, etc. 6,911
" ferry at Albany 13,474
" sundries 15,368
\$284,518

Since 1856, the items that make up contingencies have not been given. The Troy and Greenbush railroad is leased by the Hudson river. The latter pays 7 per cent. on \$275,000, equalling \$19,250. The amount charged as paid to that road is made up of this sum, and current expenses for operating it. The receipts are included in those of the Hudson river road.

The amount paid the Harlem road is the balance due it under a contract in reference to the *through* business of the two roads. The agreements under which these sums were paid, have been discontinued.

The cost of maintenance of track has been moderate, equalling only 19.94 cents per mile run, which is so low for the high speeds at which the trains have been run, that we presume the rails and ties have not been fully maintained, and that, consequently, the amount expended upon track, will continue to increase for some years to come.

On the other hand, the cost of fuel and repairs of engines has been excessive, and will probably be largely reduced. By the use of coal, the expense for fuel may be reduced \$100,000 annually, at least. The cost of repairs of engines is 33 per cent. higher than it need be, and that per centage higher than it is on the average of roads having an equal traffic. The cost of oil and waste is twice too high, judged by similar standards.

Thus far the road has shown itself to be hardly worth the debt resting upon it. The accruing interest has not been met by some \$10,000 annually. No surplus fund, consequently, has been accumulated—nothing whereby to meet the contingencies of an accident, or for renewing the superstructure. We have no reason to look to a very rapid increase of receipts. It is somewhat remarkable that these for 1854 and 1855 are very nearly the same.

It may be said in favor of the road that both it and the rolling stock is maintained in admirable condition, and that the road is managed with a great deal of energy, and safety, so far as travelers are concerned. It is of the greatest value to the city of New York, and to the whole line of railroad extending from Albany to the Mississippi River. It deserves much better success than it has so far achieved; yet we presume it has paid fully 7 per cent. net upon its actual cost. The money lost in one way or another, together with the scrip issued by way of interest on the stock till the road was opened, have probably been quite equal to the amount of stock outstanding.

HUDSON RIVER RAILROAD.

Statement showing the operations of the Hudson River Railroad, for a period of five years, ending September 30th, 1858.

1. TABLE showing the cost of construction and equipment, earnings, etc.

Years.	Cost of road and equipment.	Main line.	Second track.	Equivalent in single track.	Liabilities of Company.	Funded debt.	Floating debt.	Miles operated incl. road rented.	Total miles run by locomotives.	Passengers carried one mile.	Tons of freight carried one mile.	From passenger traffic.	From freight traffic.	Total, incl. mails, etc.	Receipts from all sources.	Expenditures on all accounts.	Receipts over expenditures.	Amount applied to interest.
1854.....	\$12,391,363	144.0	100.0	244.0	\$3,757,892	\$8,006,435	\$927,369	150	882,375	76,830,660	18,141,520	\$1,237,308	\$464,145	\$1,753,986	\$1,573,986	\$1,298,818	\$455,108	\$539,459
1855.....	12,737,898	144.0	101.0	245.0	3,758,466	8,842,000	408,363	150	882,483	74,691,074	16,221,756	1,213,970	565,717	1,812,088	1,869,806	1,298,141	661,664	611,844
1856.....	12,802,528	144.0	106.5	250.5	3,758,466	8,842,000	399,311	150	880,706	57,251,964	20,116,030	1,101,475	724,017	1,905,710	1,924,382	1,239,573	684,800	651,315
1857.....	11,258,019	144.0	106.5	250.5	3,758,466	8,842,000	453,315	150	770,264	58,928,855	19,642,158	1,132,319	707,096	1,889,416	1,902,828	1,213,948	688,880	650,399
1858.....	11,328,989	144.0	106.5	250.5	3,758,466	8,842,000	453,002	150	770,264	66,416,865	18,416,865	1,042,865	544,368	1,636,412	1,683,771	1,041,773	648,998	634,969
Average.	12,108,759	144.0	104.1	248.1	3,758,351	8,674,887	528,672	150	824,391	64,823,880	18,307,665	1,145,587	601,068	1,739,522	1,807,364	1,200,460	606,908	617,597

2. TABLE showing the cost of repairing and operating the road and equipment, etc.

Years.	Road-bed and track.	Buildings, fences, etc.	Taxes on real estate.	Total cost.	Engines & tenders.	Cars and trucks.	Tools and machinery.	Total, incl. incidentals.	Conductors, brakemen, etc.	Enginemen and firemen.	Coal and wood.	For engines.	For cars.	Total cost.	Office and stationery.	General superintendence.	Clerks, laborers, etc.	Losses and damages.	Total, incl. all others.*	Grand total of cost.
1854.....	\$160,094	\$8,460	\$10,187	\$178,750	\$94,781	\$68,810	\$2,945	\$176,187	\$57,047	\$14,008	\$181,416	\$18,268	\$9,795	\$310,534	\$4,416	\$6,758	\$191,427	\$23,576	\$495,279	\$1,160,751
1855.....	102,940	7,842	18,821	129,603	117,582	65,990	6,048	197,495	50,365	37,919	226,700	20,524	6,665	362,166	2,931	29,515	161,610	22,928	506,192	1,184,705
1856.....	138,214	11,188	21,026	150,429	73,819	67,470	4,453	156,676	52,265	36,681	239,413	16,892	6,132	351,383	2,179	18,478	178,208	32,048	541,134	1,239,573
1857.....	138,502	16,030	24,815	199,348	105,341	87,769	5,707	211,293	49,423	39,219	210,255	12,057	5,095	316,049	2,229	6,300	185,921	92,283	538,114	1,264,804
1858.....	92,465	18,312	23,160	133,938	63,284	58,523	3,224	138,890	41,846	40,147	150,015	8,475	4,088	244,521	1,836	5,987	162,188	12,463	402,754	1,044,104
Average.	100,512	56,842	98,009	255,368	94,007	73,862	21,377	250,989	50,228	39,696	203,553	15,143	6,345	314,930	2,720	19,407	175,551	36,659	496,705	1,178,787

3. TABLE showing the cost (in cents) per mile run by locomotives with trains, reduced from Table No. 2.

Years.	Cost of road, per mile.	Capital stock.	Funded debt.	Floating debt.	Total receipts, per mile.	Total expenditures, per mile.	Net receipts, per mile.
1854.....	18.14	0.96	1.15	20.26	10.74	7.69	0.33
1855.....	11.58	0.89	2.13	14.60	13.32	7.48	0.57
1856.....	17.36	1.27	2.39	21.62	8.38	7.66	0.51
1857.....	20.42	2.07	3.20	25.69	13.31	11.31	0.73
1858.....	31.62	1.90	3.31	36.83	9.75	8.35	0.46
Average.....	19.94	1.09	2.43	23.79	11.16	8.49	0.52

4. TABLE showing the receipts, etc., per mile run, and the ratio of expenses.

Years.	Total receipts, per mile run.	Total expenditures, per mile run.	Total net receipts, per mile run.	Per cent. ratio of expenditures.	Road, track, etc.	Rolling stock.	Operating cost.	Miscellaneous.	Cost of road, per mile.	Capital stock.	Funded debt.	Floating debt.	Total receipts, per mile.	Total expenditures, per mile.	Net receipts, per mile.
1854.....	\$1.99	\$1.47	\$0.52	73.87	15.40	15.09	26.74	42.77	18.54	26.051	\$36,051	\$6,440	\$12,180	\$9,019	\$3,161
1855.....	2.12	1.37	0.75	64.62	10.88	16.66	29.72	42.78	18.55	26,101	61,402	2,837	12,955	8,380	4,575
1856.....	2.19	1.41	0.78	64.39	15.36	12.64	28.38	42.68	18.56	28,364	61,402	2,773	13,364	8,608	4,756
1857.....	2.45	1.56	0.89	63.66	15.76	16.70	25.00	42.54	18.57	26,101	61,402	3,148	13,214	8,480	4,734
1858.....	2.26	1.48	0.78	65.46	24.70	18.30	23.42	38.57	18.58	26,101	61,402	3,159	11,012	7,235	3,777
Average.....	2.19	1.45	0.74	66.41	16.42	14.88	26.55	42.46	18.51	26,099	60,242	3,002	12,551	8,386	4,165

* Under this head are included—rents and payments to other companies, ferry and telegraph expenses, station expenses, baggage in New York City, etc.

Western and Atlantic Railroad.

The gross earnings of this road for the year ending September 30, 1854, were....\$591,154 78
Working expenses, (43 per cent.).... 253,081 78

Net earnings.....\$338,123 00
Gross earnings to Sept. 30, 1855.....\$688,930 56
Working expenses, (37½ per cent.)... 259,883 33

Net earnings.....\$429,047 23
Gross earnings to Sept. 30, 1856.....\$871,366 53
Working expenses, (43½ per cent.)... 380,668 85

Net earnings.....\$490,697 63
Gross earnings to Sept. 30, 1857.....\$900,808 95
Working expenses, (88½ per cent.)... 435,827 55

Net earnings.....\$464,981 40

The total of the net earnings for the four years, was, according to official reports, \$1,722,849 31.

The yearly average of the net earnings was \$430,712 32, and the monthly average \$35,892.

The gross earnings of the road to Sept.

30, 1858, were\$800,001 28
Working expenses, (49¼ per cent.)... 394,227 84

Net earnings.....\$405,773 84

Railroad Traffic.

There is an improvement, though not very great, in the traffic of most of the railroads of Illinois. Notwithstanding the low prices which prevail for all kinds of produce, the favorable influence of an abundant crop begins to be felt. Large quantities of grain are being collected at Chicago. The two Michigan railroads still show no gain, but a heavy loss upon last year. Nearly all the Eastern and Western movement is done on the lakes and canal, in merchandise as well as in produce. The leading railroads of Ohio are doing quite as well as last year. We presume the receipts of the New York Central are up to those for 1858. We have not heard from the Erie. In the transition state in which the management has been for some time past, we presume not much attention has been paid to the traffic. In other parts of the country, particularly in New England and the South, the railroads are doing remarkably well, the dark spot is mainly confined to the territory lying between New York and Chicago, and embracing Northern Illinois and Wisconsin. Matters here, are still badly out of joint.

English vs. American Rails.

There was laid in May last on the South Carolina Railroad, on the straight line below Fort Valley, on a heavy grade, 73 tons of new T rails, weighing 40½ lbs. to the yard—one-half of which was from the Lackawanna Iron Works, and the other half English—the American rail on one side, and the English on the other, for the purpose of testing the wear of the different kinds of iron.

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MARKET AND SIXTEENTH STREETS,
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IRON AND STEEL
IN ALL THEIR VARIETIES.

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BOILER RIVETS, RAILROAD IRON,
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Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
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Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
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CAR SPRING STEEL,
Far superior to the ordinary kind.

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ORDERS FILLED PROMPTLY AND AT LOW PRICES.

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RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
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NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

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IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.**

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight. CAR AXLES, SPIKES, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address **J. H. SCRANTON, President,**
Scranton, Pa.
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THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or cashing at ports in the United States.

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New York, 1st June. 1859.

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THE undersigned, sole Agents to Messrs. GRIST & Co., the proprietors of the Downais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

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THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
Boston, June, 1851. 29 Central Wharf.

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CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

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500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

**THE
RAILROAD IRON MILL COMPANY,
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MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.**

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,
President of the Incorporation

February, 1858.

A GENTLEMAN who has upwards of 26 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.
Address S. box 962 Baltimore Post Office. 3m32

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WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL

METAL—

BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE
CANNON AND PROJECTILES, ALL KINDS,
IRON AND BRASS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our SPIKE AND BOLT FACTORY, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed. The Machinery Department of our Establishment is under the supervision of THATCHER PERKINS, Esq., for 13 years the Master of Machinery on the Baltimore and Ohio Railroad, and late of the concern of SMITH & PERKINS, Locomotive Builders, Alexandria, Va.

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MANUFACTURERS OF THE

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Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral. For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,
44 Exchange Place, New York,
SOLE AGENTS for the UNITED STATES and CANADAS.

BEERS' 'CAST IRON ENDLESS RAIL,' FOR CITY RAILROAD.

Patented August 24, 1858, and May 10, 1859.



THIS Road is constructed exclusively of Iron, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

ALSO

BEERS' "ELASTIC IRON RAILWAY," FOR LOCOMOTIVE USE.

This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from undulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$8,000 to \$14,000; out of which \$2,000 will be saved on the first cost of equipment, and character of grading. The undersigned is prepared to construct, either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

S. A. BEERS, C. E. Brooklyn, N. Y.

A specimen of these Roads may be examined at 55 Liberty st., NEW YORK.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, July 9, 1859.

RAILROAD IRON.

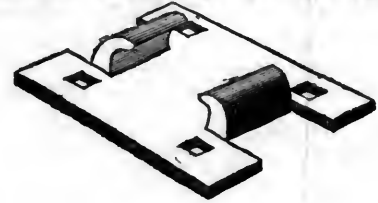
500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.
M. K. JESUP & COMPY,
New York June, 1859. 44 Exchange Place.

NEW YORK RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.
Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "New York Wrought Iron Railroad Chair Company," and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned with the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the Iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

North Carolina Railroad Company,
New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R. Co., etc., etc.

Messrs. M. K. JESUP & CO., 44 Exchange Place, NEW YORK, are the only parties authorized to act as our Agents.

Mr. Jacob Rowz, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

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LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

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Established 1821.

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HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

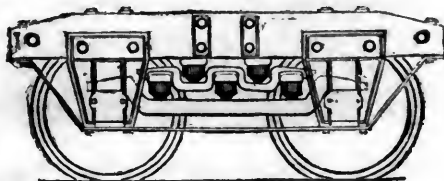
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OFFICE, No. 407 Walnut st.

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THE undersigned, having been appointed Agents for Messrs. BULGOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO, and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

NEW YORK METALLIC CAR SPRING COMPANY,



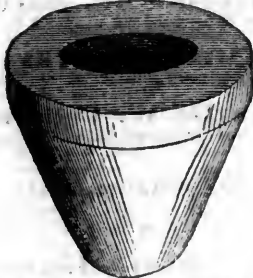
SOLE MANUFACTURERS OF THE
CONICAL VOLUTE STEEL CAR SPRING,
OFFICE, 54 WILLIAM ST., NEW YORK.
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Pres't. Treas'r. Sec'y.

JAMES JEFFRIES & SONS,
MANUFACTURERS OF
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Will be happy to furnish a SET OF SPRINGS to such companies as may wish to try their Durability and Elasticity, by writing us the Length, Width, Curve over all, and the weight which they are to bear.

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MANUFACTURERS of the PATENT ELASTIC CONE SPRINGS for Railway Cars. This Spring is new, and simple in its construction, and possesses superior advantages. It is manufactured from the best quality of India Rubber prepared under the JOLIN Patent, and is less expensive, and at the same time affords more ease, than other shaped springs. It can be fitted to all descriptions of cars without alteration or expense.

Patent Reversible Baggage Check.



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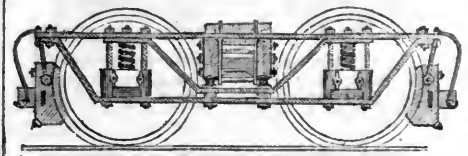


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THESE SPRINGS are now in use on many of the leading Railroads East, South and West. Samples can be examined and Price Lists obtained at No. 5 Gold st., NEW YORK.



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ARE prepared to fill, at short notice, of the best materials and workmanship, orders for Wrought and Cast Iron Work, fitted ready for use, for the building or repairs of Passenger and Freight Cars, complete or in part. A sample wrought iron truck can be seen at our office. No. 5 Gold st., NEW YORK.

We also manufacture—
BEST FAGGOTTED CAR AXLES,
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CAPITAL, \$200,000.

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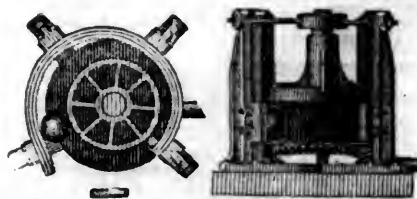
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SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this
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desirous to purchase the Right for one or more of the States.

This Machine is now in successful operation in ten or twelve
Iron Works in and about the vicinity of Pittsburgh, also at
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The time required to furnish a bloom being only about six
seconds, the scoria has no time to set, consequently is got rid
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The iron being discharged from the machine so hot, rolls
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The bars roll sounder, and are much better finished.
The subscriber feels confident that persons who will examine
for themselves the machinery in operation, will find it possesses
more advantages than have been enumerated.

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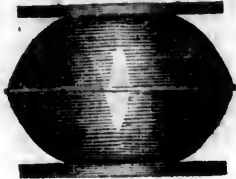
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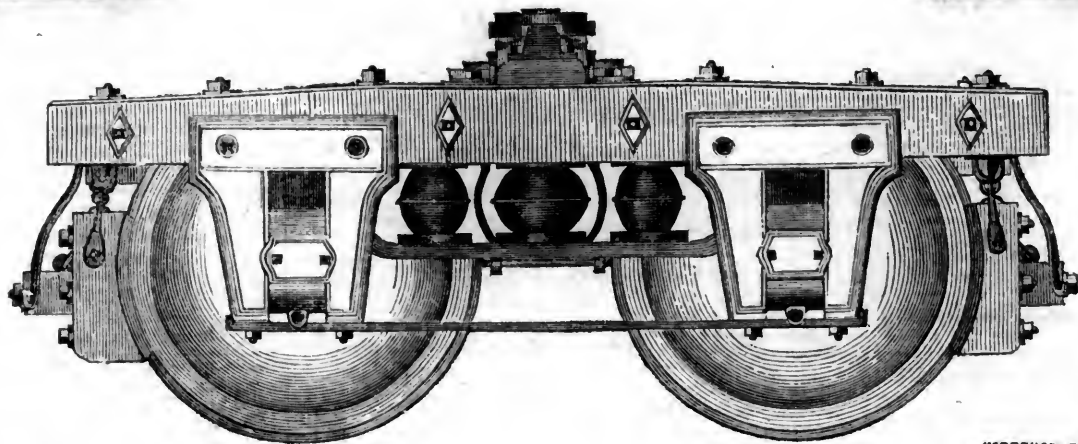
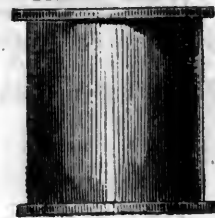


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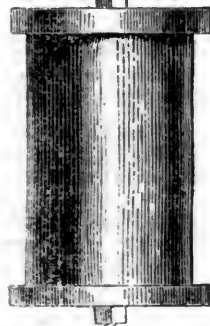
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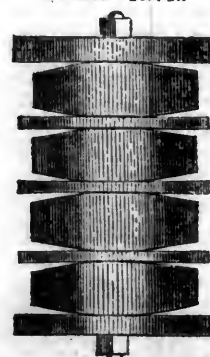
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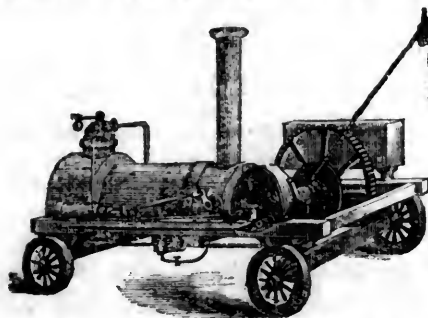
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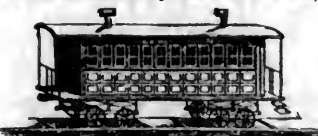


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ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, September 10, 1859.

The Rochester Canal Convention.

The most notable thing about the convention of the friends of the Erie Canal, recently held at Rochester, was the letter sent to it by Hon. Samuel B. Ruggles, a copy of which we subjoin:

GENTLEMEN:—Your invitation to meet you at Rochester on the 1st of September, in the Mass Convention called to consider the measures necessary to replenish the canal revenues of the State, and to protect its commerce from unjust discrimination, has duly reached me; coupled with the request that if unable personally to attend, I should furnish such statements of facts as might be of use to the convention. The brief period intervening before the meeting allows me only time to comply very hastily and imperfectly with your request.

The canal questions now pending in the State are brought within comparatively narrow limits. The inquiry is no longer how the canals shall be finished, for they are now virtually completed—but whether, after expending the labor of more than forty years and taxing the efforts of two whole generations to bring them to perfection, they shall now be abandoned or sold for a nominal price to a private company. As one of the citizen tax-payers of the State, claiming an interest not only in its commercial and fiscal property, but in its public character and standing, I am utterly opposed to such a sacrifice, and for the following among other reasons:

1. The canals, excepting a trifling amount of work yet to be done, are now in full and success-

ful operation—diffusing, to an extent hitherto unequalled, the benefits of cheap and safe transportation.

2. They have thus far cost the tax-payers comparatively nothing; and if wisely and honestly managed may be permanently retained and enjoyed, without imposing any material burden.

3. Their preservation by the State is essentially necessary to the security of its commerce, as a safeguard from the exactions of railroad companies, necessarily controlled by individuals.

4. The State, as owner of the canals, can always afford to keep the price of transit and the consequent burden on commerce, at a rate far below the charges necessary to satisfy a private company.

5. The canals now furnish constant and honorable employment to many thousands of independent citizens, who do not desire or deserve to be reduced to the condition of hired servants or mere machines of a soulless corporation.

6. The main trunk lines, connecting the ocean with the lakes, are of transcendent and ever-enduring importance to the State, in its highest continental relations, enabling it for all future time to regulate and control its vast and all but illimitable commerce with the States of the interior.

7. The exclusive ownership and management by a private corporation of public works so extensive, penetrating and pervading nearly every district of the State, would most unwisely and unjustly concentrate in the hands of a favored combination, a political power wholly at war with our republican institutions and habits, dangerous to our political virtue, and utterly degrading to our public character.

I have not the time to elaborate any of these propositions, but must confine myself to a brief summary of facts bearing on some of them, and drawn from public documents of unquestionable authority. It has become necessary thus to exhibit them, to expose the singular ignorance and infatuation, if nothing more, which have recently induced several of our public journals to assert that the canals have lost their value and importance as channels of trade; that they have become "obsolete," that they "have had their day," and finally, "have outlived their usefulness."

The fundamental error of these assailants lies in assuming that all the products of our varied industry required to be carried to market at railroad rates of speed. In one of the most elaborate of these assaults, the canals are flippantly denounced as unfit "for an age so fast as ours;" forgetting, that while persons may be "fast," the great bulk of their property may and must be "slow." Very possibly it may be vital, as it certainly is characteristic, for a live American to hurry his person at race-horse speed across the continent; but it certainly is not vital, nor in any respect necessary or

expedient, thus to hurry his fuel, his timber, his building material, his food; nor any very large proportion of his merchandise or manufactures. We, therefore, meet the difficulty at the threshold, by asserting that no considerable amount of these commodities requires anything approaching to railroad speed, or any rate of movement exceeding that now attained on the canals.

The superficial observers who have undertaken to pronounce on this subject, evidently have been misled by the sound and glitter and external display of strength and speed on the railway, and have wholly overlooked or forgotten the ceaseless and silent but enormous achievements of the canals, noiselessly but unfailingly working at their side. Enslaved by their single idea, they seem to suppose that because a railway is valuable for certain purposes, a canal is valuable for none; that the two modes of transport cannot co-exist, but that one must necessarily destroy or swallow up the other. The slightest acquaintance with the facts would teach them that each of these organs of commerce has its appropriate sphere; that both are equally needed by a commercial community—the one for speed, the other for economy; that they may be, and should be, harmoniously and profitably worked together—even as the wise and thrifty farmer works alike his horse and his ox, each of them kindly, but each in its proper line of labor.

We need but to look at the canals and railways in this and other States, to see how advantageously they may work together. In New Jersey, the Raritan Canal, notwithstanding the level railroad at its side, transports not only heavy commodities, but by its steam vessels shares largely in carrying light merchandise. In Pennsylvania, the Schuylkill Canal, in spite of disastrous floods to which its river bed is subject, has been steadily gaining for the last three years on the Reading Railway at its side. The tonnage on the canal gradually increased from 1,105,000 tons in 1855, to 1,324,000 tons in 1858; while on the other hand, the tonnage of the railway during that period steadily declined from 2,213,000 tons in 1855, to 1,542,000 tons in 1858.

The Delaware and Hudson Canal now carries annually 1,300,000 tons. Its intelligent officers declare that, notwithstanding their canal is navigable only seven months in the year, nothing would induce them to exchange it for a railroad.

The old canal of the Duke of Bridgewater, "the father of the inland navigation of England," is at this moment successfully and triumphantly competing with the modern railways in its vicinity, for the transportation not only of coal and bulky products, but of the light fabrics of the workshops of Manchester.

Under the present Imperial Government a splendid system of railways overspreads the surface of

France, but nevertheless the transportation on its canals and canalized rivers is steadily increasing.

But why resort to examples beyond our borders, while our own great and unequalled canals are under our very eyes, telling their own story? The most hasty glance at their official tables will suffice to expose the rashness, the folly, the superlative absurdity, if not the wickedness of the assertion, that our canals are unfit for the age, and have outlived their usefulness, and the singular presumption of the claim that rival railroads have taken, or are able to take, their place. To those who remember the wide-spread renown which they won for the State throughout the civilized world, it is equally melancholy and alarming to find respectable journals, from whose well-disposed and patriotic conductors better things were expected, willing to depreciate them as "destined hereafter to occupy but a subordinate place in our State legislation."

For, look, if only for a moment, at the facts. Eight years have now elapsed since the Central Railroad was permitted by law to carry freight in competition with the canal. Possessing ample pecuniary means, and directed by permanent officers of eminent energy and experience, they have spared no expense in putting their road and its machinery in perfect order. The canal, on the contrary, has been struggling through all that period with the difficulties and delays of an unfinished work, so that it never yet has enjoyed the full measure of its capacity or efficiency, and, nevertheless, with all these disadvantages, the incomplete canal carried, of a total tonnage of 4,430,000 tons in 1858, no less than 3,665,000 tons, being more than five-sixths of the whole, while the completed railroad, enjoying all its advantages and powers, was able to carry but 765,000 tons, or less than one-sixth.

It is deeply to be regretted that the railroad company, in its efforts to rival and cripple the canal, should have reduced their charges to a point, rendering it necessary for the State prematurely, and unduly to reduce its rate of tolls. The reduction has greatly aggravated the loss on the 765,000 tons diverted to the railroad, by adding to it a much larger loss on the 3,665,000 tons retained on the canal. The loss of toll on the 765,000 tons probably did not much exceed \$500,000, but the loss on the 3,665,000 tons has fallen but little short of \$1,500,000. But for the permission to the railroad to carry freight, the canal tolls might easily have been made to yield from three to four millions, without prejudice to the commerce of the State; at the rates charged in 1838, the amount on the present tonnage would have exceeded five millions. It was a large and liberal act of the Legislature of 1851 to foster commerce, by placing a rival by the side of the canal, but it has been poorly required in the policy which has thus compelled the State to reduce the revenues of the canal to the present scanty sum of \$2,110,000.

The analysis of the tonnage above exhibited indicates and defines with sufficient precision the portion which in search of high speed will seek the railroad, showing that proportion not to exceed one-sixth of the whole. In fact, it would hardly be possible for a much larger proportion to bear the increased expense of that mode of conveyance. The published returns of the railroad company show the movement of their 765,000 tons to be equivalent to 142,000,000 tons moved a single mile. For that movement the owners of the property moved paid to the railroad company \$3,700,000, being at the rate of 2 66-100 cents per ton per mile.

On the other hand, the movement of the 3,665,000 tons on the canals is shown by the Auditor's report to be equivalent to 564,000,000 tons moved a single mile; for which movement the owners of the property moved paid to the State in tolls \$2,110,000, being less than 4 mills per ton per mile, and to the carriers owning the boats not more than six mills in addition, making the total cost not exceeding 1 cent per ton per mile for the 564,000,000 tons, or \$5,640,000.

Now, what would have been the result to the owners of the property carried, if this whole canal

movement of 540,000,000 tons for the mile had been diverted to the railway? Would or could the company have charged any less rate than that which they were themselves compelled to impose on their 765,000 tons to earn their dividend? But if they had retained those rates, being at 2 66-100 cents per mile, it would have cost the owners of the property carried \$14,100,000, instead of the \$5,640,000 which they actually paid—leaving a clear saving of \$8,560,000 in a single year by using the obsolete canal that had "lost its usefulness," and was "unfit for the age."

We make no personal complaint of the individuals that direct the affairs of the railway or own its stock. It is natural and perhaps commendable for them to strive to aggrandize and enrich to the utmost the immense estate committed to their care; but can it be uncharitable to imagine them willing to get possession of the Erie Canal, the great rival channel of trade—the vast labor-saving machine, which thus keeps \$8,650,000 annually in the pockets of the people and out of the coffers of the company? Cannot the tax-payers of the State perceive that the canal is the only power adequate to keep such a rival within the bounds of moderation? And, knowing this, will they assist in destroying, or tolerate others in destroying this mighty safeguard of our internal trade, or in parting with this palladium of our commercial freedom?

It will, of course, be borne in mind that this \$8,650,000, thus saved yearly, is destined to inevitable increase with the steady and irresistible development of our Western States. The canal tonnage, which in 1838 (when the Legislature decided to expedite the enlargement by borrowing money) was but 1,333,000 tons, steadily and gradually increased, according to the ratio then predicted, until it reached in 1858 3,665,000 tons—having more than doubled in twenty years.

No good reason exists, or can be imagined, why it should not again double in a like period—nor, indeed, for fixing any definite limit to its growth. We see how little the railway has really abstracted after eight years of rivalry. It is not, however, impossible that the demand for high speed, and especially in years of fluctuating markets and commercial excitement, may occasionally increase the proportion of one-sixth now seeking the railway; but embracing a series of years, the general rate of growth of the canal tonnage will not probably be seriously affected. It is possible, indeed probable, that the greater part of the light merchandise may require railway speed; more than half of it has already done so, reducing the amount carried on the canal from 488,000 tons in 1853 to 183,000 tons in 1858. If the whole should be diverted, neither the loss of the quantity nor of the toll it pays, 156,000, would very materially affect the result. The great mass of the heavier products would yet remain. The products of the forest, which in the year 1853 yielded 1,821,000 tons, of which 444,000 tons came from the Western States and Canada, would remain unaffected. Some additional diversion might be made of vegetable food, and yet this item, so far from diminishing under the railway rivalry, has absolutely increased, having been 1,279,000 tons in 1858, against 1,213,000 tons in 1852; and actually exceeded by 187,000 tons the quantity carried in 1847, the year of the Irish famine.

These then are some of the prominent facts which may occupy the attention of the approaching convention. Their careful consideration will doubtless influence, more or less, their action on the momentous questions to be debated there and elsewhere, whether it will be wiser to replenish the canal revenues (which now require for the fiscal purposes of the State, an increase of about \$1,500,000,) by imposing tolls on the Central Railroad, or by raising the existing rates on the canal tonnage, or by a direct tax on the whole property of the State, until the future increase of the canal commerce shall render the tax unnecessary.

It has not been my object or wish, in any way, to anticipate the discussion of these questions in the convention, but merely in compliance with your request to collect and furnish the facts for

more convenient examination. They certainly possess a value in vindicating the importance of the canals as a vital and indispensable organ of commerce, and the paramount necessity of keeping them forever unfettered, and within its public control.

The examination might well have embraced the dangers and evils of intrusting such a power to any private company, however respectable—but the time will not now suffice, and that portion of the subject must be reserved for some other occasion.

With much respect, cordially your friend,

SAMUEL B. RUGGLES.

To Messrs. John Allen and others, Delegates to the Canal Convention.

With regard to the sale of the canals, we suppose it is not seriously proposed by any parties possessing either influence or numbers; so that a discussion on the subject is raising an issue upon a foregone conclusion. But should the canal be sold, even to the Central Railroad, its great rival, and, as some will have it, its great enemy, we believe the result would be advantageous to the people of the State. The road and the canal united would seek to command the traffic between the East and the West, as they are now doing. It must be carried by them at very nearly the cost of movement added to a fair profit, if at all; otherwise, it will seek other routes to other cities. The competition of works outside of the State, is quite sufficient to compel our own to carry at the lowest paying rates. Assuming, therefore, which must be the case, that the railroad and canal would retain their traffic, the seven points made by Mr. Ruggles, with his whole argument, fall to the ground.

But we can go a step further. As individuals are better capable of managing commercial enterprises than a State, it follows that the Erie Canal would be better managed in the hands of the Central Company than it now is, and would, consequently, prove more advantageous to the people. The latter proposition is a necessary sequence of the former. The whole question resolves itself into this—by which party would the canal be best managed; by a State, which has neither soul nor sense, nor human instincts; or by individuals which have all? That works of internal improvement are always *mismanaged* by a State has come to be a maxim. The interests of the people are best promoted by reducing the cost of transportation to the lowest possible limit. Let us have the trade of the West, and our people will find a way to pay their taxes; but we cannot have this trade cut off and pay too. The Railroad Company, by Mr. Ruggles' own showing, have already been the means of effecting a great reduction, and for ought that appears, have made money in doing so. Through the instrumentality of the railroad, the volume of commerce over the route, common to both, has vastly increased. Such being the case, the railroad, and not the canal, should be the popular favorite, as it is the great benefactor. To render it a still greater one, we would give it unrestricted freedom, as a means of reducing the cost of movement between New York and the interior, and benefiting our city and State in an equal degree.

We are confident that Mr. Ruggles is opposed to the re-imposition of canal tolls—yet he leaves it to be inferred that this is still a mooted question. But the day for such folly has gone by. It is useless for the friends of the canal to waste any more

time over their spilt milk. The whole secret of the clamor is in the fact, that, owing to the competition of the railroad, the business of forwarding on the canal has been a losing one for several years. There has been a hope that the profits of former years might be restored by imposing a tax upon the railroad, which would tend in an equal degree to raise the price of freight on the canal. We advise them to wait no longer. The sooner they go to work again, and accommodate themselves to the altered state of things, the sooner will they get relief.

Alabama and Florida Railroad.

This road commences at Montgomery, the western terminus of the Montgomery and West Point railroad, and runs thence in a southwesterly direction through the counties of Montgomery, Loundes, Butler and Conecuh, to the Florida State line, a distance of 115 miles. The report of this company for the fiscal year ending July 1, 1859, was presented to the stockholders at their regular meeting held at Montgomery August 4th. From this we learn that to the 27 miles completed from Montgomery to Mt. Willing, at the date of the previous report, 5 miles more, to Ft. Deposit, were added in October, 1858; 6 miles additional in December of that year; and the remaining 5 miles on the 1st of June last—making 43 miles completed and in operation from Montgomery to Greenville at that date: being an average throughout the year of 27 miles. Upon this length of road and during the year ending July 1, 1859, there were transported 22,528 passengers and 19,038 bales of cotton. The receipts from which were:—

From passengers	\$24,775 33
" freight and mail pay	34,654 84

Making a total of	\$59,430 17
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And the expenses were:

Maintaining road	\$10,901 49
" rolling stock	13,543 27
Operating road	12,626 11
	37,070 87

Leaving a net income of	\$22,359 30
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This result is considered very encouraging, and warrants the expectation that for the current year the receipts will show a net income, after paying all expenses, of not less than \$60,000.

Of the remaining 72 miles between Greenville and the Florida State line, 50 are graded and ready to receive the track, leaving but 22 miles of unfinished grading on the whole road—of these 12 are in Butler and 10 in Conecuh counties. The contract requires the completion by the 1st of January next, of all except four sections in the lower part of Butler county, where it is proposed to unite the tracks laid from the direction of Montgomery and Pensacola respectively.

The company recently purchased, upon favorable terms, 600 tons of American rails, which are now being shipped to Charleston, and every effort will be made to complete nine miles more south of Greenville by the 1st of November. Negotiations are also pending for 2,000 tons Welsh iron, to be delivered one-half in Charleston, and the other half in Pensacola, by or before the 1st of January next.

The Alabama and Florida railroad of Florida, with which this road unites at the State line, and through which it proposes to reach Pensacola in a

further distance of 25 miles, is making good progress. They had at last advices, 13 miles of iron laid down, and expected by October, to open to the 21 mile station. Relying on the completion of this road to the Alabama State line by the 1st of April next, the Alabama company deem it advisable to import only about 1,600 tons more through the Atlantic ports—contracting for the 4,000 tons, required to lay through Conecuh county, to be landed in Pensacola. Could the iron now be received through Pensacola, track-laying might be commenced at once at the Florida line, and prosecuted without interruption to a connection with the track from Montgomery.

The cost of completing the 43 miles to Greenville, and of grading 15 miles south of that point was	\$926,058 96
Add balance of interest paid on loans to July 1st	55,010 49
Locomotives and cars	72,365 00
Materials for car factory and machine shops, tools, etc.	9,867 30
Depot building at Montgomery	22,976 38

Total cost of road and outfit.	\$1,086,278 13
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The chief engineer has submitted the following estimate of the amount of money now required to complete the road:

Construction—not including iron	\$220,000 00
6,000 tons rails delivered at \$55 per ton	330,000 00
Spikes and plates	30,000 00
Locomotives and cars	50,000 00

Making a total of	\$630,000 00
To which add present amount of floating debt over and above assets	70,000 00

And the sum of	\$700,000 00
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will be required to complete and equip the road.

To meet this the company have \$520,000 land mortgage bonds, which will no doubt be sold at par—leaving the company with a floating debt of \$180,000, and a bonded debt of \$1,000,000, with a first class road of 115 m. in operation, having a complete outfit, and a domain of 394,437 acres of land to be disposed of. These lands are estimated to be worth on an average \$3 per acre, the proceeds arising from the sale of which, if judiciously disposed of, will in due time provide for the payment of the bonded debt.

According to the statement submitted, the road will cost, when completed and equipped, about \$2,000,000, represented as follows:

Capital stock	\$820,000 00
Bonds secured by mortgage of road and lands	1,000,000 00
Floating debt	180,000 00
	\$2,000,000 00

It will be seen by the annexed statement, that the company had outstanding, on the 1st of July, \$450,000 of 8 per cent. bonds. In reference to the recent additional issue of \$550,000, the President says:

After the exhaustion of the assets available for the prosecution of the work, amounting to \$206,743 76, the Board had no other means to make available but the lands granted by Congress, and after mature deliberation, they finally concluded to issue \$550,000 of bonds, and secure them by a mortgage on the lands and a second mortgage on the road.

[Here follows a series of resolutions authorizing the issue of coupon bonds to the amount of \$550,000, bearing date May 20, 1859, the interest thereon to be 8 per cent., payable on the 1st of January,

1860, and quarterly thereafter, and the principal reimbursable on the 1st of July, 1869. The payment of the bonds at maturity, and the interest thereon as it may accrue, to be secured by a mortgage on the 394,437 acres of land granted to the company by government to assist in building the road, and also by a second mortgage on the road and property of the company—a first mortgage having already been executed as security for the endorsement by other companies of the bonds of this company for \$300,000.]

In accordance with the directions given to me by these resolutions, I executed the mortgage and proceeded to issue the \$550,000 of 8 per cent. bonds, which I have placed in the market for sale, and have great satisfaction in reporting to you that they have been favorably received, and that up to this time I have sold \$30,000 at par.

These bonds are safe and good beyond all doubt, offering to capitalists one of the very best investments that can be made in securities of this character. The total cost of road and outfit, and the estimated value of lands, show an aggregate of three millions of dollars, which is pledged for the payment of one million of dollars of bonds maturing from 1863 to 1869. If a speedy sale of these bonds can be made so that the whole amount may be made available as early as the 1st of July next, I have great confidence in seeing our connection with the Gulf completed by the close of the year 1860.

GENERAL STATEMENT.

Amount of capital stock paid in	\$539,396 74
Mortgage bonds due in 1867	300,000 00
Convertible bonds due in 1863, guaranteed by Directors	150,000 00
Land mortgage bonds due in 1869	23,500 00
On bill and notes payable within 6 months as per bills payable account	101,205 14
On open accounts as per general Ledger	13,072 72

	\$1,127,174 60
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Total cost of road and outfit, (as above)	\$1,086,278 13
90 acres land at Montgomery	5,050 00
Due in bills and notes per general Ledger	4,876 75
Due by Georgia R. R. Banking Co.	7,215 21
" " Ala. & Fla. R. R. of Florida.	300 00
" " Mobile Stage Line	3,319 00
" " open account for stock subscription unpaid	18,594 27
Cash in treasury	1,541 24

	\$1,127,174 60
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The officers are:

CHARLES T. POLLARD, *President.*
SAMUEL G. JONES, *Ch. Engineer and Gen. Supt.*
H. B. LITTLEPAGE, *Sec. and Treas.*

Long Island Railroad.

The map of the extension of the Long Island Railroad from Jamaica to Hunter's Point has been filed in the County Clerk's office. The new road avoids the Flushing road, and merely crosses it at Winfield, bearing north to the Shell road, which it crosses at the foot of Bett's Hill, thence to Lawrenceville, and thence bearing west through an easy grade to Dutch Kills, where it debouches near the new Hunter's Point avenue, running nearly parallel with the aforesaid avenue to the Thirty-fourth street ferry.

Baltimore and Potomac Railroad.

This company have in contemplation a change in the southern terminus of their route. It has heretofore been intended to terminate the road at Smith's point, opposite Aquia creek. It is now proposed to make the terminus of the road at a point on the Maryland side of the Potomac, opposite Pope's creek, in Virginia, and connect by a ferry with a branch of the Virginia Central Railroad, provided authority to construct such branch

road can be obtained from the General Assembly of Virginia.

New York and Erie Railroad.

LONDON, Aug. 12, 1859.

This road having passed into the hands of a Receiver, it may be interesting to your readers to be made acquainted with its workings since the last Committee of Investigation, of which Mr. Moran was Chairman, reported thereon—October 21, 1854. The following statement and deductions therefrom, afford some portion of the necessary information. They were made to a few bondholders who met at my office on Monday, the 8th inst., and it is their opinion, as well as that of several persons largely interested in the company, who have been consulted, that we should know more fully the capabilities of the road, before any attempt is made to re-organize its affairs.

The first statement shows the receipts and payments on account of the company, from 1855 to 1858, to have been:

Receipts in 1855.....	\$5,488,990
" 1856.....	6,349,050
" 1857.....	5,742,606
" 1858.....	5,161,616

\$22,732,262

Transportation expenses:

1855.....	\$2,625,744
1856.....	3,101,053
1857.....	3,844,812
1858.....	3,729,200

\$13,300,809

Additional expenses, including taxes, rent of other railroads, losses on steamers, fuel burned, road debts, and other charges on income:

1855.....	\$610,682
1856.....	842,782
1857.....	550,891
1858.....	612,688

2,417,018

INCREASE OF CAPITAL ACCOUNT.

Capital acc. Sept., 1854...	\$35,150,628
Less assets.....	1,712,195
	\$33,438,433

Capital account

Sept., 1858...	\$39,079,086
Less assets..	3,992,192
	35,086,894

Increase.....\$1,548,461

Required to put road in order, Sept., 1857...	\$1,831,425
Est. expenses '58	1,081,425
	750,000

Profit.....	2,298,461
	4,715,979

\$22,732,262

The interest upon the First, Second and Third mortgages for 4 years being \$3,640,000, little more than \$1,000,000 is left for four years interest upon over \$10,000,000 of unsecured bond debt. Therefore the road cannot be said to have earned much more than the interest upon the first three mortgages.

From the 30th September, 1858, to the 30th June, 1859, the revenue is represented to have been \$3,316,044, and the expenses are said to be \$2,308,527; but as the passenger and freight rates for 6 months were greatly reduced in the severe competition with the New York Central; and comparing the estimated revenue with that of 1858, we must wait the receipt of the detailed traffic charges, before we admit the correctness of the es-

timate. The charge for maintenance of way in 1855 was \$0.164,169 per train mile; but in 1858 \$0.353,378 per train mile; and this multiplied by 13,000,369, the train mileage of 1858 shows an increased expenditure in 1858, over that of 1855, of \$569,086. Again the expenditure for repairs of engines and cars in 1855 was \$0.123,159; but in 1858 it was \$0.296,821 per train mile, making an increased expenditure in 1858 of \$520,623. Over and above the usual charges for working an American railroad, \$326,300 has been expended in reinstating the road and the rolling stock in the same condition as in 1854. The operating charges, which in 1855 were \$0.546,533, increased in 1858 to \$0.612,843 per train mile, showing an increased charge upon the business of 1858 of \$199,020.

The experience of the New York and Erie compares unfavorably with that of the New York Central, the receipts and expenditure of which, for the same years, were:

Receipts, 1855.....	\$6,563,581
" 1856.....	7,773,069
" 1857.....	8,027,251
" 1858.....	6,528,412
	\$28,892,313

Working expenses—

1855.....	\$3,401,455
1856.....	4,097,867
1857.....	4,453,515
1858.....	3,687,292

\$15,440,129

Int. bonded debt 4 years..	3,800,000
Div. 8 per cent. per annum on stock.....	7,678,256
	26,918,385

Surplus.....\$1,973,928

The increase of capital from the 30th September, 1854, to 30th September, 1858, was \$3,616,221, of which \$1,505,778 was for new engines and cars added to stock; and since 1854 a considerable portion of double track has been laid. But if all increase of capital other than for rolling stock be charged to revenue, the road has yet earned the dividend paid, and the company has no floating debt.

To explain the difference between the two lines, a comparison was given of the charges upon each, from 1855 to 1858, per train mile, for—

	Erie.	Central.
Maintenance of way..	Cts. 2.412,443	Cts. 3.010,441
Rep's of eng's, cars.	2.255,437	2.140,598
Running expenses...	6.121,780	5.420,580
	\$1.078,666	\$1.057,161

The difference between the two, multiplied by the mileage, showing an increased outlay on the Central of \$740,830 for maintenance of way. An increased outlay on the Erie of \$138,581 for repairs of engines and cars. And an increased outlay on the Erie of \$868,682 for running expenses. But as the Capital account of the Central does not show any additional charge for each engine and car, the cost of repairs is fairly carried to Income account, provided the rolling stock has been maintained in proper order. And, as the Central is a better graded road than the Erie, and as the condition of the rolling stock has deteriorated on the Erie, notwithstanding the increased charge, it follows that the estimate to put the road in order is not excessive, and that the Central can work cheaper than the Erie. The earnings of the two roads per train mile, also compare unfavorably for the Erie, being—

	ERIE.	CENTRAL.
	Per train mile.	Per train mile.
Earnings.		
1855..	\$5,488,990 1.747,300	\$6,563,581 1.958,100
1856..	6,349,050 1.988,340	7,773,069 2.187,030
1857..	5,742,606 1.881,170	8,027,251 2.014,700
1858..	5,161,616 1.716,420	6,528,412 1.779,000

—giving 1.4326 in favor of the Central, which sum multiplied by the train mileage, shows a difference of \$2,174,873.

Now the Central and the Erie are two great competing lines for western traffic. The Central by charter cannot charge more than two cents per mile per passenger, while the Erie has gained the reputation of being a low carrying freight line. Therefore, in competition, the Central reduces freight rates below the ordinary charges of the Erie, which in retaliation carries passengers from point to point at less than the Central. For some time, and up to June last, the Erie carried passengers from New York to Buffalo for \$5, or a little over one cent. per mile. Thus, each has been injuring the other, the Central only saving itself by the favorable character of its grades and the smaller length of line between water carriage.

The New York Central directors do not supply particulars of "through" and "way" traffic, but the general earnings have been as follows:—

1857.	Per mile.
Passengers carried at \$0.119,620.....	\$3,147,569
Cost of carrying at 0.018,605.....	2,184,226

	Profit.	\$963,343
1858.		
Passengers*carried at	\$0.018,609.....	\$2,532,607
Cost of carrying at	0.011,836.....	1,610,863

	Profit.....	\$921,744
1857.		
Freight (tons) carried at \$0.031,254....		\$4,559,214
Cost of carrying at .. 0.015,556....		2,269,288

	Profit	\$2,289,926
1858.		
Tons of freight, carried at	\$0.025,932..	\$3,700,607
Cost of carrying at....	0.018,150..	1,876,429

1857.	Profit.....	\$1,823,878
And the earnings of the Erie were as follows:		
1857.	Per mile.	
Thrh'g pass'gers carried, at \$0.019,843	\$603,395	
Way do.	0.023,837	1,021,115

		\$1,624,510
Cost of carrying.....	\$0.021,603	1,580,406
1858.	Profit.....	\$44,104

1858.	Thrh'g pass'gers carried, at \$0.019,169	\$449,071
Way do.	0.024,828	840,061

		\$1,289,132
Cost of carrying.....	\$0.024,618	1,409,570
Loss.....		\$120,438

1857.	Through goods carried at..	\$0.021,847	\$2,121,286
Way do.	do.	0.025,547	1,778,023
Other earnings	0.001,312	218,784	

		\$4,118,093
Cost of carrying, at \$0.015,479		2,580,179
1858.	Profit.....	\$1,537,914

1858.	Through goods carried, at \$0.018,436..	\$2,145,323
Way do.	do.	0.031,262.. 1,548,509
Other earnings do.	0.001,016..	168,649

		\$3,862,481
Cost of carrying, at \$0.015,662		2,598,316
Profit.....		\$1,264,165

The profit upon the through freight for 1858 being \$440,996, and upon way or local freight \$823,031, the difference between the total of these sums and \$1,264,165 being the loss upon reduction.

These figures will enable bondholders, and others interested in the Erie, to judge of the system of management adopted by the Board. It will be seen that the passenger traffic of 1857 as a whole was not worth the trouble of conducting, but that the local traffic is profitable; and although this portion of the traffic of the line, which cannot be diverted from the company, paid better in 1858 than 1857, yet competition entailed a loss on the entire passenger traffic of \$120,438. Also that although Mr. Moran in his report, in 1857, condemned the reduction of fares as causing the disastrous position of the company, yet the receipts per ton of goods per mile was reduced from cents 2.1847, in 1857, to cents 1.8436, in 1858.

Now it is to the interest of the bondholders generally that the working of this road be better inquired into, and a stop put to the ruinous follies which have rendered this really valuable road unproductive. The company has always been in difficulties at short intervals, and its true position has not been frankly and fairly exposed. All promises of a better future have hitherto ended in disappointment, and confidence is lost in all financial statements emanating from the company; not so much because facts are not given, but because from the form in which the accounts are referred to in the reports, the true financial position of the company is most difficult to be understood. The company, to be what it can be made, requires re-organizing. The power of management is with the shareholders only, and the price of the shares being 7 per cent. less, their interest in the undertaking is very small. The bondholders have no voice in the management, and can only hope to influence the directors by critical notice of the proceedings of the company, which now labors under many difficulties from the excess of bonded debt. Some change is necessary to ensure future prosperity, but all arrangements to be effective must be founded upon sure information.

WILLIAM LANCE.

26, THROGMORTON STREET.

The first condition to an intelligent discussion, in reference to the affairs of the Erie railroad—something like accurate data—is wanting. The result shows that for years, the road has been in most incompetent hands; of parties utterly ignorant of the duties appertaining to the management of a railroad and, at the same time fully engrossed with their own affairs. For two years past there has been no one intimately connected with the road who could have supplied the necessary information, had he been so inclined. We know nothing, except from general report, of the condition of the road, or rolling stock, and but little in reference to its business. All attempts to reduce its value to anything like a definite quantity, with the information existing, is utterly impossible. On most roads, as upon the Central for instance, there seems to be, to a certain extent, a law pervading its operations, so that results for the future are fairly inferable. But nothing can be predicated of the Erie, save that all expectations are certain to be disappointed, that every

plan of relief, even though carried out, will probably leave the road in greater embarrassment than it found it.

Still, it is everywhere felt that this constant ill fortune is undeserved and unnecessary. In the first place the road earns a very large sum, averaging for four years past, something over \$5,500,000, or fully 20 per cent. on the debt of the company. Now it would not seem a difficult task to save one-third part of this sum, leaving two-thirds for expenses. We still believe such a result possible, though all efforts to realize it have failed.

There have always been some great leaks which have absorbed the earnings, of so mythical and shadowy a nature, that the public could never understand or fathom them. Take this matter of *ballasting* which is now the great bugbear. In the report of the company published in 1853, we were substantially told that the road was *completed*. In the Report for 1855, it was stated that the ballasting, or so much as was necessary to be done, was completed. In the report of 1857, we were told that a large portion of the road was *without* ballast, and that 1,000,000 cubic yards, at least, were required to perfect the track. Detailed estimates of the amount required for each division were given. The total cost of this work was put down at \$250,000. Here was an unexpected outlay, but it was felt to be a cause of satisfaction that this matter had at last been reduced to a determinate quantity, and that when the sum named should be expended, this uncomfortable spectre would, at last, be laid. But there has been no such lucky escape, notwithstanding the enormous sum of \$1,073,308 was expended upon the road the past year, and \$946,900, exclusive of iron used for repairs, a sum sufficient to have maintained the track and have completed the ballasting. But this is as far as ever from being accomplished, and may be an open account, and a running sore for years to come. The report for 1858 took very good care *not* to tell what was done in this matter, but shuffled over it in a most disgraceful manner, leaving at the same time the inference that a larger sum would be required for track the present year than the last. Till we saw the report, we supposed Mr. Moran, having the estimate of the previous year before him, would have told us how much had been done, and how much remained to be completed. But he has disappointed his friends in more particulars than one: a great many other matters are left just as indefinite as this one of *ballasting*.

The first step to be taken is to ascertain the condition of the road and rolling stock, and the next to get some competent parties to take charge of them. The last is the most difficult undertaking. Unless the Erie be an exception to all other roads, it can still earn the interest on its indebtedness. We are confident it is no such exception. It cannot be managed in Wall street, nor by bankers and brokers, nor by merchants devoting their whole time to their own affairs. Why the road has not paid, it is easy for a person familiar with its management to see. To go on the old way is utter ruin. Let the unsecured bondholders take measures to get at the actual condition of the road, and then if possible commit it to the hands of capable parties to carry it on. Not a moment should be lost in taking it out of the hands of the law. As matters stand, the

power that controls the road is coupled with no interest whatever in its success. Without such a motive at the bottom, no success can be expected, and unless the road is soon raised from the slough in which it lies, and placed on its feet, the *vis inertiae* it will acquire, will resist all efforts to raise it. Its huge carcass will only suffice for food for loungers, law offices, and plunderers of one kind or another.

Journal of Railroad Law.

LIABILITY FOR ACCIDENTS.—PRESUMPTION AS TO NEGLIGENCE.

The case of *Curtis vs. the Rochester and Syracuse Railroad Company* recently decided in the New York Court of Appeals drew in question the legal presumption as to negligence in cases of accidents on railroads. Suppose an accident happens, and there is no evidence as to its cause; does the law presume that if proper care had been taken everything would have gone safely, therefore, there was probably negligence, or does it presume that every servant of the company did his duty, therefore, the inquiry must have resulted from inevitable accident.

The case we mentioned was brought to recover for injuries suffered by plaintiff while traveling as a passenger on defendants' road. It appeared on the trial that the train in which plaintiff was, ran off the track at a switch. The proof left it uncertain whether the switch was deranged, or the accident resulted from the spreading and breaking of the rails. There was no evidence that there was any visible defect in the apparatus prior to the accident. The plaintiff had a verdict, and the defendant appealed on the ground, the judge erred in charging the jury. What he said to them is stated in the opinion of Judge Selden, of which the following is the substance, omitting some citations of authorities.

SELDEN, J.—The judge charged the jury in this case, "that the fact of this accident occurring was of itself presumptive evidence of negligence on the part of the defendants." If, by this, the judge is to be understood as saying that, in cases of this kind, evidence of the mere happening of an accident, resulting in injury to the plaintiff, without proof of any of the circumstances under which it occurred, establishes, *prima facie*, the charge of negligence. I am not prepared to assent to the proposition. Carriers of passengers are not insurers; and many injuries may occur to those they transport for which they are not responsible. They are, for obvious reasons, held bound to exert the utmost care and vigilance to secure the safety of the passengers; and are responsible for the slightest negligence.

But injuries may often happen through the fault or misconduct of those whose acts are in no way chargeable to them. In traveling in stage coaches, upon ordinary roads, such injuries would be very frequent, because, in such cases, the proprietors of the coach do not construct the roads, nor control those who travel upon them. For a large portion of the accidents, therefore, which result from defects in the road, or collisions with other vehicles, the proprietors would not be liable.

The carrier, however, is in all cases bound to provide a safe and secure carriage for the transportation of the passengers; and nothing can ex-

empt him from his responsibility, but the existence of some latent defect, which no reasonable degree of foresight could guard against: and this obligation extends to every species of appliance belonging to the carrier and used by him in the business in which he is engaged. Consequently, whenever it appears that the accident occurred through some defect in the vehicle, or other apparatus used by the carrier, a strong presumption of negligence arises, founded upon the improbability of the existence of any defect which extreme vigilance, aided by science and skill, could not have detected.

The cases in which the carrier would be exempt from responsibility would be far less frequent where the transportation is upon railroads than were it is upon common roads, because railroad companies have the entire control of the track, and of all engaged in its use. Still, accidents may occur from a multitude of causes, even upon a railroad, for which the company is not responsible. If obstructions are placed, by strangers, upon the road, either through accident or design, the company is not responsible for the consequences, unless its agents have been remiss in not discovering them. The straying of cattle or horses upon the roads, causes numerous accidents which are not chargeable to the company. If a drunken man falls asleep or a deaf man incautiously walks upon the road, in consequence of which a train is unavoidably thrown from the track, and as a passenger is injured, he is without redress as against the company. So if a careless driver, in crossing a track, fails to get his vehicle out of the way of an approaching train. How, then can it be assumed, without proof of any sort, when an accident has occurred, that it was caused by some carelessness on the part of the agents of the company, and not by any or either of these numerous causes?

In regard to the carriages and other apparatus used for the carrying of passengers, railroad companies are under the same obligation as that already alluded to in the case of the carrier upon common roads. They make and own their road, and have the exclusive control of that, and of every part of the machinery and apparatus used in connection with it; passengers have no means of knowing nor any power of remedying its defects, but are forced to trust their lives and persons to the care and watchfulness of the agents of the company. The latter, therefore, is bound to see that the road and all its appurtenances are in perfect order and free from any defect which the utmost vigilance, aided by the highest degree of knowledge and skill, could discover or prevent.

Consequently, whenever it appears that the accident was caused by any deficiency in the road itself, the cars or any portion of the apparatus belonging to the company and used in connection with its business, a presumption of negligence on the part of those whose duty it was to see that everything was in order, immediately arises; it being extremely unlikely that any defect should exist of so hidden a nature that no degree of skill or care could have foreseen or discovered it.

If it be said that upon the same principles upon which negligence is presumed in such a case, it should be presumed in every case, on account of the high degree of improbability that a serious accident of any kind should occur, without some

degree of negligence; the answer is plain; and to present this distinction is the object of most that has been said. There may be a presumption of negligence in every case; but where nothing is known in regard to the cause of the accident, the negligence may as well have been that of some one residing in the vicinity of the road, or of some stranger, of whom numbers come in contact with it every day, as of any of the employees of the company; while if it appears that the mischief has resulted from a defect in some part of the apparatus of the company, the negligence, if any, must have been that of some one for whose acts and omissions the company is liable; it being well settled that the carrier is responsible for the negligence, or want of skill, of every one who has been concerned in the manufacture of any portion of its apparatus. (*Hegeman vs. The Western Railroad Company*, 3 Kem., 9; *Ware vs. Gay*, 11 Pick., 106; *Ingalls vs. Bills*, 9 Metc., 1.)

The cases in which it has been said that a presumption of negligence arises from the mere proof that an accident has occurred, will appear, if examined, not to conflict materially with these principles; and some of them are, I think, illustrative of the distinction just suggested.

It does not follow from what has been said, that the judgment in this case is to be reversed for error in that part of the charge referred to. The very first witness called by the plaintiff upon the trial, proved enough of the circumstances of the case to warrant the presumption of negligence. It was clear from his testimony that the accident was caused by some defect in the track, and in all probability by the misplacement of the switch. It was material, however, whether it was this, or the spreading of the rail, as the company sought upon cross-examination to show, which threw the train from the track. In either case, the presumption of negligence would arise.

The judge was fully warranted in instructing the jury, that the occurrence of the accident, under the circumstances disclosed by the evidence, authorized the presumption of negligence. Did he do more than this? He did not say to the jury, in the language of Judge Bell, in *Laing vs. Colder*, that "the mere happening of an injurious accident" raises a presumption of negligence; but his words were, that "the fact of this accident occurring," was presumptive evidence, &c. The effect is attributed not to any and every accident, but to this particular accident. A verdict like this, sustained as it is by ample evidence, ought not to be disturbed by a construction which would make the charge a mere abstraction, not called for by the exigencies of the case, provided any other interpretation is admissible. There is no reason to suppose that the jury were misled. They were carefully instructed that if the injury was the result of pure accident, without any neglect of the defendant, the plaintiff could not recover; and under the view which has been taken, the charge, so far as the exception under consideration is concerned, may, I think, be properly sustained.

Dayton and Western Railroad.

The following gentleman have been elected Directors of this company:

Jonathan Harshman, V. Winters, H. L. Brown, R. R. Dickey, Henry Hermann, R. W. Steele, J. D. Phillips, Dayton; E. C. Frost, E. F. Drake, Xenia; J. W. Owens, Robert Brown, J. W. Kirk, Cincinnati; S. Brinley, Brinley Station,

Williamsport and Elmira Railroad.

The earnings of this road for the year ending March 31, 1859, were:

From freight.....	\$112,741 12
" passengers	61,788 37
" other sources	17,441 09
	\$191,970 58

And the expenses were—

Repairs of road.....	\$24,289 60
" engines	6,658 96
" cars	5,361 73
" bridges	1,481 11
" buildings, etc..	485 93
Tools and machinery in shops.....	387 32
Incidentals and salaries...	2,559 06
Taxes	1,092 30
Fuel, cost and labor.....	11,200 00
Conducting transportation,	26,669 50
Oil, waste and tallow.....	3,868 53
Loss and damage	311 82
General superintendence..	2,560 19
Miscellaneous	8,786 20
	95,662 25

Leaving net earnings.....\$96,308 33

To which add profits on repairs done for other companies.....\$3,884 74

One-half president's salary paid by C., W. & E. Co....	2,500 00
	6,384 74
	\$102,693 07

Disbursed as follows:

Coupons first mort. bonds, \$37,730 00	
" second " 700 00	
" chattel " 12,041 66	
Interest acc't for balance of interest unfunded...	12,599 18
Office expenses, salaries, counsel fees, stationery, printing, etc.	10,937 06
Insurance.....	2,109 36
Sundries.....	697 76
	76,814 98

Balance to credit of construction acc't, \$25,878 09

The annual report of the company, from which the above is compiled, and which was presented to the stockholders at their annual meeting held on the 2nd of May last, states that "during the year the managers have successfully carried out the programme laid down in their previous report, and approved at the last annual meeting, of applying the surplus income of the road to the extinguishment of the floating indebtedness of the company.

With the exception of the first mortgage coupons maturing in January, which were promptly paid, and the discharge of some small claims for back coupons, for which suits were pressed by a few dissatisfied holders, the receipts have been faithfully appropriated, first to the payment of the current expenses, and afterward to the reduction of the debt.

The loans and notes of the company secured by its chattel mortgage bonds are now nearly all discharged, and the bonds have been mostly delivered to the holders of the unsecured indebtedness, who subscribed for them at par, under the arrangement of last year.

The result has been most satisfactory to the managers, and permanently beneficial to the interests of all concerned, both bond and stockholders. At the date of the annual report of May, 1857, the amount of bills payable, including the postponed debt, was \$477,832 01, and at the date of last year's report it was still about \$350,000. By the annexed statement it will be seen that the whole amount of bills payable of the company, on April 1st, 1859, was \$161,272 19, and at the date of this report, this amount has been further reduced \$10,000, leaving only about \$150,000 of bills payable outstanding.

When we take in view the fact that a very large

portion of these bills payable are for materials on hand, for the track and shops, and for oil and fuel in constant use, a supply of which it is the truest economy always to purchase and distribute along the line in advance of immediate requirements, and the liquidation of which is provided for in that portion of the subsequent cash receipts, appropriated to the operating expenses of the road, it will be seen that the finances of the company are assuming a solid and satisfactory position."

In considering the business of the past year, the managers call attention to the report of the superintendent as to the various influences which affected the income of the road.

"The general freight shows a large increase, owing to the improved arrangements with connecting roads for the receipt and transfer of produce and merchandise—whilst, on the other hand, the iron freights have fallen off, in consequence of the general depression of the industrial interests of the Northwest; and the universal disposition among the railroads to wear out their old rails and machinery had especially caused a great, though temporary, decline in the consumption and transportation of rolled and manufactured iron.

The average rates charged for passengers, and per ton on freight, have not fallen off nearly so much as on many roads the past year, being on freights, per mile, per ton 2.28 cents, against 2.32 cents last year, including coal and lumber, our lowest freights; and 2.56 cents per passenger, per mile, against 2.66 cents last year.

The number of passengers transported has only fallen off 571—there having been the present year 46,196 through and way passengers safely carried on the road.

It is, however, in the coal freights that the greatest decline has occurred. This was owing partly to the ruinous low prices for coal, which ruled during the past year in the Northwest, and which the managers were unwilling unduly to encourage by pressing the trade.

But it was mainly owing to the opening of the Northern Central road, which induced a temporary diversion of a great portion of the coal formerly transported north; and which, naturally, every influence was used to turn southward from Sunbury, to swell the freights of the Baltimore road."

In reference to the other connections of this road the report says:—

"The perpetual contract between the Sunbury and Erie and Catawissa companies, under which for so long a time the twenty-eight miles from Milton to Williamsport have been operated successfully and profitably to all the interests concerned, is one which, in the nature of things, will always prove mutually advantageous and free from embarrassment.

By the route of the Quakake road, in which the Sunbury and Erie company are largely interested, the Catawissa company have opened a New York line, which, with the arrangements made with the Lehigh Valley and New Jersey Central roads, will always hereafter provide the shortest and only legitimate outlet for the lake trade over the Sunbury and Erie road, and the lumber and local trade from Lockhaven and Williamsport to New York, as well as a large trade from Buffalo and the Northern lakes over our road.

This connection also opens, by the North Pennsylvania road, a route to Philadelphia, on which freight is beginning already freely to move in addition to the established line by the Reading railroad.

If the Sunbury and Erie company would yield to our urgent appeals to extend this contract of the Catawissa company from Milton twelve miles south to Sunbury, from which point all freight and passengers could be taken northward to Milton, and thence, with the New York and Philadelphia trains to Williamsport and Elmira, the southern traffic and travel would be well accommodated at Sunbury, and the Northern interests, freed from the influence of Southern competition, would,

from our close and peculiar connection with the Catawissa company, be established on a permanent foundation.

The importance of this change becomes more apparent, in view of the early opening of the line to Lock Haven. The Catawissa company having leased the Tyrone and Lock Haven road, which is to be opened by August or September of the present year, the vast deposits of the Snow Shoe Gas Coal would thus, under a friendly operation of the intervening link from Lock Haven to Williamsport, flow northward to Elmira for the supply of the gas works in that place and for distribution among the flourishing cities and towns of central and western New York.

The approaching opening of the Catawissa coal lands at the junction of the Quakake railroad perhaps constitutes one of the most important features of the ensuing year's coal business. Contracts have been made for the shipment of lump coal from these mines so early as September of the present year, and the parties who have charge of the sale of this coal have agreed, in advance of that opening, to furnish from other sources, a large supply of Lehigh coal for the Northwest market, at a temporary loss to themselves, in view of their early reimbursement by the Catawissa tract.

During the past year a most valuable contract has been signed between this company and the Buffalo, New York and Erie company, by which that road will probably hereafter constitute our principal connection with Buffalo and the Northwest.

Although the freight receipts of the fiscal year show a falling off from those of the previous twelve months, yet this deficiency all occurs in the first six months of the year, the receipts for the last six months showing an increase of \$28,484.24 over those of the corresponding period of the previous year, and this increase will undoubtedly continue, and steadily advance, until the prosperity of the road is fully established."

GENERAL STATEMENT.

	DR.
Capital stock	\$1,500,000 00
First mortgage bonds	1,000,000 00
Second do.	700,000 00
Chattel do.	495,000 00
Ten per cent. bonds	11,000 00
First mortgage scrip	60,715 13
Second do.	45,805 33
Chattel do.	49,452 27
Liabilities—	
Bills payable	\$161,272 19
Due bills for labor	17,572 85
Loans	78,245 77
Pay-rolls and vouchers	21,944 60
Debts due by the comp'y	7,911 97
	286,947 38
	\$4,148,920 11

	CR.
Construction account	\$3,482,374 12
Elmira basin property	80,317 15
Williamsport basin property	44,529 32
Williamsport shop	43,460 91
Locomotive engines	150,315 84
Cars	230,531 59

	Assets—
Cash on hand	\$2,512 83
Freight and toll bills due the company	3,980 62
Stock and bonds	41,615 23
Telegraph & patent rights	9,219 51
Materials on hand	21,416 16
Debts due the company	32,551 75
Discount on sale of bonds, 5,360 91	
Philadelphia office furniture	681 17
	117,338 18
	\$4,148,920 11

The officers of the company are:—

President—THOMAS KIMBER, JR.

Secretary & Treasurer—WM. C. LONGSTRETH.

Superintendent—J. A. REDFIELD.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending September 6, 1859.

BONDS.	Per cent.
Little Miami, 1st Mort.	6s. 84 and int.
Covington and Lexington, 2d Mortgage ..	7s. 66
Cinc. Ham. and Dayton, 2d Mortgage ..	7s. 82
Indianap. & Cincinnati, do. do.	7s. 82½
STOCKS	
Cincinnati, Hamilton & Dayton	68
Columbus and Xenia	82
Indianapolis & Cincinnati	50
Little Miami	86

Railroad Earnings.

The earnings of the Little Miami and Columbus and Xenia Railroad for August were, \$119,740 33 August, 1858..... 113,533 21

Increase..... \$6,207 12

The annexed is a comparative statement of earnings for the month of August, 1858 and 1859, on the Buffalo and State Line railroad:—

	1858.	1859.
Passengers	\$42,322 32	\$32,477 36
Freight	29,904 23	219,719 19
Other sources	1,150 00	1,666 97
Totals	\$73,376 55	\$63,863 52
Decrease		\$9,513 03

Comparative statement of earnings and expenses for the month of July, 1858 and 1859, on the above road:—

	1858.	1859.
Passengers	\$40,467 20	\$26,407 88
Freight	24,461 89	21,952 20
Other sources	1,150 00	1,400 00
Totals	\$66,079 09	\$49,760 08
Decrease		\$16,319 01

EXPENSES.

	1858.	1859.
Construction	\$1,991 05	
Maintaining road	16,717 21	\$16,371 81
Repairs of machinery ..	4,811 09	3,540 66
Operating	16,318 94	13,525 97
Totals	\$39,837 29	\$33,438 44
Decrease		\$6,398 85

The receipts of the Grand Trunk Railway of Canada for the week ending August 20,

were.....\$41,954 92

Week ending Aug. 21, 1858..... 37,300 97

Increase.....\$4,653 94

Total traffic from July 1st

Same period last year

Increase.....\$15,954 37

The traffic of the Great Western Railway of Canada for the week ending August 26, 1859, was as follows:

Passengers	\$23,525 05
Freight and live stock	10,082 51
Mails and sundries	1,860 72
Total	\$34,968 28
Corresponding week of last year	39,114 69

Decrease.....\$4,146 41

The Hudson River Railroad receipts for August, were:

August, 1859

August, 1858

Increase.....\$15,675 14

The earnings on the Great Western (Ill.) railroad have been:

July, 1859

August, 1859

Two months.....\$75,473 35

The following is a statement of the earnings of the Buffalo, New York and Erie Railroad (Buffalo to Corning), for the month of August, 1859, compared with the same month of last year:

	1858.	1859.
Passengers.....	\$19,059 49	\$16,621 17
Freight.....	24,119 30	27,538 39
Other sources.....	1,568 15	1,675 91

Total.....\$44,746 94 \$45,835 47

The earnings of the Galena and Chicago Union Railroad, for the month of August, were:

	1858.	1859.
Freight.....	\$72,818 23	\$83,435 71
Passengers.....	44,276 36	32,512 54
Mails, etc.....	5,256 17	4,500 00

Total.....\$122,350 76 \$120,448 25

Decrease.....\$1,092 51

Corrected earnings for the previous month.....\$88,527 06

The receipts of the New York and New Haven Railroad for August, 1859, were:—

For Passengers.....	\$92,256 67
For Freight.....	12,000 00

Total.....\$104,256 67

Less dues on other roads.....23,487 81

Net receipts.....\$80,768 86

Receipts for August, 1858...72,720 82

Increase.....\$8,048 04

The receipts of the Cleveland and Toledo railroad for the month of August were:—

August, 1859.....	\$62,465
" 1858.....	60,889

Increase in 1859 of.....\$1,576

The earnings of the Milwaukee and Mississippi Railroad for the month of August, as compared with last year, are as follows:—

	1858.	1859.
Freight.....	\$28,811 42	\$37,641 56
Passengers.....	18,806 24	26,617 85
Mails.....	1,835 42	1,877 61

Total.....\$48,953 08 \$66,137 02

The earnings of the Michigan Central railroad for the month of August were:—

	1859.	1858.
Passengers.....	\$70,053 23	\$89,060 99
Freight.....	72,740 12	81,001 09
Mails.....	7,752 85	5,998 74

Total.....\$150,366 20 \$176,060 82

Decrease.....\$25,694 62

The earnings of the Chicago and Rock Island road for August, 1859, were.....\$84,700

August, 1858.....81,026

\$3,674

Railroads in Iowa.

The railroads in Iowa, with the distances completed, are thus given by the *Dubuque Herald*:

Keokuk and Fort Des Moines.....	Miles 45
Keokuk and Mount Pleasant.....	" 30
Burlington and Missouri.....	" 65
Muscatine and Oskaloosa.....	" 40
Muscatine and Tipton.....	" 13
Mississippi and Missouri.....	" 56
Chicago, Iowa and Nebraska.....	" 86
Dubuque and Pacific.....	" 42
Dubuque Western.....	" 35

Total.....412

The *Herald* adds, that the majority of these roads are graded much further than completed, and it is probable that a year from now the entire length of roads completed will be quite doubled.

In the case of Dubuque, the matter is reduced to a certainty that the seventy-seven miles will reach one hundred and fifty miles before another twelve months are passed.

American Railroad Journal.

Saturday, September 10, 1859.

New York Central Railroad.

The leading sentiment exhibited at the convention of the friends of the New York Canals, recently held at Rochester, was one of intense bitterness and hostility toward the New York Central Railroad. We may put down much that was said as mere rantings of selfish and disappointed men. But there is no doubt that such statements are encouraged by the response of the public, who, from hearing charges of venality, corruption and abuse of power, so often reiterated against this company, and which are always allowed to pass without contradiction, believe there is a great deal of truth in what is said. Assuming the affairs of this company to be properly conducted, there is no doubt that the moral position of its managers has become greatly weakened, and that a general suspicious distrust prevails among its warmest friends, that something may be wrong after all; that where there is so much smoke there may be some fire. While they are receiving dividends, there is an apprehension that they have not been earned, and that by the exposure of some mismanagement or calamity, they may be cut off altogether. That such distrust and apprehension generally prevails there is no doubt. It certainly does not exist without cause, although such cause may have nothing to do with the real condition of the road, or its management. Admitted, for argument sake, that both are what they should be, the managers have taken good care that the public shall know nothing about it. They give us, to be sure, through the medium of the Legislature of the State, a few statements, all expressed, in figures only, showing the length of the road; its cost; the number of miles run by the trains; the gross earnings, expenses, etc., etc. But they are entirely silent as to the road. There is not a stock or bondholder, outside the direction, who can form any opinion as to the actual condition of its affairs; whether the road will require \$100,000 or \$1,000,000, by way of construction, for the year to come; whether the road is safe or unsafe; whether it is improving or deteriorating; whether, with the diminished earnings, the expenses can be reduced in like ratio; or whether the reduction in the latter is apparent and temporary; or whether, with an improved traffic, expenses will go back to their old figures. So with the traffic. There is a general suspicion that the freight business is done at a loss. The public know that a vigorous competition is going on with the canal. It is feared that in the excitement of the contest the road may be doing a large portion of its business at a loss, while a great many believe that the railroad is engaged in a systematic move to crush out a formidable rival by taking away its business at all hazards.

To all these clamors and distrust, the company oppose a stolid silence. It entirely neglects a duty which, with one or two exceptions, all other leading companies perform with pleasure, as well as from a sense of duty—that of seeking to en-

lighten their stock and bondholders as to the condition and value of their property, and the manner in which it is conducted, putting themselves, as they are, in the subordinate position of agents, or trustees, instead of acting as if they were the owners of the road, responsible to no body but themselves.

All this is a great wrong. We know that the managers of this road presume a great deal upon their respectability, and their high-standing as capable and upright men of business; but such presumption should not have a feather's weight in absolving them from a most palpable duty, that of placing in the hands of their principals full and timely statements as to the manner in which they have conducted their trust. Experience has shown, in the misfortunes that have befallen our railroads, that their managers have been wanting in one of the two qualities named. What is worse, the public do not find them out, till a great, sometimes an irreparable mischief has been done. Why should the Central Company follow precedents so full of disasters and warning? Why should they not tell their stock and bondholders all they know, and impart to them all the information possessed by themselves.

A very hostile feeling against the Central Railroad has grown up from the relations it sustains to the canal. The canal has now come to be a burden on the finances of the State, (the cost of the enlargement, we mean,) to defray which, every tax-payer is called upon to contribute. This fact is sufficient to create a hostile feeling against the author of the burden. The continued silence of the company has ripened this feeling into a confirmed conviction, and the result is a vigorous effort to reimpose the canal tolls. But there is no doubt that the policy of the company in reference to the canal, can be fully justified to the public; and, instead of any adverse legislative action against it, with a proper presentation of the argument, its present independence of the canal fully preserved. The interests of the people of New York are best promoted by cheapening the cost of movement over all our great routes of commerce. Give us the business they bring, and we will find a way to pay our taxes; but do not tax us, and draw away business by the same process. The bare statement of the case is enough. Let the public understand this matter, and they will leave the canal and railroad to fight out their own battles, well satisfied, if, in doing so, Western produce comes to them a dollar cheaper on the ton.

The road is also suffering in the public estimation, for the reason that the low price at which it can carry freights is only imperfectly understood. The Reading railroad is carrying coal at a cost of three mills per ton per mile (for the mere cost of transportation). For ten years past, the cost per mile has not averaged four mills per ton. It has freight only in one direction. With a return freight, equalling in amount the coal tonnage, the cost, per ton, would not exceed five mills per mile, embracing all charges. Now, the Central railroad presents conditions for cheap movement more favorable than the Reading. It has a much longer line, grades nearly as favorable, and with its immense traffic, every engine runs with a full load. We are satisfied that the Central can carry freight at rates very much under the generally received limits, and make money. But its advan-

tages, and what has been actually accomplished in this particular, are carefully concealed from the public eye. The consequence is, that nearly every newspaper in the State is repeating the statement that the road is doing its freight business at a loss. The public believe it. The stock and bondholders fear it is so. The people regard it as a great power, wielded constantly to their disadvantage. It may happen that a combination of all these elements of hostility may place the road in a very uncomfortable position. When all this opposition could not only be disarmed, but be converted into friendship and support, by stating the truth, and nothing else, we cannot imagine why the managers of this road forego so useful a step and so obvious a duty. The termination of the fiscal year which is now at hand, is the suitable occasion for its discharge. Shall we have a report, or is its past silence to be maintained?

What it Costs to Maintain the Track of a Railroad.

The Reading Railroad has the largest traffic of any road in the United States, and probably the largest of any in the world. The amount of useful freight, in tons, transported over this road for a period of 10 years has equalled 22,278,321 tons, of 2,000 lbs. each, or 2,227,832 tons annually. The dead weight carried (on freight trains alone) have equalled just about 27,000,000, or 2,700,000 tons annually. The aggregate weight of the freight trains with their loads has reached the enormous weight of 49,278,321, equalling 4,927,832 tons annually, nearly all of it passing over the whole length of the road.

For this period of 10 years, the cost of maintenance of track, including rails used in repairs, and repairs of bridges, have been as follows:

Years.	Cost of track.	Cost of iron used in repairs.	Repairs of Bridges.	Miles run by all the trains.
1849..	\$112,256	\$12,536	\$6,896	1,047,014
1850..	140,205	12,115	4,836	1,233,144
1851..	144,994	25,855	5,500	1,561,772
1852..	183,845	24,954	8,731	1,517,981
1853..	165,029	35,547	3,109	1,466,894
1854..	197,121	67,176	11,234	1,674,403
1855..	265,643	160,139	10,000	1,948,225
1856..	302,304	204,502	12,249	1,942,317
1857..	248,491	154,687	8,899	1,707,366
1858..	216,700	128,629	6,707	1,570,482

\$1,976,088
Tot cost 826,140
of rep's 77,613
for 10
yrs. \$2,870,841

The average cost, per mile run, for repairs of track has equalled 18.49 cents; and per mile of road, \$1,442 annually. The cost of renewal of rails have equalled 5.3 cents, per mile run, for the 10 years.

Now there is no road in the United States that should cost so much for repairs of track, according to its mileage, as the Reading, as there is none with so vast a tonnage. The average gross weight of a train on the Reading road, loaded with coal, equals 728 tons, of 2,000 lbs. each, of which 472 tons are useful, or paying weight. On the New York and Erie and the New York Central Railroads, the useful weight, we presume, will not exceed 100 tons the train.

The rate at which the track of the Reading road has been maintained should not, consequently, be exceeded by any railroad in the country. It

should be much less on most of our roads. According to this standard, the cost of maintaining the track of the Erie Railroad, the past year, should have been \$554,700 instead of \$1,073,300, which was the sum charged to this account, and which was equal to 35.76 cents per mile run. The cost of maintaining the track on the New York Central Railroad the past year was \$991,388. At 18.49 cents per mile, it would have been \$728,873, or \$262,415 less than the sum expended. The average on this road was 25.12 cents per mile. The total number of miles run was 3,942,547. The repairs of track on the Hudson River Railroad the past year cost 33.52 cents per mile. On the Boston and Worcester 18.93, and on the Boston and Providence 19.20 per mile run.

We may safely lay it down as a rule, therefore, that if a road exceeds 20 cents per mile for repairs of track, the excess is made up of extraordinary expenses, or it has been wasted. On ordinary roads, where the road-bed and superstructure are in good condition, the repairs of track should not exceed 15 or 16 cents the mile run.

On most roads the cost of repairs of track, including iron, exceeds one-quarter of the current expenses. The cost of the locomotive department another. If these could be run, on an average, at the rate of 20 cents per mile each, as is being done on several of our roads, the aggregate cost per mile run would come down to something like 60 cents.

New York and Erie Railroad--Where some of the money went to last year--or rather, Where it did not go.

Attached to the last report of the President of the Erie Railroad, was one from the Assistant-President, addressed to the former, giving an account of his doings on the road in the way of repairs of track, ballasting, etc.; the same coming under his supervision. In describing what was done the past year on the *Susquehanna Division*, he says;

"The *Eastward* bound track on this division has been ballasted with gravel an average depth of two feet nearly its entire distance; a large amount of ballast has been applied at points where most needed on the *Westward* bound track, and the ditches have been enlarged more or less over the whole division."

Now the *Eastward* bound track of the *Susquehanna* division was ballasted two and a half feet deep when constructed, and before the rails were laid, according to the terms of the contract for its construction. It, therefore, needed no ballast last year, and received none, except the inconsiderable amount naturally wasted, or to supply material for adjustment, in all costing but a trifling sum. The material furnished for this purpose comes under the head of *repairs* of track, not *ballasting*. To have placed two feet of ballast upon the *Eastward* bound track of the *Susquehanna* division, 85 miles long, would have cost \$170,000. If two feet of ballast were not placed on the *Eastward* bound track of the *Susquehanna* division the past year, as we affirm was not, and none at all except for adjustment of track and ordinary repairs, then we will thank the Assistant-President, or some other person, to tell what became of the money necessary to do such an amount of work, which would have called for at least \$170,000?

So far, we speak without the fear of contradiction. We will, however, reiterate an often ex-

pressed opinion, that the department for repairs of track was mismanaged on the Erie Railroad the past year, and a great deal of money wasted upon it—a very much larger sum than \$170,000.

Green's Self-Adjusting Belt Clasp.

We give below a cut of a very simple, but useful contrivance, a "Self-Adjusting Belt Clasp," designed to supersede *lacing* in fastening together the ends of machine belting, and which is found to be a great improvement over the old mode of fastening.

Fig. 1

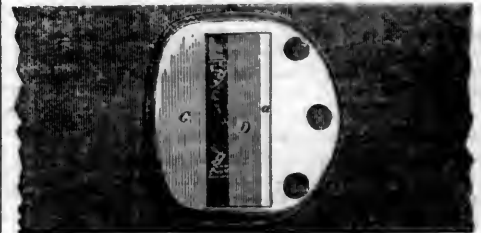


Fig. 2



Fig. 1 shows a top view of two ends of a belt joined with this clasp, and Fig. 2 is a section through the joint. A B, represent the ends of the belt, and C is a metal stock or plate of oblong form, and equal or nearly equal to the belt in width. This stock is firmly riveted to one end, B, of the belt, and it has a slot or opening, a, made longitudinally through it. One edge, c, of the slot is corrugated, and the opposite edge is grooved to form a concave, d, to receive one edge, e, of the tongue, D, which is grooved and corrugated, f, to correspond with or fit into the edges of the slot. The tongue is not so large as the slot, room being allowed to pass the belt between the tongue and the edge of the slot; and the tongue is provided with two spurs, g, which enter into the belt and hold it fast. When the end of A is passed through the slot in C, between its edge, c, and the edge, f, of the tongue, D, the tension of the belt when in operation will cause the edges, f, of the tongue to press the end, A, of the belt firmly against the edge, c, of the slot, for the edge, e, of the tongue is lower than the corrugated edges, f, and the spurs, g, which are forced into A, prevent the tongue from moving outward and releasing the end of the belt, when the belt is suddenly cast off from the driving pulley, a contingency likely to occur under the circumstances if not provided against, owing to the sudden cessation of the tension of the belt and a slight degree of elasticity which it possesses. The end, A, can be detached by drawing it outward through the slot with pincers or the hand, until the spurs, g, pass out of the leather, and allow the tongue to be removed.

The self-adjusting clasp has been in extensive use in numerous establishments in the western part of this State and is much commended wherever used. By means of it the belting can at all times be kept in proper adjustment, by the work of a moment. They are afforded at a very low rate, and prove not only much more convenient, but much cheaper in the long run than the

old mode of fastening. The owner and manufacturer of the improvement is E. B. Horr, Esq., of Mottville, in this State, who is prepared to fill orders for the same.

Panama Railroad.

Mr. Hoadley, President of the Panama road, who returned from Europe by the Africa, has written a letter to Mr. Cobden, Chairman of the Packet and Contract Committee of the House of Commons, in regard to the advantages of the Panama route for the mail contract between England and Australia. He says:

The advantages of the Isthmus route over that of Cape Horn, and especially for the trade of the Pacific north of Panama, are clearly exhibited by the following facts. The average time between New York and San Francisco during the last year has been:

	Days.
Via Panama, steam on both oceans	23
Via Panama, sailing vessels on the Atlantic and steam on the Pacific	46
Via Cape Horn, clipper ships	133

From the 1st of October next, the through time will probably not vary materially from 20 days, it having already been performed as quickly in several instances during the present year.

The length of the Panama Railroad is 47½ miles, extending from the City of Aspinwall, (Colon,) the Atlantic terminus, to Panama, on the Pacific. It has been built in the most substantial manner, at a cost of eight millions of dollars, (£1,600,000); and notwithstanding the character of the country through which it passes, and the excessive rains it is exposed to for several months in the year, has acquired a solidity and firmness fully equal to that of any similar work with which I am acquainted. Following the course of the Chagres river for the greater part of the first 25 miles, and crossing the Cordilleras at an elevation of only 253 feet above tide water, no heavy grades are encountered, the greatest being one, for a short distance only, on the Pacific slope, of 60 feet to the mile. It, therefore, seems superfluous in me to add that the railroad is competent to perform any kind of service that can ever be required of it. This is fully evinced by the experience of the last four years. Not only have the ordinary descriptions of merchandise been constantly transported over the road, but also articles the coarsest and heaviest, such as coal, timber, guano, munitions of war, ores, heavy machinery, (in one instance a light-house,) whale oil, &c., together with every variety of Pacific produce, such as coffee, cocoa, indigo, cochineal, Peruvian bark, &c., &c.

The transit of the passenger trains connecting with the California steamers is made in three hours, the line being furnished with comfortable carriages, constructed with special reference to the character of the climate. The ordinary trains occupy about five hours in the transit, stopping at the several stations to discharge and receive passengers and freight. At Aspinwall there are four substantial and commodious wharves, where vessels of the largest capacity are moored to land and receive passengers, and discharge and load cargo. The harbor is one of the safest on the Atlantic coast, only one disastrous storm having occurred there for many years. The only inconvenience experienced is from the heavy swell which sometimes enters the bay during the winter months, caused by the "northerners" that sweep down the Gulf of Mexico and the Caribbean Sea, but which usually expend themselves before they reach the latitude of Aspinwall.

Owing to the high tides which prevail in the Bay of Panama, and prevent the construction of piers, except at enormous cost, the freight is, for the most part, landed and loaded by the use of lighters. These lighters, of which a sufficient number of large capacity are owned by the railroad company, are towed between ship and shore by steam tugs; and as calm weather invariably prevails in the bay throughout the year, this ser-

vice is performed without risk, and with a dispatch which renders it a good substitute for piers. From the first opening of the route throughout to the present time, the entire amount of reclamations for goods lost or damaged in the transit, notwithstanding the many thousands of tons transported over the railroad, is less than £1,000. Only one serious accident has occurred on the road during that period, and not a single case of illness among the passengers while making the transit, or caused by the transit, has been brought to my knowledge. The employees of the company, and the residents on the Isthmus generally, are also remarkably exempt from disease: and I think I hazard but little in asserting that Aspinwall, whatever its character may once have been, is one of the healthiest tropical ports of the world.

The number of passengers conveyed over the road in the four years ending December 31, 1858, was 121,820; most of whom were through passengers, between the Atlantic ports of the United States and California, and England, South America, California, and British Columbia.

During the same period the amount of specie transported over the road was over \$200,000,000. The precise sum was as follows: Gold, \$171,157,421 28; Silver, \$29,902,793 49. Total, \$200,561,214 74. Consigned to the United States, \$135,135,093 87; to England, \$65,426,120 87. The silver was exclusively for British account, having been brought to Panama from South America and Mexico, and most of the gold shipped to the United States found its way ultimately to the Bank of England.

During the four years already mentioned, there was sent over the road at least 55,000 bags of postal matter, not one of which was either lost or damaged; and so perfect have been the steamship arrangements on either ocean, that the arrivals of the mails going or coming by that route are looked for in New York or California on a given day with as much confidence as are the British mails by the Cunard steamers in England or the United States.

Interest and Dividends.

The Virginia Central Railroad Company have declared a semi-annual dividend of 2½ per cent., payable on the 15th inst.

The Norwich and Worcester Railroad Company has declared a semi-annual dividend of 2½ per cent., payable 1st October.

Racine and Mississippi Railroad.

This road has been opened through to Freeport. The extension just completed is expected to add largely to the revenues of the road.

Flint and Pere Marquette Railroad.

This company are laying the rails on the first 20 miles of their road, which will secure to them the lands granted by Congress for its construction. The first portion of the road built is from Saginaw southward, for the purpose of forming a junction with the Detroit and Milwaukee Railroad.

Western (N. C.) Railroad.

At the annual meeting of the stockholders of this company, held at Salisbury, on the 25th ult., the following Board of Directors was elected:

Dr. J. C. McDowell, of Burke; Jonas Cline, of Catawba; Otho Gillespie, of Iredell; Anderson Ellis, of Davidson.

The following are the State Directors appointed by the Governor:

A. Henderson, of Rowan; R. F. Davidson, of Iredell; A. M. Powell, of Catawba; W. W. Avery, of Burke; R. C. Pearson, of Burke; W. H. Thomas, of Jackson; Wm. Murphy, of McDowell.

At a meeting of the Directors, Mr. Pearson, the former efficient President, was re-elected. Mr. J. C. Turner, with the approbation of the whole Board, continues in his position of Chief Engineer.

Personal.

Col. C. M. PENNINGTON, of Rome, Ga., has been elected Chief Engineer of the Nashville and Chattanooga railroad, and has entered upon the duties of that office.

Col. R. B. Mason was elected Vice President and also a director of the Dubuque and Pacific railroad company on the 31st ult. Mr. Roor, the contractor has arrived at Dubuque, and has sublet the works to Messrs. Magill, Denton and Carpenter, agreeing to pay them chiefly in cash.

We understand that a contract has been entered into for a division of the receipts of the Cincinnati, Hamilton and Dayton, and the Little Miami and Columbus and Xenia railroads. The gross earnings of the former, 60 miles, and the latter, 120 miles, go to the formation of a common fund, from which fifty per cent. is to be deducted for the working expenses of each line; of the balance the East line takes seventy per cent., and the west line thirty per cent. The contract is for twenty years, but at the end of five years either party may withdraw upon giving one year's notice of a desire to dissolve the connection.

The effect of this movement will be to harmonize conflicting interests, and advance the prosperity of both roads as well as greatly strengthen the value of the stocks of each.

Rosendale Hydraulic Cement.

We invite attention to the advertisement, in another column, of the "LAWRENCEVILLE MANUFACTURING CEMENT COMPANY." The quarry from which this cement is obtained is situated in Rosendale, Ulster County, N. Y., near the Delaware and Hudson Canal, about seven miles from its entrance into the Hudson river. The quantity is said to be inexhaustible, and the quality is considered equal to any water cement manufactured in that locality. Ulster County is, we believe, the only place where the best quality of Hydraulic Cement is found, and where nearly all the cement used in the United States is manufactured. The cement supplied by this company has been extensively used in the construction of canals, water works, sewers, foundations for buildings, etc. It is of uniform quality, fresh from the works, and ground fine. The company is prepared to supply orders to any extent on reasonable terms. The office of the company is at 96 Wall street.

Michigan Southern Railroad.

This road has been having trouble with its unpaid workmen, who placed an embargo on the trains till they should be paid. The amount due for arrearages of wages is stated to be \$150,000. An equal sum is stated to have been due in Jan'y last, when the report of the company was published; but not a word was said about it. The over-due wages were probably embraced in the floating debt of the company. The omission to state the fact, if it existed, was a great outrage, as wages due workmen take precedence of all other debts, and the failure to meet them may be attended with disastrous consequences, as in the present case. A crisis is impending over this road. It cannot be looked after too soon.

We learn from the Detroit Tribune of Monday, that the difficulties above alluded to were adjusted the day previous, and that the employees had resumed their labors—having been promised three months' pay on Tuesday, with regular monthly

settlement thereafter. The trains commenced their regular trips on Sunday evening last.

Nashville and North-Western Railroad.

The Nashville and North-western Railroad Company have contracted with Messrs. Maxwell, Saulpaw & Co., to build the bridges over Richland, Harpeth, and Turnbull. These bridges will be completed by the time the road is ready to receive the iron.

Large forces are at work on the various sections for eighteen or twenty miles north of Nashville, and the prospect is that the contractors will have their work completed within contract time.

We learn that Col. V. K. Stephenson, the President of the company, is about closing a contract for a sufficient amount of iron to lay the track from Hickman, Ky., on the Mississippi, to Union City, and from Nashville about twenty miles north.

In connection with the above we learn that St. Louis has determined to extend her Iron Mountain Railroad so as to connect with the Nashville and North-western Railroad at Hickman.

Burlington and Missouri Railroad.

The formal opening of this road was celebrated with appropriate ceremonies by the citizens of Burlington and Ottumwa, Iowa, on the 1st inst. This road runs in a westerly direction from a point opposite Burlington, Ill., to Ottumwa, having a charter to construct a road to the Missouri river, a distance of 250 miles beyond its present Western terminus. The cost of the road has been about \$30,000 the mile. Its present length is 75 miles.

THE LAWRENCEVILLE MANUF'G CEMENT COMPANY,

OFFICE 96 WALL ST,
NEW YORK.

THIS Company manufacture ROSENDALE HYDRAULIC CEMENT of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings.

For sale upon favorable terms by addressing:
WM. N. BEACH, President,
CHAS. E. LAWRENCE, Secy.

WINDOW, PICTURE AND CAR GLASS.

F. HOPKINS & BROTHER,
IMPORTERS,
193 Pearl St., NEW YORK.

A VERY SUPERIOR WELL FINISHED, IRON, CAR RAILROAD CAR, complete and fit for immediate use, will be sold very low to close a concern.
Enquire at 63 PINE ST.
37*24 UP-STAIRS.

DIVIDEND NOTICE.

THE Board of Directors of the Virginia Central Railroad Company have declared a dividend of 2 1/2 per cent. for the last six months on each share of the stock of the Company payable 15th September, 1859.

The books of the transfer will be closed from the 5th to the 15th of September, and the dividend will be paid to those in whose name the stock stands on the 5th of September.

J. GARRETT, Treasurer.

METALS for RAILROAD COMPANIES.
LUCIUS HART,
IMPORTER AND DEALER IN METALS,
4 and 6 Burling Slip, NEW YORK.
BLOCK TIN. SPELTER. RABBIT METAL.
ANTIMONY. PIG LEAD. INGOT COPPER.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
113 Cliff St., N. Y.

FAY, WOOD & CO.,

214 Pearl St., NEW YORK,
MANUFACTURERS OF
**WHITE LEAD, ZINC,
COPAL VARNISHES AND
JAPANS.**

Also, PUTTY, PAINTS and COLORS.

FULTON FOUNDRY AND MACHINE WORKS, P. F. GEISSE, WELLSVILLE, OHIO.

STEAM ENGINES of every variety built to order. STEAM BOATS and STEAM FERRY BOATS contracted for in whole.

PUTNAM'S PATENT Turn-Tables (a very superior and simple table) of all sizes built to order at very reasonable rates.

Car Wheels of a quality superior to any ever yet made. I am now manufacturing from the best material, and annealed by a process patented by me in February, 1859, which renders them almost equal to wrought iron. Car Wheels, Steam Engines and all kinds of machinery furnished at as low, if not lower rates than can be found elsewhere.

Rights to manufacture Car Wheels under P. F. GEISSE'S annealing process may be obtained from the Patente at Wellsville, O., or from T. Culbertson, No. 8 Fourth Avenue, N. Y.

Testimonials from the Superintendents and Master Mechanics of the Cleveland and Pittsburgh, Little Miami, and Steubenville and Indiana Railroads, as to the superior quality and durability of these Wheels will be furnished on application.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Secy.
WHEELING, VA.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William St.
New York, Aug. 1, 1858.

RAILROAD IRON.

THE RENSSLAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS
received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.
New York Agency:
BUSSEING, CROCKER & DODGE,
33 Cliff St.

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL
IN ALL THEIR VARIETIES.

ROILER PLATE. CAR AXLES.
BOILER RIVETS. RAILROAD IRON.
CUT NAILS AND SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

CAST STEEL, Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.
Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.

ORDERS FILLED PROMPTLY AND AT LOW PRICES.
SALTUS & CO.,
45 Cliff St., New York.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz - 25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or on ship at ports in the United States.

M. K. JESUP & COMPY,
44 Exchange Place.
New York, 1st June, 1859.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. Gress & Co., the proprietors of the Downish Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad St.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
BOSTON, June, 1851. 29 Central Wharf.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall St., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO,

MANUFACTURERS EXCLUSIVELY OF
RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads at this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited from Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to
ALBERT G. SMITH,
President of the Incorporation
February, 1860.

A GENTLEMAN who has upwards of 26 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.

Address S. box 962 Baltimore Post Office. 3m32

JOS. R. ANDERSON,
JOHN F. TANNER,
R. ARCHER,
R. S. ARCHER.

TREDEGAR IRON WORKS, RICHMOND, VA.

WE CONTINUE TO MANUFACTURE at these old and extensive Works, from BEST CHARCOAL METAL

BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
CAR AND TRUCK AXLES,
BRIDGE AND OTHER LONG BOLTS,
IRON TRUCKS,
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE.
CANNON AND PROJECTILES, ALL KINDS,
IRON AND BRASS CASTINGS,
LOCOMOTIVE, STATIONARY AND PORTABLE
ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our SPIKE AND BOLT FACTORY, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

The Machinery Department of our Establishment is under the supervision of THATCHER PERKINS, Esq., for 13 years the Master of Machinery on the Baltimore and Ohio Railroad, and late of the concern of SMITH & PERKINS, Locomotive Builders, Alexandria, Va.

J. R. ANDERSON & CO.

SANDERSON, BROTHERS & CO.,

MANUFACTURERS OF THE

CELEBRATED CAST STEEL,

FOR MAKING SUPERIOR TOOLS.

SHEFFIELD, ENGLAND.

IMPORTERS OF FILES,

Armitage's Genuine Mousehole Anvils, etc.

16 CLIFF STREET, NEW YORK.

42 BATTERYMARCH ST., Boston.
24 BANK PLACE, New Orleans.

516 COMMERCE ST., Philadelphia.
TYLER, DAVIDSON & CO., Cincinnati, O.
HISS & COLE, Baltimore, Md.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

BEERS' 'CAST IRON ENDLESS RAIL,' FOR CITY RAILROAD.

Patented August 24, 1858, and May 10, 1859.



THIS Road is constructed exclusively of Iron, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

ALSO

BEERS' "ELASTIC IRON RAILWAY," FOR LOCOMOTIVE USE.

This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from undulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$9,000 to \$11,000; out of which \$3,000 will be saved on the first cost of equipment, and character of grading. The undersigned is prepared to construct, either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

S. A. BEERS, C. E., Brooklyn, N. Y.

A specimen of these Roads may be examined at 55 Liberty st., NEW YORK.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, July 9, 1859.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.

M. K. JESUP & COMPY,
New York, June, 1859. 44 Exchange Place.

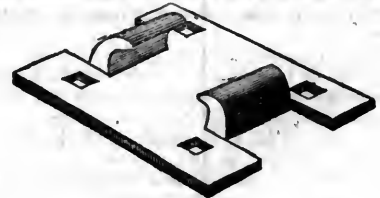
NEW YORK RAILROAD CHAIR WORKS.

J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

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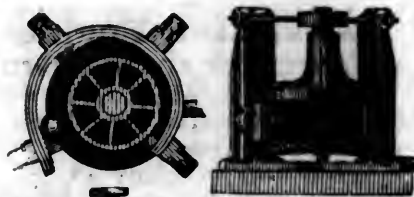
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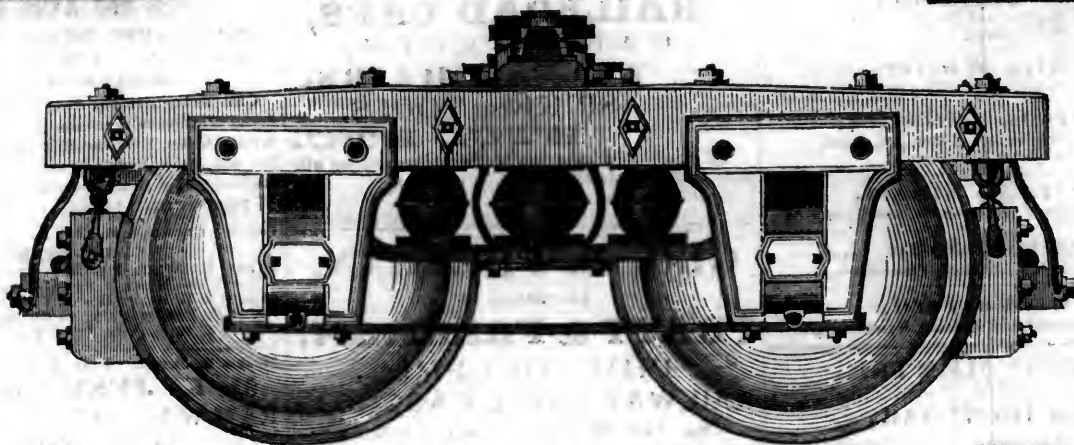
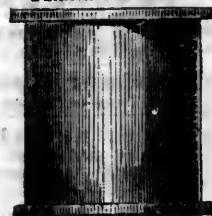


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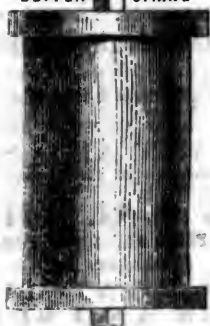
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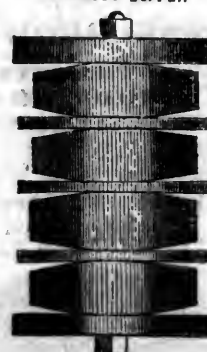


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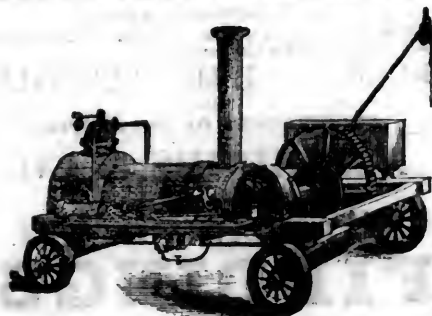
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, September 17, 1859.

New York and Erie Railroad.

3 Threadneedle Street, E. C. }
LONDON, 25th August. 1859. }

To the Editor of the AM. RAILROAD JOURNAL.

SIR:—We observe in some of the American papers, suggestions for re-organizing the New York and Erie Company. Most of these suggestions are based upon the idea of cutting down the nominal capital represented by the unsecured bonds and shares.

We wish to protest against any plan of this kind, as regards the unmortgaged debt. It would be very unpopular in England. John Bull would much prefer 5 per cent. on his £100, than have the nominal amount reduced to £50, although he might receive 10 per cent. on it. Moreover, there is no sufficient reason for such a step, as the capital has been raised clear of any heavy discount, and *bona fide* expended on the line, in addition to \$3,000,000 given by the State.

We quite agree with the suggestion for reducing the mortgage debt to \$13,000,000, and that the balance of the capital should be represented in shares, but if bonds are to be turned into shares, it should be at their full par value. We beg to hand you our Premises and Arguments, and a plan based upon them, for the re-organization of the

company, to which we would draw the attention of all interested.

Your obt. sert.

HESELTINE & POWELL.

P. S.—In the *Tribune* of the 11th August, we read as follows: "It is conceded that the general account should be reduced to \$25,000,000, and many parties consider \$20,000,000 as much as the road can pay interest and dividends upon. Mr. Gelpcke states that the working expenses are now at the rate of \$3,000,000 per annum. The average receipts for 5 years, ending December, 1858, were \$5,618,432."

7 per cent. on \$20,000,000 is only \$1,400,000; it is, therefore, absurd to say the road can only be made to pay interest on \$20,000,000.

PREMISES AND ARGUMENTS.

The revenue is so abundant for the 1st, 2d and 3d mortgage bondholders, that many of them may be expected to insist on their rights—and, if not paid early, to mar the whole plan of a *friendly* foreclosure under 4th and 5th, by pressing a hostile foreclosure under 1st, 2d, or 3d, with a view of enforcing *par* in cash. Therefore, means ought to be found to pay them early all arrears.

The "floating" creditors might force sacrifice of 4th mortgage bonds, to the serious prejudice of the other 4th and of all subordinate bondholders—or they might procure embarrassing judgments. Therefore, they ought to be got rid of, and the bonds redeemed.

Without *some money* being raised, there appears no little peril that before the surplus revenue over and above accruing interest shall have accumulated enough to pay off all arrears and floating debts, some one or more early bondholders or creditors will have grown impatient and hostile, and mar all the friendly plans of re-organization.

Assuming money to be necessary, the terms of re-organization must be such as to raise it by compulsion, *i. e.*, raise it from certain classes as a condition of being admitted, otherwise the "willing horses" are overburdened to save drones.

It is very desirable to avoid even the appearance of using the sponge on any part of the debt, seeing how large an European interest has to be consulted, and how advantageous it will be to avoid the imputation of dishonor or repudiation.

Therefore do not let objections be raised to the mere appearance of a large common capital stock. It can make no difference *intrinsically* whether a bondholder convert his \$1,000 into \$1,000 stock, part of a total of \$10,000,000, or into \$500, part of a total of \$5,000,000, but it may make a considerable difference in the feelings with which an irritated and aggrieved bondholder would discuss the proposal.

To induce the advance of money by the subordinate interests invited to re-organize, you must remove all *serious risk* of damage from *excessive mortgage* charges. It cannot be considered that this point is attained to the extent that will satisfy English notions, if more than \$13,000,000 of mortgage debt remain.

Therefore, the 4th and 5th mortgage bonds ought to be converted into something less perilous to those below them, but yet retaining the same order of priority, or nearly so, with provision that no new capital can take priority over them. Let them be converted into preference capital—the 5th paying a contribution to the *cash fund*, but the 4th being let off from all new contributions.

So, then, the 4th will retain the same relative order or priority as if they should foreclose entirely on their own account; but they will not have the monopoly of the surplus after the first three mortgages, and, on the other hand, they will as a compensation be relieved from providing the cash which they must find if they foreclose on their own account.

The unsecured bondholders and unsecured creditors should turn their claims, both principal and arrears, into a new capital stock at *par*, and the shareholders should turn their shares with the same stock, but valuing them at a discount of say 70 per cent. or \$30 per share.

The contributions to the cash fund to become preferred stock. Assuming that \$700,000 is wanted to pay off arrears of interest on 1st, 2nd, and 3rd mortgages, and the floating debt, a contribution of about 9 or 10 per cent. on the 5th mortgage bonds, and on the suggested capital stock of, say, \$10,000,000 (see below) would be ample.

The preferred stock dividends to be accumulative, in case of any temporary omission of dividend.

The result would be—

	Requir'g per ct. Interest.	
Mortgages	\$13,000,000	7 \$910,000
<i>Preferred stock.</i>		
From \$3,600,000	4th	5,870,000 - 7 411,900
Int. 200,000		
1,000,000	5th	
Int. 70,000		
Contri- but'ns, 1,000,000		
<i>Common stock.</i>		
Unsecured bonds and ar- rearers	\$8,000,000	
* 30 per ct. on \$11,000,000		
Shares	3,300,000	
	\$11,300,000	
Recusants ..	1,300,000	
	10,000,000	7 700,000
		\$2,020,000
Being 40 per cent. net receipts on a gross take of	\$5,050,000	
Average for 5 years ending 30th Sept., 1858, having been.	\$5,618,432	

On the Burning of Welsh Steam Coal in Locomotive Engines.

At a meeting of the British Institution of Mechanical Engineers, the following paper, by Mr. Joseph Tomlinson, of Cardiff, was read: "On the Burning of Welsh Steam Coal in Locomotive Engines."

The use of coal in locomotive engines having become almost the rule, the writer offers the following results of a series of trials he has made with the steam coals of South Wales in locomotive engines upon the Taff Vale Railway, in comparison with the best description of coke to be had in the same district; as there has hitherto been a difficulty in the use of that description of coal for such a purpose, almost amounting to prohibition, from the fact that, in all previous trials, a failure has resulted from the burning of the fire bars. This failure of the Welsh steam coal in locomotive engines has been hitherto attributed to the fire-bars becoming clinkered over; but the results of the trials described in the following paper appear to show that the failure has arisen from an entirely different cause, and one that can be completely obviated.

The writer was originally driven to the use of coal alone for carrying on the traffic of the Taff Vale Railway, in January last, in consequence of the continued strike of the colliers in the Rhonda Valley, where the coking coal is obtained. Previous to that time little or no coal had been used in the locomotives, owing to the good quality and low price of the coke, and from the idea that coal could not economically compete with coke for the heavy work of this line, and also from the known difficulties to be overcome in its employment. The transition from coke to coal being sudden and unprepared for, it became necessary to watch the matter closely, so as to determine which of the various descriptions of coal would answer the purpose best, and to arrange its treatment; more especially, as at the outset, from the various qualities of coal that had to be used, the fire-bars were continually being burnt out, and seldom could be made to last two days without passing through the hands of a smith, to be separated and straightened; even then several bars a day were totally destroyed in each engine—some engines having had two entire new sets a day, to run 100 miles. After careful consideration of the subject, it was decided to use only one description of coal; the preference was then given to the steam coal over the bituminous, as being more pure in its composition, and smokeless; and after attentive observations and trials, the Aberdare four feet vein coal was chosen. With this coal it was found that the least damage was done to the fire-bars, and the best result obtained by working the engine with a very thin fire,

* This would require a contribution of \$3 from each share.

say not exceeding nine inches with a moderate load, and slightly thicker as the load increased, not, however, exceeding fifteen inches in any case. In working with a light train, or down hill with a loaded train, it was found advantageous to keep even a more shallow fire than nine inches; for the blast being very light, (as little or no attraction is required down hill on this railway,) the supply of steam could not be kept up unless the air were admitted with little difficulty; it is, however, necessary to be prepared in case of being stopped, and therefore a bright fire was a desideratum, which could not be obtained unless it were kept thin.

The injury to the fire-bars was, however, still a great item, notwithstanding all the care that could be bestowed on them; for it is difficult to get a number of men to attend implicitly to rules which give them more trouble than they have previously been accustomed to. The writer was, therefore, induced to try an experiment, by covering up the entire surface of the bars with small pieces of firebrick, not exceeding three inches cube, and putting fire on them, so as to prevent the direct action of the fire on the iron of the bars; and it was found that, from the clean nature of the coal, no bad result took place in the generation of steam, while the bars received little or no injury. This plan has consequently been generally adopted, but with the partial substitution of clinker from stationary engines, instead of firebrick alone. It has completely obviated the difficulty of the bars being burnt; and a set of bars will now last on an average four months, running about 100 miles a day. It is also attended with a beneficial result; for the small coal, instead of passing directly into the ashpan unconsumed, adheres partially to the red hot brick and clinker, and is consumed; and notwithstanding that the Welsh steam coal falls readily to small, and has little, if any, binding property, the engines can run 100 miles without cleaning out the ashpan. Another description of coal, containing a larger per centage of ash, has also been tried for getting up steam and making the first fire to start with, which, clinkering slightly on the bars, most effectually prevented them from burning; the use of this coal was, however, limited to 5 cwt. per day for each engine.

To place the engine more out of the control of the men, the plan was adopted, which has been in use on other engines, of perforating the shield of the fire door, and drilling five or six 2 inch holes in the door itself, to admit a little air above the fire; this was found useful, not only in assisting combustion, but also in preventing the blast from lifting the small particles of coal, and thereby choking the tubes.

Having so far succeeded in efficiently working the traffic entirely with coal, and finding the engines were working the trains with a smaller weight of fuel than they had previously done, the writer was disinclined to return to coke without good reason after the experience he had had. A series of experiments was, therefore, made to test the commercial value of each description of fuel. The particulars of these experiments were given to the meeting in seven tables; of which, tables I. and II. show the results of experiments made with an engine working the regular mineral trains, with Aberdare four feet coal and Rhondda Valley best coke; and tables III. and IV. give the experiments with the same coal and coke with a special train of 35 loaded coal wagons, weighing 269 tons, run at the regular speed of the ordinary trains of about 11½ miles per hour. Table V. gives experiments with various fuels, with a special train of 40 loaded coal wagons, weighing 314 tons, run at a speed of 20 miles per hour up the hill, and 12 miles down, (12 miles per hour being the limit down hill with loaded trains. Tables VI. and VII. show the results of experiments with Bastard steam coal and Aberdare nine feet coal; the former of these has a larger per centage of ash, and more bituminous property, the only objection to its use being the smoke; it does not burn the bars, and is fully as economical as the pure steam coal.

The whole series of experiments were made with

the same engine, and by the same engine man. The engine is of the following dimensions: Cylinders, 16 inches diameter and 24 inches stroke; six wheels, coupled, 4 feet 6 inches diameter; fire box, 3 feet 6 inches square, by 4 feet 10 inches high; 156 tubes, 18 feet 3 inches long, by 2 inches diameter, and No. 11 to No. 14, wire gauge thickness; safety valves loaded to a pressure of 110 lbs. per square inch.

The following table gives the general results of the whole of the experiments, showing the quantity of fuel consumed per ton per mile, the quantity of water evaporated per lb. of fuel, and the average speed of the train during running:

	Fuel consumed per ton per mile.	Water evaporated per lb. of fuel.	Speed in running miles per hr.
Table.	lb.	lbs.	Miles.
Coal-Aberdare Four Feet Vein.....I.	.127	7.63	11.5
Coke-Rhondda Valley Best Coke....II.	.172	7.62	11.5
Coal-Aberdare Four Feet Vein.....III.	.130	8.37	11.5
Coke-Rhondda Valley Best Coke....IV.	.124	8.34	11.3
Coke-Rhondda Valley Best Coke....V.	.136	7.54	16.8
Coal-Aberdare Four Feet Vein, lump..V.	.133	7.73	16.5
Coal-Aberdare half lump & half small,V.	.153	7.71	14.8
Coal-Rhondda Valley Bastard Steam Coal.....VI.	.110	8.63	11.5
Coal-Aberdare Nine Feet Vein.....VII.	.112	8.15	11.5

The results in the consumption of fuel showing, in all cases, slightly in favor of the coal, they may fairly be considered equal; and as the abuse of the engine, when burning coal is more easily detected than when using coke, this forms a further advantage in favor of coal. The preference may also be given to coal over coke for the freedom in generating steam, which will allow the blast pipe to be of larger dimensions than when burning coke. This has been clearly shown, as the engines are now maintaining steam at 100 and 110 lbs. per square inch with coal, with the same sized blast pipes as were used previously for 80 lbs. with coke; and the fire-bars have also been placed closer together, the air spaces being reduced from 1 inch to ¾ inch. Hence the writer concludes that the Welsh smokeless coal may be economically used in substitution for coke; and that where failures have taken place previously, they are to be attributed to the very great heating power of the coal; and that the difficulty with fire-bars has resulted not from clinkering, but from the absence of a proper protection for the iron of the bars, so that, with heavy firing, the heat has struck downwards, and fused the bars themselves.

Nearly all the engines on the Taff Vale Railway are now burning Welsh steam coal entirely; they take with each train a load of 80 empty wagons, averaging 3¼ tons each, or 260 tons total, up an average rising gradient of 1 in 309, at from 13 to 14 miles per hour, without any inconvenience.

The composition of the Aberdare Four Feet Vein, the coal now in use in these engines, is—

Carbon	90.25	Nitrogen, &c.....	2.13
Hydrogen.....	4.12	Ash	1.25
Oxygen.....	2.25		
Total	100.00		

It is, therefore, practically coke, and requires only proper treatment for substitution in the place of coke. Another great advantage in the use of this coal over all others in locomotive engines, is its almost entire freedom from smoke, thus rendering any plan of smoke burning unnecessary—not even a steam jet being required when the engine is standing.

The advantage of slow speed is so distinctly shown in the results obtained, that the writer

considers this point is worthy of more attention than it usually receives on railways; for a slow speed not only economises the quantity of fuel consumed, by diminishing the resistance of the train, but also increases the evaporative duty obtained from it.

Mr. Tomlinson showed specimens of the various descriptions of coal and of the firebrick, before and after using it in the engine fire; and explained that the firebrick was merely broken into small pieces of about 3 inches cube, and thrown in roughly with a shovel in a single layer over the grate, so as to cover the fire-bars: it was found to last a long time, and in one special trial that he had made to test its durability, the fire was not dropped for six days—the engine running continuously 100 miles per day—and at the end of that time the firebrick still remained as an efficient protection for the grate bars. The clay used for the firebrick was the local fire clay from the Rhondda Valley, which answered well. The thickness of the fire was an important point: it might be 9 or 10 inches thick at the sides, where the absorbing surfaces of the fire box keep down the temperature; but should be as thin as possible in the centre, so that the bars could just be seen through it; for the bars would go down in the centre, in spite of all precautions, unless the fire was kept very thin, on account of the intense heat.

In the table of experiments, the injurious effect of increased speed was remarkably shown, not only in increased consumption of fuel, but also in diminished evaporative duty of the fuel, which was reduced about 10 per cent. by an increase of speed of $5\frac{1}{2}$ miles per hour, or about 50 per cent.

In the trial that he had made of Newcastle coal, the coal used was some that had been tried in steamboats in comparison with Welsh coal, and he had made a trial of a small quantity in a locomotive; it was half small coal, and therefore would not serve for comparison with the large Welsh coal used in the experiments; but the trial showed that the bituminous Newcastle coal demanded very different circumstances for its economical consumption, requiring a much greater supply of air; it consequently received imperfect treatment in ordinary locomotive fire boxes, where no provision was made for an extra supply of air beyond that admitted through the grate; so that the evaporative duty obtained in the trial was only $5\frac{1}{4}$ lbs. of water per lb. of fuel.

The result of the trials in consumption per ton per mile were not always thoroughly reliable as a means of comparison, on account of the great fluctuation in the weight of trains down; some being as much as 700 or 800 tons down hill, which would materially affect the result; the fall was nearly uniform from one end of the line to the other, amounting to 409 feet in 24 miles, or an average gradient of 1 in 309. The trains wanted scarcely any power down hill, and required the break to regulate the speed, which was not allowed to exceed 12 miles per hour, on account of the number of heavy trains upon the line. The coke cost 12s. 6d. per ton, and the coal 6s. 8d. per ton, in the wagons upon the railway; so that the cost of fuel, when coal was used, was little more than half of that with coke, as the consumption was about the same in quantity to do the same work.

Mr. R. Laybourn said he had made some trials of burning Welsh coal in locomotives on the Monmouthshire Railway, about 18 months ago, with coal from Nixon's Deep Duffryn seam, the same seam of coal as the Aberdare Four Feet Vein, but found the bars came down in the same way as had been described; this was, however, obviated by using inferior coke for lighting the fire, which formed a portion of clinker over the bars, that served to protect them; by this means he succeeded in using the coal. The difference in price between coal and coke was considerably less in that instance—the Nixon's Deep Duffryn coal costing 11s. 6d. per ton, on account of having to be conveyed over two or three different railways; while the best coke cost 16s. per ton, and inferior coke 12s. to 13s. per ton.

He had been driven to investigate the subject of

coal burning in locomotives about two years ago by the difficulty experienced in the supply of coke, and made a series of experiments, which led him to the adoption of a considerable proportion of coal mixed with the coke for the locomotives on the Monmouthshire Railway. In the half year ending December, 1855, and previously, coke alone had been used, at an average rate in that half year of 40 lbs. per mile for all the trains, passenger and goods, costing 3.12d. per mile for fuel. In the following half year to June, 1856, a quantity of coal was mixed with the coke; and in the next half year to December, 1856, this was increased to an average of 22.73 lbs. of coal per mile and 17.85 lbs. of coke, making a total consumption of 40.58 lbs. per mile, at a cost of 2.56d. per mile of the trains for fuel. The proportion of coal was then further increased, and the results were:

	Coal.	Coke.	Total consumption lbs. per mile.	Cost of fuel per mile.
In the half year ending	lbs.	lbs.	lbs. per mile.	per mile.
June, 1857.....	39.25	5.60	44.85	2.09d.
Dec., 1857.....	39.71	5.20	44.91	2.13d.
June, 1858.....	34.15	7.21	41.36	2.10d.

The coal used was steam coal, of a semi-anthracite and semi-bituminous quality, obtained from the Monmouthshire valley on the eastern side of the Welsh coal district; it was not so anthracite as the Welsh steam coal, which was found at some distance westward from the district of the Monmouthshire Railway, in the Aberdare and Swansea valleys.

Mr. B. Fothergill had been engaged recently in an extensive series of experiments on the comparative value of coal and coke as fuel for locomotive engines; and the results of his observations led him to agree entirely with the statements in the paper, as to the efficiency of coal for locomotives in place of coke; and that the quantity of coal required was not greater to do the same work, if suitable provision was made for its proper combustion. His experiments had been made with the partially bituminous coal of Lancashire and Yorkshire; and he had also made one trial with the Welsh smokeless coal, in a locomotive engine, but it was impracticable to complete that trial, in consequence of the fire bars melting down upon the trip, so as to stop the engine after having run only a short distance. It was not from defect of the coal that this stoppage of the trial took place, but entirely from the melting of the fire bars; and it was evident, that without some provision for protecting the bars from melting, the Welsh smokeless coal could not be employed in locomotives.

The question of coal burning in locomotive engines was a highly important one, and called for the careful attention of railway companies, as to the saving to be effected in their working expenses by the substitution of coal for coke. In two trials he had made, the cost of fuel for taking the same train over the same distance of 96 miles was found to be—

With Coke, at 11s. 6d. per ton.....	22s. 3d.
With Coal, at 5s. 3d. per ton.....	9s. 6d.

—showing a saving of 57 per cent. in the cost of fuel consumed when coal was used. He should be happy, on a future occasion, to bring before the institution the particulars and results of the trials; and was glad to say he had come unreservedly to the conclusion that there was no necessity for noxious volumes of smoke being discharged from locomotive engines with the use of coal, but they might always be made to burn their smoke satisfactorily. There was not only a great saving in the cost of fuel attending the use of coal, but a great convenience to the drivers in keeping up the steam better than with coke; and those accustomed to it would rather run a coal burning engine, if the smoke were consumed, than a coke engine.

There was another point of great importance to be noticed in reference to the subject—the relative durability of the boiler tubes and fire box, with coal and with coke: and after the practicability of using coal, with great economy in cost of fuel, had been established, this became a serious question, in deciding whether to go on making coal

burning engines instead of coke engines. It had been feared, at first, that there would be a loss from more rapid destruction of the brass tubes and copper fire box with coal than with coke, and he had been recently engaged in an investigation of the subject on the London and South-Western Railway, where coal burning engines had been worked for a long time, for the purpose of ascertaining the real lifetime of the tubes under the two circumstances. The result was found to be, that in 26 coke burning engines, the average duration of a set of brass tubes was 94,518 miles, varying from 65 to 127,000 miles, according to their quality, and the description of coke used. But in several engines running with half coal and half coke, the tubes had run 154,955 miles, and were still in good working condition; and in one of these engines, the tubes, after 137,676 miles work, were not half worn out, and were reduced in thickness only from No. 13 to No. 16, wire gauge, or from .095 to .065 inch. From the results of this investigation he was satisfied that the ordinary wear of the tubes was caused mainly by the cutting and abrading action of the hard particles of coke drawn rapidly through the tubes, and was not entirely a chemical action, as had been at first supposed; and consequently, the comparative softness of the particles of coal greatly reduced this cause of wear. This was illustrated by the wear that ordinarily took place in the fire boxes of coke engines, in which the roof and upper portion were reduced only 1-32 inches in thickness, whilst under the fire door and at the lower part of the sides, where exposed to the continued wear of the hard pieces of coke, the thickness became reduced $\frac{1}{4}$ inch in the same time. He was satisfied that the durability both of tubes and fire boxes would prove much greater with coal alone; and that there was no ground to fear more chemical action from sulphur with coal than with coke.—*Newton's London of Arts.*

The New Haven Railroad—Injunction agst. the Payment of Dividends.

Below we give the decision of Judge Ingraham, of the Supreme Court, in reference to the dividend recently declared by this company:

SUPREME COURT—CHAMBERS—SEPT. 8.—Before Justice INGRAHAM.

John A. Underwood et al agt. The New York and New Haven Railroad Company.

This is an application growing out of the old Schuyler frauds on the New Haven Railroad Company. The facts of the case are disclosed in the opinion of the Court, rendered this morning, of which the following is the substance:

This is an action brought by the plaintiffs, who claim to be owners of some of the stock of the New Haven Railroad Company, to restrain the company from paying a dividend which was lately declared by the Directors, upon the ground that among the persons designated as stockholders there are several holding false stock, issued by Schuyler; and, also, to restrain the company from declaring other dividends until the true list of the stockholders is ascertained. The Judge here states the substance of Mr. Holbrook's affidavit, which has heretofore been made public.

He considers that it is necessary that a more thorough examination of the stock ledger, and of the transfers of the stock previous to 1853 should be made, before the true character of the stock held by those to whom the company propose to pay dividends can be ascertained.

If in no other way, the title to all the work from the original subscribers can be traced through those to whom such stock has been from time to time transferred, until it is found in the possession of the present holders. After reviewing the points raised by the counsel for the respective parties, comes to the conclusion that the order restraining the defendants should be to a certain extent granted. The dividend now declared belongs to the genuine stockholders. Whenever it is ascertained who they are, they will be entitled to receive their portions, and so far as it can be ascertained that any of the stockholders hold none of the stock that

is not genuine, there is no reason for prohibiting the payment to them of the dividend now declared by the company. In the affidavit submitted by the defendants, it was stated that more than one-half of the original subscribers of the stock continued to hold their stock up to the present time. There can be no doubt as to their right to the dividend now declared; and as there were no allegations that any fraudulent stock was issued prior to 1850, there seems to be no good reason for the restraining of the payment of the dividend upon any stock which is now held by persons who held it prior to 1850, and have not transferred their stock at any time since that period.

With these exceptions the injunction is continued as to all other stockholders, and the directors are prohibited from making any future dividend on the stock of the corporation until by the decision of some Court of competent jurisdiction, it shall be established who are the genuine stockholders in the company, or until the further order of the Court herein.

It will be seen that the Judge decided that the injunction should continue against stockholders acquiring their certificate *since* 1850, but that the dividend should be paid to those whose certificate date *anterior* to that time, there being no allegation of fraud prior thereto. A more thorough scrutiny of the stock ledger is to be made to ascertain the fraudulent from the *bona fide* stock.

La Crosse and Milwaukee Railroad.

A meeting was recently held in this city by the second mortgage bondholders of the Eastern Division of the La Crosse and Milwaukee Railroad, to express their disappointment in not receiving their interest, and to devise some way to arrive at it. Mr. D. E. Wheeler was appointed President, and Mr. Halliday, Secretary. The following resolutions were adopted:

Resolved, That the interests of the second mortgage bondholders require energetic measures for the protection of their interests, and that the committee proceed at their discretion to institute legal proceedings.

Resolved, That the committee now in charge of the interests of the second mortgage bondholders have the confidence of the bondholders, and this meeting tender to them their thanks for the ability and zeal they have manifested for the protection of their property up to the present time.

Resolved, That a contribution of \$5 on each bond, to be paid as the committee may call for it, be made to defray the expenses of legal proceedings, and that the committee be requested to apply for a receiver, at their discretion, and for a sale of the road at an early day.

It is claimed that this portion of the road earned the last 15 months \$343,000, *net*, a sum much larger than the accruing interest on the first and second mortgages. That the road has earned such a sum, is, we presume, no sufficient reason why the bondholders should get it.

With regard to the Western Division, matters are still worse, the net earnings being *nil*. According to a statement of Mr. Chamberlain, who seems to carry this concern in his pocket, the result of a year's operation have been as follows:

Receipts from pass'rs, fr't and mails..	\$134,310 91
Expenditures for operating the road..	142,944 25
Expend's for other outlays, depots, &c.	69,785 42

Exhibiting a loss of \$78,468 76, so far as the Western Division was concerned. In addition, Chamberlain's statements show that "the statement of expenses does not include any charge for use of rolling stock used in two daily passenger trains each way, and one working train, engaged in repairs of the road, belonging to the Eastern Division."

It will be found a very difficult thing to straighten out the affairs of this road, or to gain any credit for statements made in reference to it by interested parties. The road from the first has been the engine for the perpetration of frauds unequalled in extent by any ever committed in this country. It is not likely to escape from the effects for a long time to come, or be placed in the hands of parties who will labor honestly and capably for the benefit of the bondholders.

Journal of Banking Law.

LIABILITY OF BANKS—DEPOSITED CHECKS NEED NOT BE PRESENTED FOR PAYMENT THE DAY OF THEIR DEPOSIT.

The case of *Hooker vs. Franklin*, lately decided in the New York Superior Court, has an important bearing upon the every-day occurrence of deposits of checks in bank.

It is interesting to know, when we are contemplating the balance in our favor, which the deposit book may show, whether the balance is real or fictitious. To know when the bank really becomes liable to us, for the checks of other parties, that we may have deposited with them, and which appear to our credit in the bank-book.

This case establishes the doctrine, that although a bank receives the check of a third person, from the hands of a customer, on deposit, for collection, and credits such customer's account with the amount of its face, it does not undertake to use greater than ordinary diligence in its collection.

It does not undertake to present the check for payment the day of its deposit; nor is the bank guilty of negligence, if, in presenting it for payment, they conform to the regular and established course of business in such cases, though in such regular course the check would not be presented until the day after its deposit.

The facts of this case were as follows:

A check was drawn by the Chicago, St. Paul and Fond du Lac Railroad Company on the American Exchange Bank, in favor of J. W. Currier, and by him endorsed to the defendant, Joseph F. Franklin.

Franklin was a customer of the Continental Bank, and, therefore, endorsed the check, and deposited it with the Continental Bank on the day it was endorsed to him.

The Bank credited Franklin's account with the amount of the check, but did not present it to the American Exchange Bank until the next day, when it was sent through the Clearing House, according to the established usage of the Banks of the City of New York. The American Exchange Bank refused to pay the check, and immediately returned it to the Continental Bank. The Continental Bank then sued Franklin for the amount of the check.

It was urged upon the appeal that the plaintiffs should have presented the check for payment to the American Exchange Bank *on the day of its deposit with them*, there being in the American Exchange Bank, at that time, funds sufficient to pay the check, and that as the plaintiffs did not so present the check, the defendant was exonerated from all liability to the plaintiffs for the amount of the check.

Judge BOSWORTH, in delivering the opinion of the court said:—The defendant kept an account with the Continental Bank, and on depositing with that bank, on the 15th of April, 1857, the check in question, received credit for its amount.

The Continental Bank, in its proceedings to obtain payment of the check, conformed to the established usage of the banks in the City of New York, and the custom course of business in such cases.

The Continental Bank did not undertake, expressly or by implication to exercise or subject itself to the duty of exercising any greater diligence to obtain payment of the check.

It passed through the Clearing House to, and was presented at, the American Exchange Bank, on which it was drawn, soon after that bank opened on the 16th.

That bank refused to pay it, and returned it to the Continental Bank, about 12 o'clock of that day. The defendant was immediately and personally notified of these facts; the defendant said, there must be some mistake in the matter, and he would see to it immediately. * * *

When a case presents no peculiar circumstances, *laches* cannot be instituted to the holder of a check, as between him and his immediate endorser, merely because he does not present it until the day after he received it, (*Merchants' Bank vs. Spicer*, 6 Wend., 433; *Gough vs. Staats*, 13 id. 549.)

Certainly no *laches* can be imputed to a depositary, receiving it for presentment and collection, who, on presenting it on the next day after its receipt, acts in conformity with the regular and established course of business in such cases.

A rule which required all banks in the City of New York to present, for payment, all the checks deposited by their customers, on the day of their deposit, would compel them to decline business of that character, and defeat the objects in many cases, for which deposits are made, and put an end to certain facilities, which result from obtaining credit for the amount of a check, for the day of its deposit, without providing for its payment until the following morning.

The transaction at the Clearing House did not operate as a payment of the check by the American Exchange Bank, nor make it the duty of that bank to credit the amount of it to the Continental Bank.

Giving to the transaction that effect, would be in direct conflict with the established course of business. * * *

There was no evidence that the Continental Bank received the check as a purchaser and at its own risk, or upon an agreement not to look to the defendant, in the event of its being dishonored.

In our opinion, there is no error in the judgment appealed from, and it must be affirmed, with costs.

Mammoth Iron Vessel.

The British Government are having built a wrought iron vessel of immense size, strength and steam-power, especially adapted as a vessel of war, and for running down ships of the largest kind, not even excepting the *Great Eastern* herself. Sufficient progress has been made with the iron work to make it certain that she will be afloat and ready for sea by June next. Her dimensions will be—extreme length, 380 feet; breadth, 58 feet; depth, 41 feet 6 inches, and her tonnage, 6,177 tons. The weight of the empty hull will be 5,700 tons. The engines are to be 1,250 horse power, and their weight with boilers will be 950 tons. She will carry 950 tons of coal, and her armaments, masts, stores, &c., will amount to 1,100 tons more. Thus at sea, her total weight will be about 9,000 tons.

Sandusky, Dayton and Cincinnati Railroad.

The earnings of this road for the fiscal year ending June 30, 1859, were:—

From passengers	\$173,387 28
" freight	371,147 34
" mails, express, etc.	33,423 96
	\$577,958 58

And the expenses were:—

Locomotive power	\$123,709 19
Maintenance of way	78,411 78
Train expenses	46,542 87
Station expenses	56,529 92
Office expenses	34,748 42
General expenses	7,298 80
Machine shop	4,836 03
	352,076 01

Net earnings	\$225,882 57
Loss and damage on freight	2,569 19

	\$223,313 38
Less interest account	\$114,694 61
" taxes	11,419 63
	126,114 24

Balance	\$97,199 14
Compared with the previous year the gross earnings show an increase of	\$34,278 00
The expenses a decrease of	49,632 36

And the net earnings an increase of \$83,910 36

In reference to the finances of the company, the report says:—

The process of extinguishment of over-due bonds, amounting, at the close of the fiscal year 1858, to \$190,000, is progressing, under the arrangement of 1856, satisfactorily to all parties. Fifty-three thousand dollars of principal, and fifteen thousand four hundred and five of interest, have been paid during the past year.

Our floating debt is in a fair way of adjustment under the programme of February, 1858. Many of the company's securities, pledged as collateral, have been released and applied to the extinguishment of past due obligations. In some instances, where the margin in collaterals was large, obligations to pay a per centage in money have been given with the securities, on settlement. The securities thus used are mostly of the class of '75, and the obligations accompanying them have been promptly met. The remaining portion of our floating debt, including also that known as "the boat debt," it is hoped, will soon come in to the proposed arrangement, especially when it is seen, as will appear by the exhibits accompanying this report, that the company has offered the best terms within its power, and such as, in the end, promise to be entirely sufficient and satisfactory.

In estimating the future prospects of this road, some regard should be had to its past performances. Its net receipts, after allowing for changes in its operating condition, may be assumed as the most reliable guide in forming this estimate. From 1853 to 1859, both inclusive, the following statement shows the net of each year:

1853-'4	\$334,441 20	1856-'7	\$205,708 39
1854-'5	228,281 83	1857-'8	141,972 21
1855-'6	246,620 02	1858-'9	225,882 57

These results were derived from the following gross receipts for the same years, to wit:

1853-'4	\$705,783 21	1856-'7	\$680,190 96
1854-'5	588,771 79	1857-'8	543,680 53
1855-'6	575,723 18	1858-'9	577,958 58

The net of the year just closed is the largest, of the last three years, and about equals (contrasting the gross and net of the two years) that of 1854-'5—while the expenditure has fallen short of sixty per cent. on \$600,000, which was the estimate in last year's report.

The report of the Superintendent gives in detail the actual condition of the road, the present efficiency of its machinery, and the success with which it has been operated the past year. While

the expenses have been reduced, it is believed that the road has never been in a condition to answer the purposes of its construction better than at the present time. The road-bed is in good order—the renewal of ties exceeds by three times the number replaced last year, and the company have gone to the extent of their ability in the renewal of iron.

The road has been run with exemplary promptitude and punctuality, at all seasons, and under all circumstances. No injury to passengers is reported, and the few accidents by which injury to the persons of employees or the property of the company has ensued, is creditable to the skill and faithfulness of its servants.

CONDENSED BALANCE SHEET. DR.	
Cost of road	\$3,195,994 00
Stations	792,160 37
Rolling stock	605,900 00
Bonds of the company not sold	126,500 00
Stocks, bonds, and bills receivable	28,203 36
Lands	419 00
Materials on hand	44,455 47
Cash	\$49,933 91
Balances due from agents and connecting roads ..	6,314 35
Due from P. O. Department	8,040 00
	64,288 26

Balances due from individuals, mostly uncollectable	15,789 18
Balances due from sundry parties, mostly uncollectable or offset by claims	27,824 15
Coupons, mostly collectable from parties holding collaterals	6,905 31
Springfield and Columbus railroad ..	39,464 45
Boats	158,503 02
Profit and loss	391,951 41
	\$5,508,357 88

CR.	
Capital stock	\$2,697,090 00
Bonds, over-due	137,000 00
" due in 1866	997,000 00
" due in 1875	1,000,000 00
Dividend, due in 1860—1862	224,000 00
Due in 1878, bonds and scrip	78,453 03
Dividends unclaimed	8,530 00
Bills payable	128,277 88
Balance of earnings account	120,203 93
Due employees, May and June	32,105 21
Due sundry parties for wood, ties, iron, etc.	11,960 28
Due sundry parties balances, loans, etc.	11,757 53
Taxes, proportion for 6 mos.	7,200 00
Interest on bonds, accrued to date ..	54,780 02
	\$5,508,357 88

The officers are:—

O. FOLLET, *President*.
L. H. LATHAM, *Secretary and Treasurer*.
JOHN H. HUDSON, *Superintendent*.

Performances of Locomotives.

The New Orleans Delta gives the following account of the performances of two Philadelphia locomotives on the New Orleans, Jackson and Great Northern Railroad:

The locomotive "Black Prince," built by R. Norris & Son, Philadelphia, ran in the month of June 3,328 miles, burning 25 cords of wood, making 133-12 miles to a cord, carrying three passenger cars and one baggage car.

The locomotive "Mazeppa," built by M. W. Baldwin & Co., ran for the same month 2,730 miles, burning 27 cords of wood, making 101-08 miles to a cord, carrying the passenger and two baggage cars. The above wood includes firing up, switching and regular mileage. The length of the road is 206 miles; it has 35 stops each way.

We will also remark that, on one trip of the "Black Prince," (a trial trip,) the consumption of wood was 2½ cords, making 412 miles, including switching, stopping, and firing up at each end of the road, and with a train of two passenger cars and one baggage car—being 164-08 miles to a cord of wood.

Macon and Western Railroad.

The Balance-Sheet of this company for the fiscal year ending August 1, 1859, is as follows:

Construction Accounts, &c.	\$1,500,000 00
Disbursements, July	111,338 74
Dividend No. 25	57,552 00
Interest on Bonds	3,391 54
Hinn Case	9,322 89
Treasurer's Balance	\$27,270 81
Bills Receivable	21,735 60
Freight Agents	14,122 60
Bank of the Republic	29,763 02
Bank of Charleston	17,798 71
Post Office Department ..	4,268 66
Geo. Parsons & Co.	83 15
Am. Atc. Screw St. Ship Co.	5,073 72
Money Loaned	50,000 00
	170,116 27

	\$1,851,721 44
Capital Stock	\$1,438,800 00
Bonds	52,500 00
Profit and Loss	107,917 05
Freight Earnings	\$139,730 10
Passenger Earnings	82,973 82
Mail Earnings	6,791 85
	229,495 77
Interest	486 88
Negro Hire	4,476 28
Central R. R. & Bk. Co.	930 79
Sale of Freight Cars	15,707 98
Through Tickets	1,406 69
	\$1,851,721 44

Coal for Locomotives.

The following is the result of an experiment with Lehigh coal on the East Pennsylvania road with one of Norris's engines:

OFFICE EAST PENNSYLVANIA R. R. Co., }
READING, Pa., Sept. 8, 1859. }

Messrs. RICHARD NORRIS & SON:
Below please find statement of the performance of "Engine No. 1," built by you, on the East Pennsylvania Railroad, in July and August last. The coal cost \$2 80 per ton, gross, in the tender.

DIMENSIONS.	
Cylinders—Diameter, inches	14
Stroke, inches	24
Drivers—Diameter, feet	5
Grate—Area square feet	13½

PERFORMANCE.	
Number of trips, (Round)	59
Total number miles run	4,514
Average number of cars	3½
Total pounds coal consumed	109,760
Pounds coal used per trip	1,860½
Pounds of coal per mile	243-10
Cost per trip	\$2 33-100
Cost per mile	\$3 4-100 cts.

The above performance was on Passenger Trains. The fire was not drawn from 5 o'clock a. m., until after 6 p. m. daily. The engines ran 38½ miles, (single trip,) then lay over 1½ hours on an average, or 5 hours out of 12. During the 5 hours, in which the engine was standing still, coal was of course being consumed.

Yours truly,
JAMES MOORE.
Gen. Supt. East Pennsylvania R. R. Co.

Pittsburg and Erie Railroad.

Asa B. Wood, of Buffalo, has taken the contract for completing forty miles of this road, extending from Gerard, Penn., to Jamestown, to be finished by the 1st of November next. This will open a new avenue to the coal regions.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending September 13, 1859.

BONDS.		Per cent.
Little Miami, 1st Mort.	68	85
Covington and Lexington, 2d Mortgage	78	56
Cinc. Ham. and Dayton, 2d Mortgage	78	82½
Indianap. & Cincinnati, do. do.	78	82½
STOCKS.		
Cincinnati, Hamilton & Dayton	68	
Columbus and Xenia	83	
Indianapolis & Cincinnati	50	
Little Miami	85	

Railroad Earnings.

The earnings of the Cleveland and Mahoning railroad for August were:—

Passengers	\$4,340 78
Freight	11,073 91
Coal	9,553 99
Mail	262 50

Total earnings for August	\$25,231 27
Operating expenses	8,894 92

Net earnings.....\$16,336 35

In the expenses are included about \$1,400 for extraordinary repairs to a bridge.

The following are the August earnings of the Cincinnati, Hamilton and Dayton Railroad, compared with the corresponding month of previous year:

1859	\$46,082 22
1858	38,175 03

Increase, 1859.....\$7,907 19

The business of the Illinois Central Railroad for August, 1859, was as follows:

Land Department.

Acres Construction Lands sold.....	1,511.97 for	\$21,409 86
Acres Interest Fund L'ds sold.....	80.00 "	2,725 72
Acres Free Lands sold ..	80.00 "	1,449 60

Total sales during the month	1,671.97 for	\$25,625 18
To which add Town Lot sales.....		1,106 20

Total of all.....\$26,731 38

Acres sold since Jan'y 1, 1859.....	20,188.61 for	\$299,799 27
Acres sold prev'ly, 1,229,835.33 "		15,637,148 95

Total.....1,250,023.94 for \$15,936,948 22

Construction Bonds canceled in Aug., 1859.....\$17,000 00

Construction Bonds canceled previously.....1,148,000 00

\$1,165,000 00

Free Land Bonds canceled in Aug., 1859.....\$3,000

Free Land Bonds canceled previously.....149,000

152,000 00

Total Bonds canceled up to August, 31, 1859.....\$1,317,000 00

Cash receipts in August, 1859.....\$29,847 64

Do. since Jan'y 1, 1859... 363,085 02

Total cash and bonds received to August 31, 1859.....\$3,037,982 55

Traffic Department.

Receipts from passengers.....\$63,467 89

Do. freight.....96,789 90

Do. mails.....6,358 23

Do. rent of road.....5,215 00

Do. other sources.....5,198 93

Total receipts in August, 1859.....\$177,030 05

Do. do. 1858.....202,953 01

Do. since Jan'y 1, 1859.....\$1,185,932 53

Do. do. 1858.....1,262,905 52

Original land grant, 2,595,000 acres; railway,

706 miles of main track, and 87 miles of sidings; 113 engines; 2,401 cars; funded debt, \$18,683,000; share capital, \$60 paid on 175,000 shares—\$10,500,000.

	1856.	1857.	1858.
Traffic	\$2,434,878.59	2,293,964.47	1,976,578.52
Work'g ex-			
penses	1,444,546.19	1,791,231.14	1,419,954.80

Balance....\$990,332.40 \$502,733.43 \$556,623.72

The receipts of the New York and Harlem railroad company for Aug., 1859, were..\$100,118 04

Do. do. 1858.....93,236 57

Net increase.....\$6,881 47

The earnings of the Toledo, Wabash and Western Railroad for August, were as follows:—

Passengers	\$24,523 76
Freight	44,693 34
Mail and express	3,366 66

Total.....\$72,582 76

The earnings of the Michigan Southern and Northern Indiana railroad, during the month of August, were as follows:—

	1859.	1858.
Passengers	\$57,290 99	\$74,725 36
Freight	85,717 36	100,302 69
Mails	4,583 41	4,635 14
Express and miscell's ..	5,287 90	23,046 09

Total.....\$149,879 66 \$202,709 28

The receipts of the Grand Trunk Railway of Canada for the week ending August 27, were.....\$46,381 09

Week ending Aug. 28, 1858.....47,163 37

Increase.....\$782 28

Total traffic from July 1st.....\$338,733 69

Same period last year.....323,562 60

Increase.....\$15,171 09

The receipts of the Grand Trunk Railway of Canada for the week ending Sept. 3, were.....\$45,242 78

Week ending Sept. 4, 1858.....43,421 69

Increase.....\$1,821 09

Total traffic from July 1st.....\$383,976 47

Same period last year.....366,984 29

Increase.....\$16,992 18

The earnings of the Chicago, Burlington and Quincy railroad for August were as follows:

	Chicago & Burlington.	Galesburg & Quincy.
Freight.....	\$78,087 04	\$9,179 81
Passengers.....	32,654 18	9,463 95
Mails and miscellaneous	1,938 38	872 83

Total.....\$112,679 60 \$19,516 09

Total earnings, 310 miles.....\$132,195 69

Total earnings in August, 1858.....146,448 46

Increase.....\$13,247 77

The earnings of the North Pennsylvania Railroad for August, 1859, were.....\$34,005

August, 1858.....29,150

Increase.....\$4,845

Earnings in 9 months, ending August 31, 1859.....\$248,070

For same time last year.....210,759

Increase.....\$37,310

The earnings of the Worcester and Nashua railroad for August, 1859, were.....\$22,359 10

August, 1858.....18,624 33

Increase.....\$3,734 77

The following is a statement of the earnings of the New York Central Railroad, for the month of August, 1859, compared with its earnings for the corresponding month of the previous year:

August, 1859	\$602,151 07
August, 1858	538,048 16
Increase.....	\$64,102 91

The earnings of the Watertown and Rome railroad for August were as follows:

	1858.	1859.
From passengers.....	\$13,221 64	\$14,268 17
From freight.....	14,535 69	14,415 34
From other sources	1,150 92	1,127 24

Total.....\$28,908 25 \$29,810 75

Increase in 1859.....\$902 50

The earnings of the Pacific Railroad of Missouri for August, 1859, were.....\$48,947 14

August, 1858.....50,602 25

Decrease.....\$1,655 11

The earnings of the South West Branch in August were \$1,158.55.

The earnings of the Memphis and Ohio railroad for August were.....\$18,198 09

August, 1858.....5,823 98

Increase.....\$12,374 11

The earnings of the Erie railroad, for August, 1859, were.....\$359,114 59

Earnings, August, 1858.....883,261 96

Decrease.....\$24,167 37

The earnings of the Norwich and Worcester railroad, for August was very favorable. The figures are:—

	1858.	1859.
Passengers.....	\$13,797 69	\$16,021 27
Freight.....	17,778 93	20,185 48

Totals.....\$31,371 42 \$36,206 75

Decrease.....\$4,835 33

Harrisburg and Lancaster Railroad.

The annual meeting of the stockholders of the Harrisburg, Portsmouth, Mount Joy and Lancaster railroad company was held at Philadelphia on the 2d inst. From the report of the President we learn that the—

Receipts from passengers, not from or to the Pennsylvania railroad were.....\$89,096

From passengers to and from Pennsylvania railroad.....57,123

From freight from all sources.....250,543

From Adam's Express, emigrant passengers, etc.....11,144

From rents and mail.....15,653

Total receipts for the year.....\$423,561

The expenditures were for the year, for—

Motive power and transportation.....\$169,544

Repairs of road.....56,912

Salaries of officers, conductors, etc.....9,540

Tax on dividends, freight and property.. 29,573

Rent, insurance, etc.....3,138

Interest on bonds, etc.....36,880

Two per cent. dividends.....108,710

Total expenditures.....\$402,299

—showing a surplus of \$9,251 on hand. The number of passengers carried over the whole road was 146,219. The report states that the sterling bonds of the company due in London January, 1858, have all been paid and cancelled. Of the dollar bonds, maturing at the same time in this city, there still remain outstanding but \$1,000. The bonds of the company loaned to the Pittsburgh, Fort Wayne and Chicago Railroad Company

have all been returned. The road and bridges are reported in excellent condition, several bridges having been rebuilt during the past year.

The officers for the ensuing years are: **MICHAEL V. BAKER, Esq.**, re-elected President, and **GEORGE TABER, Esq.**, Secretary. *Directors*—**MICHAEL V. BAKER**, **WILLIAM FORD**, **ALGERNON S. ROBERTS**, **DR. JOHN HOLMES**, **JAMES MAGEE**, **ROBERT V. MASSEY**, **WM. W. LONGSTRETH**, **JAS. MEHAFFEY**, **JOHN H. TOWNE**, **J. B. LIPPINCOTT**, **JAS. YOUNG**, **EDWARD P. GAY** and **THOMAS SPARKS**.

American Railroad Journal.

Saturday, September 17, 1859.

How the Management of our Railroads can be Improved.

The great thing wanting to an improvement in the management of railroads is a knowledge of the manner in which they are conducted. Only in a very few instances is this communicated with the requisite fulness of detail. As it is impossible to tell how most of our railroads are managed, so it is impossible to form a correct idea of their value. The Reports of railroad managers give us what are claimed to be *net* results of their operations, but keep from the public the process by which they are reached. We are told that the earnings are so much, the current expenses so and so. The balance which belongs to the capital account is simple deduction from the two statements. But a railroad and its equipment is a perishable affair. The iron, ties, machinery, bridges, and many of its structures have to be renewed on an average every ten years. In each year, therefore, the depreciation of these equal one-tenth part of their value. If these are not fully maintained, or a sum be not set apart each year for this object equal to the annual wear and decay, and embraced among the current expenses, then these are understated by an equal amount. Take the matter of rails. They may last 8 or 10 years without any extensive renewals, when they must be entirely replaced. Now it is well known that the large dividends paid years back by many of our companies were made up in part of what should have gone to *current* expenses, or to a fund for renewals. When they could be no longer postponed, dividends had to be greatly reduced or omitted altogether. Now, a statement, to show as nearly as possible the actual condition of a road, and whether the same has been fully maintained, should give the *items* of expenditures. Only a small number of companies give the quantity of rails that have been used during the year, or their cost. In the absence of such a statement, no idea can be formed of the condition of the track. It is quite as important to state the quantity as the value of the rails, as the difference between the cost of new, and re-rolled rails is equal, often, to one hundred and fifty per cent. The number of ties on a road, as well as the number renewed each year, should be given. Statements equally full and explicit should be made in reference to machinery and bridges, and in fact to every perishable structure, that the stockholders may see the relation between the sums yearly expended upon them, and their cost, and their annual depreciation.

A great many, if not most of the managers of our railroads act upon the idea that a great many

things should not be communicated to the stockholders, as a knowledge of them might throw an odium upon their management, or shake the confidence of the public in the value of the securities held by it.—In other words, the *owners* of our railroads are, often, allowed to know only so much about their property as those entrusted with its management see fit to communicate. To these, not only the property of the stockholders, but all voice in the manner of conducting it, is entrusted. The latter, in fact, have only a mere residuary interest dependent, in its value, upon the capacity or faithfulness of their agent, over whom they really exert little influence or control.

Such a state of things would be speedily changed, could every important act of the managers of a railroad be laid before the public. It would at once become a subject of criticism, or comparison with similar acts by other companies. A judgment, and probably a correct one, would be formed by the stockholders, which would react upon, and become the rule of conduct for the managers, who would in all cases become constantly amenable to public opinion, from which by the present system pursued they are now almost entirely shielded. We cannot expect any very great improvement till the neglects and abuses commented upon shall be thoroughly corrected.

Sunbury and Erie Railroad.

This road has been completed from Erie to Union Mills, and formally opened for business. Regular trains are now running between the two places. The company is also engaged in stocking the completed portion of their road, and have ordered the construction of twenty-three more burthen and platform cars. The work on the portion of the road between Union Mills and Lock Haven is rapidly approaching completion, and will most undoubtedly be in working order by the first of January next.

Pacific Railroad of Missouri.

The proposition to subscribe \$200,000 to the stock of this road, was recently submitted to the voters of Jackson County; the result was a majority of one thousand in favor of the subscription.

Florida Railroad.

We learn that this company has purchased two steamboats for the route between Cedar Keys and New Orleans, on the proposed great through mail route of the seaboard, and that two iron steamboats have been contracted to be built for the portion of the route between Charleston and Fernandina.

Detroit and Milwaukee Railroad.

We learn that since the new boats have been put on, the freight business over this road has more than doubled. Freights for Wisconsin and all points in the Northwest now generally take this route.

New York and Erie Railroad.

For the purpose of assisting, as far as possible, to an intelligent discussion of the affairs of the Erie railroad, we present in the following page a full abstract of its operations for seven years, embracing the entire period since its completion.

The result, we confess, is not very flattering, if the past is to be a copy for the future. The most unfavorable feature presented by the abstract is the constantly increasing cost of maintaining some of the more important departments, such

as the road proper, and machinery. The cost of maintaining the former increased over *three hundred* per cent. from 1852 to 1859. That of machinery, *two hundred* per cent. per mile run. This immense increase proves one of two things—either that the yearly statements made by the company have failed to give any adequate idea of its affairs, or that no intelligent opinion can be formed by the managing parties of the cost of keeping up the road. Taking the result, there is a degree of uncertainty in this matter, so great as to destroy all confidence in this or any other road; for no business can be a paying one, the expenses connected with which, (its volume being uniform), vary in different years *three hundred* per cent.

This wide difference we refer to an incompetent management rather than to any inherent defect in the thing itself. It is, certainly, comparatively easy to tell when a road is *completed*. This being determined, it is easy to estimate, pretty nearly, the annual wear and tear to which it is to be subjected. Take the matter of repairs of track, including iron. We suppose that *twenty cents* per mile run is a fair estimate of the cost of maintaining a first class road, including the depreciation of rails. The charge for repairs of track, in 1852, was 12.40 cents per mile run; or 7.60 less than the actual depreciation. In 1853, it was 16.63, or 3.37 cents less. In 1859, it equalled 37.83 cents per mile, or 17.83 cents greater than the actual annual depreciation. The necessary inference is that the early reports of the company failed to give the total yearly current expenses, while those for a later period, would seem to prove that their great excess over previous years, and over the assumed standard, (of 20 cents per mile run,) embraced repairs and improvements neglected in former years. But this last inference is not a necessary one, as we know too little of the present condition of the road, or the manner in which it has been conducted, for two or three years past, to say whether anything more than the yearly depreciation has been met. If this be all, the figures given show a very lavish expenditure for the services performed.

But whatever may be the true cause of the vast difference in the current expenses for different years, one fact is apparent through the whole, that we are yet all afloat as to the actual cost of the road, whenever it *may* be completed, and of the necessary ratio of expenses to earnings. As before remarked, the very first elements to an intelligent estimate of the cost and value of the road are wanting. In any move for the re-organization of the company, the first step to be taken is to ascertain and define them.

The decline in the business of the road, though great, is not so great as upon many other important lines. That the receipts have held up so well, under all the circumstances, prove the great strength of the route. Its local trade is very valuable; while connecting by an uninterrupted line, the harbor of New York with the great Lakes, it cannot fail, under almost any administration, of having a very large through business. The goods traffic has held up remarkably well. The past decline in the passenger receipts from 1853 and 1854, is a bad feature, and has arisen very largely from the mismanagement of this department. From a variety of causes, the passenger traffic has been actually driven from this to other roads.

Statement showing the operations of the New York and Erie Railroad for the seven years ending September 30, 1898.

New York and Erie Railroad.

1. TABLE showing the cost of construction and equipments, earnings, etc.

Years.	Cost of r'd and equip-ment.	Length of r'd.—Main.	Branch.	2d track & sid'gs.	Equip. in single l.	Paid-up capital.	Funded debt.	Floating debt.	Miles oper-ated incl. r'd leas'd.	Total miles run by l. com. with trains.	Number of pass-engers.	Tons of freight.	Pass'ger traffic.	Freight traffic.	Tot., incl. mails, etc.	Rec'ts from all sources.	Expendit's on all ac-counts.	Net rec'pts over expendit's.	Am't applied to interest.	Am't applied to divid'ds.
1892.....	\$5,272,551.25	546 19	83	548 87	766 91	\$18,008,000	\$18,008,000	\$18,008,000	405	2,389,271	81,179,624	96,667,656	\$1,832,637	\$1,832,637	\$1,832,637	\$1,832,637	\$1,832,637	\$1,832,637	\$1,832,637	\$1,832,637
1893.....	5,312,222.83	446 19	215	682 10	600,000	20,170,869	20,170,869	20,170,869	445	2,434,293	98,482,261	101,626,522	1,601,209	2,527,214	4,181,968	4,181,968	4,181,968	4,181,968	4,181,968	4,181,968
1894.....	5,483,439.43	446 19	262	727 10	603,959	22,601,000	22,601,000	22,601,000	445	2,466,484	99,663,709	100,008,034	1,733,379	2,809,500	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968
1895.....	5,583,742.81	446 19	265	730 10	603,959	24,851,000	24,851,000	24,851,000	445	2,466,484	101,108,220	103,468,046	1,698,670	2,809,500	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968
1896.....	5,683,028.24	446 19	281	740 10	600,000	24,851,000	24,851,000	24,851,000	445	2,466,484	101,108,220	103,468,046	1,698,670	2,809,500	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968
1897.....	5,741,023.68	446 19	281	740 10	600,000	24,851,000	24,851,000	24,851,000	445	2,466,484	101,108,220	103,468,046	1,698,670	2,809,500	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968
1898.....	5,841,023.68	446 19	281	740 10	600,000	24,851,000	24,851,000	24,851,000	445	2,466,484	101,108,220	103,468,046	1,698,670	2,809,500	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968
Aver.	5,627,551.25	446 19	281	740 10	600,000	24,851,000	24,851,000	24,851,000	445	2,466,484	101,108,220	103,468,046	1,698,670	2,809,500	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968	4,542,968

2. TABLE showing the cost of repairing and operating the road, rolling stock, etc.

Years.	Road-bed and track.	Iron used in repairs.	Buildings, fences, etc.	Taxes on real estate.	Total cost of main-tenance r'd.	Engines & tenders.	Cars and trucks.	Tools and machinery in shops.	Total cost of repairs includ-ing incidentals.	Conductors & brake-men.	Engin'rs & firemen.	Coal and wood.	Used for engines.	Used for cars.	Total cost of operat-ing.	Office and stationery.	Clerks and laborers.	General super-intend-ence.	Losses and damages.	Total incl. all others.	Grand total cost of re-pairs and operating.
1892.....	\$188,301.30	\$9,080	\$9,668	\$13,293	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342	\$296,342
1893.....	188,301.30	9,080	9,668	13,293	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342
1894.....	188,301.30	9,080	9,668	13,293	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342
1895.....	188,301.30	9,080	9,668	13,293	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342
1896.....	188,301.30	9,080	9,668	13,293	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342
1897.....	188,301.30	9,080	9,668	13,293	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342
1898.....	188,301.30	9,080	9,668	13,293	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342
Aver.	188,301.30	9,080	9,668	13,293	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342	296,342

3. TABLE showing the cost (in cents) per mile run by locomotives with trains, reduced from Table No. 2.

Years.	Cost of road per mile.	Capital stock.	Funded debt.	Floating debt.	Total ex-pendit's per mile.	Net rec'pts per mile.
1892.....	7.88	2.31	0.40	1.81	12.40	8.61
1893.....	7.81	0.24	1.12	1.46	10.63	8.23
1894.....	7.81	0.24	1.12	1.46	10.63	8.23
1895.....	7.81	0.24	1.12	1.46	10.63	8.23
1896.....	7.81	0.24	1.12	1.46	10.63	8.23
1897.....	7.81	0.24	1.12	1.46	10.63	8.23
1898.....	7.81	0.24	1.12	1.46	10.63	8.23
Average.	7.81	0.24	1.12	1.46	10.63	8.23

4. TABLE showing the receipts, etc., per mile run, and the ratio of specific expenses.

Years.	Tot. receipts Tot. ex-pense Total net-re-ceipts to ex-pense Ratio to total ex-pense.	Ratios to total ex-pense.	Rolling stock, etc.	Operating ex-pense.	Miscel. ex-pense.	Years.	Cost of road per mile.	Capital stock.	Funded debt.	Floating debt.	Total ex-pendit's per mile.	Net rec'pts per mile.
1892.....	\$1.49	\$0.77	\$0.72	51.67	17.83	1892.....	\$59,249	\$16,703	\$38,718	\$2,845	\$7,677	\$3,971
1893.....	1.68	0.89	0.63	56.33	20.80	1893.....	67,146	21,505	43,865	5,774	9,000	5,089
1894.....	1.81	0.95	0.86	62.48	21.20	1894.....	71,912	24,604	47,308	6,481	10,810	5,971
1895.....	1.72	0.85	0.87	49.42	21.74	1895.....	72,664	21,657	47,308	6,481	10,810	5,971
1896.....	1.84	1.18	0.76	60.82	20.29	1896.....	72,985	21,604	47,308	6,481	10,810	5,971
1897.....	1.91	1.37	0.54	71.72	24.03	1897.....	73,191	22,664	47,308	6,481	10,810	5,971
1898.....	1.71	1.35	0.36	78.95	31.58	1898.....	73,223	23,654	47,308	6,481	10,810	5,971
Aver.	1.74	1.05	0.69	60.19	22.74	Aver.	70,038	21,449	47,723	6,468	10,461	6,314

Gutta Percha Cement Roofing.

We invite attention to the advertisement in another column, of Messrs. JOHNS & CROSLY'S "Gutta Percha Cement Roofing." This article has been thoroughly tested in this city, Brooklyn, and elsewhere, by builders, architects and others, who pronounce it the cheapest and most durable roofing in use. The materials of which it is composed, combine every requisite for a practically imperishable roof. It is fire and water proof; and from its great elasticity, is not injuriously affected by extremes of heat and cold. It is adapted to all kinds of roof, whether steep or flat, and is readily applied to old shingle roofs without removing the shingles. The cost is only about one-half that of Tin.

The Gutta Percha Cement, from its great durability, is fast superseding paint for coating and preserving new, and repairing old tin and metal roofs. It adheres firmly when applied, forming a body equal to three coats of ordinary paint. It is not liable to crack in cold, or run in warm weather. Roofs repaired with this Cement are prevented from further corrosion and leaking. Orders supplied at short notice for Gutta Percha Roofing Cloth, and Gutta Percha Cement by the barrel, with full directions for application. Address Messrs. JOHNS & CROSLY, 510 Broadway, New York, or 349 Fulton st., Brooklyn.

Holly's Elliptical Rotary Pump.

In our advertising department will be found a cut of this approved engine as adapted for railroad use. It has been in successful application as a power in mines, factories, shipping, etc., for some considerable period, and has earned for itself an excellent character for simplicity, efficiency, and durability. In its new application it is also authentically endorsed by several eminent railroad engineers and mechanics. Whatever may hitherto have been the prejudice against rotary pumps, the experience of this adaptation has signally overcome. It is also evident that it has many qualities not possessed by other forms; and the small amount of power necessary to drive it as compared with other pumps to raise a given quantity of water is not the least prominent feature in its favor. The agent in this city for the sale of these pumps is C. W. COPELAND, Esq., 122 Broadway.

English vs. American Rails.

To the Editor of the AM. RAILROAD JOURNAL:

Your correspondent "R. O." in your paper of the 3d inst., affirms the decided superiority of English to American rails, and proposes several tests to prove the fact.

The comparative quality of English and American rails can be seen by any person in your city, in a few hours, by taking a trip to Hackettstown, N. J., on the Morris and Essex Railroad, and inspecting the rails of the extension of that road from Dover, and then examining the rails on the Sussex Railroad, from Waterloo to Newton; the former are English, 70 lbs. to the yard, the latter made by the Trenton Iron Co., 50 lbs. to the yard; the former have been down two years the longest, but the latter have carried twice the amount of tonnage; and a fair inspection will show that while a large number of the English rails are splintered at the ends, not twelve rails can be found in the same condition on the twelve miles laid with the American iron.

Sussex Co., N. J., Sept. 12.

J. R.

House Furnishing Hardware.

The attention of persons in want of house furnishing goods, is invited to the advertisement of C. B. GORDON, Esq., 258 Pearl street, in this city. Mr. GORDON has for sale Water Coolers, Baths, Plain Japanned and Stamped Tin Ware. He is also dealer in Tinmen's Tools, Copper Bottoms, Brass Kettles, etc.

Also manufacturer of the "OLD EMPIRE COFFEE POT," patented October 19, 1858, and which has received the unqualified approval of numbers who have given it a trial. It is constructed in sizes from 1 to 16 quarts, at prices varying from \$1 25 to \$7 00. It is simple in its construction, easily managed, and accomplishes the object for which it was intended. Full printed directions accompany each package.

Sault St. Marie Canal.

The following is the monthly statement for August of the commerce of the Canal, furnished by the Superintendent to the Detroit Board of Trade.

	Aug. 1859.	Aug. 1858.
No. of Steamers passed	17	12
" Propellers "	26	13
" Sail vessels "	90	45
" Tugs "	60	3
Aggregate tonnage	64,752	36,829
Tolls received	\$3,091.98	\$1,730.94
No. of passengers.	2,517	

The total value of all articles which passed the Canal, during the month of August, was \$1,249,964 48.

Alexandria, Loudoun and Hampshire R. R.

About twenty miles of rail have been laid on this road, and the work of track-laying is steadily progressing with the expectation of reaching Leesburg the coming winter.

Personal.

CHARLES MINOT, Esq., was appointed General Superintendent of the New York and Erie railroad on the 7th inst.

Mr. R. C. NEIL, of Campville, has been appointed Superintendent of Live Stock on the New York and Erie railroad—and is to have the entire charge of that branch of the business.

Interest and Dividends.

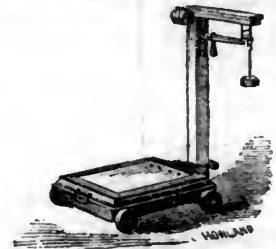
The Philadelphia and Norristown Railroad Company have declared a dividend of 5 per cent., payable on the 1st of October.

We understand that the money to pay the interest on the coupon bonds of the city of Norfolk, Va., due in New York on the 1st of October next, has been transmitted to this city.

Important Decision in Virginia.

The Court of Appeals have unanimously affirmed the judgment of the Circuit Court in this County, in the case of "Sanger vs. The Central Railroad Company." At the November term, 1856, of the Circuit Court of Augusta, Jacob Sanger recovered a verdict for \$6,000 damages for injuries received by the plaintiff whilst a passenger on the cars of the defendant. The cars were thrown off the track by a large stone left lying near the rail, by the carelessness of some hands in the employment of the contractors who were ballasting the road, and the plaintiff had his leg broken. At the trial, the company contended that they were not responsible for the acts of the hands in the employment of their contractors. The Judge (Thompson) held that they were, and on this point the case went up. This is the first case in Virginia settling the extent of the liability of railroad companies as passenger carriers, and it holds them up to the most rigorous responsibility. The judgment amounts to over \$7,000 at this time, exclu-

sive of counsel fees paid by the company.—*Staunton Spectator.*

FAIRBANKS'**STANDARD SCALES,**

Adapted to every branch of business where a correct and durable Scale is required.

SCALES FOR RAILROADS,

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SCALES FOR HAY AND CATTLE DEALERS,

WAREHOUSE AND TRANSPORTATION SCALES,

PORTABLE AND DORMANT SCALES FOR STORES,

Scales for Grain and Flour Dealers,

Counter Scales, every variety.

BANKERS' AND JEWELLERS' BALANCES,

SCALES FOR FAMILY AND FARM USE,

WEIGH-MASTERS' BEAMS,

POST OFFICE SCALES, ETC., ETC.,

All of which are **WARRANTED** in every particular.

Call and examine, or send for an illustrated circular.

FAIRBANKS & CO.,

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GUTTA PERCHA
CEMENT ROOFING

THE
Cheapest
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most
DURABLE
ROOFING
IN USE.

Sent to any part
of the country
with directions
for application.

SPECIMENS and references can
be seen, and any desired information
obtained on application, by
letter or in person, at our office,
510 BROADWAY, N. Y.
(Opposite the St. Nicholas Hotel).
JOHNS & CROSLY.

G. B. GORDON,

IMPORTER AND JOBBER OF HOUSE-FURNISHING

HARDWARE,

MANUFACTURER OF THE

"Old Empire Coffee Pot,"

WATER COOLERS, BATHS,

PLAIN JAPANNED AND STAMPED TINWARE.

DEALER IN

Tinmen's Tools, Copper Bottoms Brass Kettles, etc.

258 PEARL STREET; NEW YORK.

Adjoining U. S. Hotel.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COM'Y,

44 Exchange Place.

New York, 1st June, 1859.

FULTON FOUNDRY AND MACHINE WORKS,

P. F. GEISSE,

WELLSVILLE, OHIO.

STEAM ENGINES of every variety built to order. STEAM

BOATS and STEAM FERRY BOATS contracted for in whole.

PATENT'S PATENT Turn-Tables (a very superior and simple table) of all sizes built to order at very reasonable rates.

Car Wheels of a quality superior to any ever yet made.

I am now manufacturing from the best material, and annealed by a process patented by me in February, 1859, which renders them almost equal to wrought iron. Car Wheels, Steam Engines and all kinds of machinery furnished at as low, if not lower rates than can be found elsewhere.

Rights to manufacture Car Wheels under P. F. GEISSE'S annealing process may be obtained from the Patentee at Wellsville, O., or from T. Culbertson, No. 3 Fourth Avenue, N. Y.

Testimonials from the Superintendents and Master Mechanics of the Cleveland and Pittsburgh, Little Miami, and St. Louis and Indiana Railroads, as to the superior quality and durability of these Wheels will be furnished on application.

THE LAWRENCEVILLE MANUF'G CEMENT COMPANY, OFFICE 96 WALL ST, NEW YORK.

THIS Company manufacture ROSENDALE HYDRAULIC CEMENT of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings. For sale upon favorable terms by addressing.

WM. N. BEACH, President.
CHAS. E. LAWRENCE, Sec'y.

WINDOW, PICTURE AND CAR GLASS.

F. HOPKINS & BROTHER,
IMPORTERS,
193 Pearl St., NEW YORK.

A VERY SUPERIOR WELL FINISHED, IRON, CITY RAILROAD CAR, complete and fit for immediate use, will be sold very low to close a consignment. Enquire at 63 PINE ST.

37*21

UP-STAIRS.

DIVIDEND NOTICE.

THE Board of Directors of the Virginia Central Railroad Company have declared a dividend of 2½ per cent. for the last six months on each share of the stock of the Company payable 15th September, 1859.

The books of the transfer will be closed from the 5th to the 15th of September, and the dividend will be paid to those in whose name the stock stands on the 5th of September.

2137

J. GARRETT,
Treasurer.

A GENTLEMAN who has upwards of 26 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.

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METALS FOR RAILROAD COMPANIES.

LUCIUS HART,

IMPORTER AND DEALER IN METALS,
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BLOCK TIN. SPELTER. BABBITT METAL.
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RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 Cliff St., N. Y.

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE. CAR AXLES.
BOILER RIVETS. RAILROAD IRON,
CUT NAILS and SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.

August 16, 1854.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

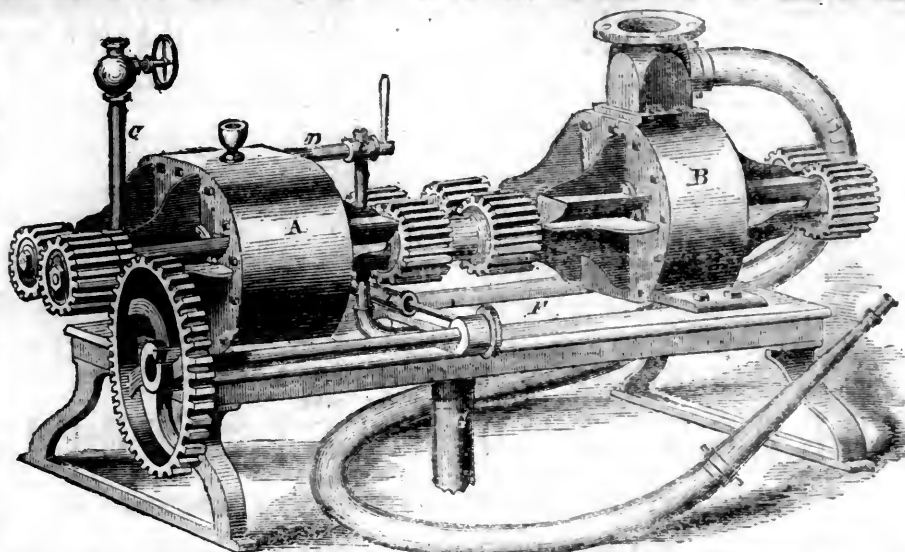
R. & J. MAKIN, 70 Broad St.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
BOSTON, June, 1851. 29 Central Wharf.

RAILROAD STEAM PUMPS.



HOLLY'S PATENT, the most simple, durable and reliable PUMPING APPARATUS, yet introduced.
C. W. COPELAND, 122 Broadway, New York.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
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NEW YORK.

Erle Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

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BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz - 25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N.Y.

Address J. H. SCRANTON, President,
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THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rail. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

from Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,
President of the Incorporation
February, 1855.

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CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

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Also, PUTTY, PAINTS and COLORS.

RAILROAD IRON.

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ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Sec'y,
WHEELING, VA.

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THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
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New York, Aug. 1, 1858.

RAILROAD IRON. THE RENSSELAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

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New York Agency:

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LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.
Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

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METAL—

BAR IRON OF EVERY SIZE AND SHAPE,
RAILROAD CHAIRS, VARIOUS PATTERNS,
RAILROAD AND SHIP SPIKES,
TRUCK BOLTS AND FISH BARS,
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BRIDGE AND OTHER LONG BOLTS,
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RAILROAD WHEELS, EITHER FITTED TO AXLES
OR SEPARATE,
CANNON AND PROJECTILES, ALL KINDS,
IRON AND BRASS CASTINGS,
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ENGINES,
SAW AND GRIST MILLS,
SUGAR MILLS AND ENGINES.

Our SPIKE AND BOLT FACTORY, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons SPIKES and 5,000 BOLTS per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed. The Machinery Department of our Establishment is under the supervision of THATCHER PERKINS, Esq., for 13 years the Master of Machinery on the Baltimore and Ohio Railroad, and late of the concern of SMITH & PERKINS, Locomotive Builders, Alexandria, Va.

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MANUFACTURERS OF THE

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Near LEEDS, Yorkshire,

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TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

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Patented August 24, 1858, and May 10, 1859.



THIS Road is constructed exclusively of Iron, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

ALSO
BEERS' "ELASTIC IRON RAILWAY," FOR LOCOMOTIVE USE.
This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from undulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$9,000 to \$11,000; out of which \$3,000 will be saved on the first cost of equipment, and character of grading. The undersigned is prepared to construct, either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

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THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other parts.
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500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.

New York, June, 1859. M. K. JESUP & COMPANY,
44 Exchange Place.

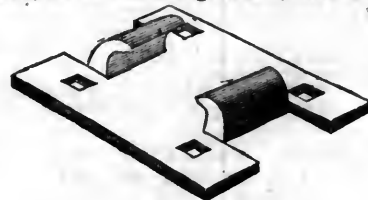
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J. B. GREEN & CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "NEW YORK WROUGHT IRON RAILROAD CHAIR COMPANY," and also the entire machinery for manufacturing their improved Wrought Iron Railroad Chair, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought Iron Chair now in market, to our works for a supply; believing their combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned with the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

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New Jersey Central Railroad Company,
Panama Railroad Company,
Buffalo and State Line Railroad Company,
New York and New Haven Railroad Company,
New Orleans, Jackson and Great Northern R. R. Co., etc., etc.

Messrs. M. K. JESUP & CO., 44 Exchange Place, NEW YORK, are the only parties authorized to act as our Agents.

Mr. Jacob Rowe, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 5 inches bore, with Screw and Socket Connections, T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY

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Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
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HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

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THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

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THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY

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THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with **unqualified approval**, renders the manufacturers confident when making the following claims:—

1st. Its **first cost** is much less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will **not** in any way gum or clog up any journal or bearing, **all the gum in the Oil being entirely decomposed**.

3rd. It will keep all journals and bearings **cool, clean and bright** as new, thus not only **saving wear and tear**, but **saving also** no inconsiderable amount of **motive power**.

4th. It is fully as **durable** as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is **sweet and clean**, and entirely **free from all odor or unpleasant smell**.

6th. It will remain limpid at as low a temperature as sperm.

CERTIFICATES from a large number of **Railroad and Steamboat officers**, also, prominent **Manufacturers and Machine Builders**, can be seen by application as above.

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AND MANUFACTURERS OF

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THIS celebrated **GREASE** has been in use upwards of **Ten years**, and is in the opinion of **FORTY RAILROAD COMPANIES**, whom we regularly supply,

The **Cheapest and Best Lubricator in use**.

Parties ordering, will please state the kind of box, or description of machinery.

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OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for **Burning**, and **TWENTY-FIVE** per cent. more **durable** than Sperm Oil, for Lubricating, and the **only** Oil that is in all cases **reliable**, that will keep bearings **cool**, and

WILL NOT GUM

In no case has it failed to meet the approval of the consumer.

The *Scientific American* and *Manufacturer's Journal*, after testing this Oil, pronounce it **superior** to any other for Lubricating.—For sale **ONLY** by the Inventor

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Reliable orders filled for any part of the United States or Europe.

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WORKS,

JERSEY CITY, N. J.

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MANUFACTURERS OF

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CAR, ENGINE AND TRUCK WHEELS,

MANUFACTURERS AND PROPRIETORS OF

MOORE'S PATENT**TRIPLE PLATE CAR WHEEL.**

CHILLED LOCOMOTIVE TIRES,
Made from the best Charcoal Cold Blast Iron.

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MANUFACTURERS OF

CHILLED WHEELS

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TIRES,

FOR RAILROAD CARS

AND

Locomotive Engines,

**ARE PREPARED TO EXECUTE PROMPTLY
ORDERS TO ANY EXTENT FOR THEIR**

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTEDTo **HAMMERED** or **ROLLED** AXLES,

IN THE BEST MANNER, AT THE SHORTEST NOTICE,
AND ON THE MOST REASONABLE TERMS.

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CAR WHEEL WORKS,

Callowhill & Sixteenth Sts.,

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FURNISH

CHILLED WHEELS,

FOR CARS, TRUCKS, and TENDERS.

CHILLED

Driving Wheels and Tires.

FOR LOCOMOTIVES.

ROLLED AND HAMMERED AXLES

WHEELS and AXLES,**FITTED COMPLETE.****A. N. GRAY, Cleveland, O.,**

RECEIVER AND FORWARDER OF
RAILROAD IRON, CHAIRS & SPIKES.

Also Cars, Locomotives,

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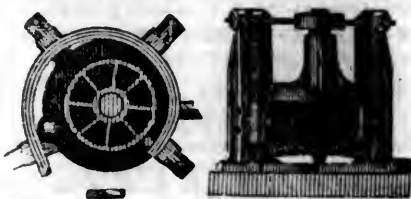
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BOILER RIVETS
AND
BAR IRON.
TROY, N. Y.

HENRY BURDEN'S
PATENT REVOLVING
SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this
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of the Right to run said Machine, or sell to those who may be
desirous to purchase the Right for one or more of the States.

This Machine is now in successful operation in ten or twelve
Iron Works in and about the vicinity of Pittsburgh, also at
Phoenixville, and Reading, Pa., Covington Iron Works, Md.,
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N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are nu-
merous:
Considerable saving in first cost; saving in power; the entire
saving in shingler's, or hammerman's wages, as no attendance
whatever is necessary.

It being entirely self-acting: saving in time from the quan-
tity of work done, as one machine is capable of working the
iron from sixty puddling furnaces; saving of waste, as nothing
but the scoria is thrown off, and that most effectually; saving
of staffs, as none are used or required.

The time required to furnish a bloom being only about six
seconds, the scoria has no time to set, consequently is got rid
of much easier than when allowed to congeal, as under the
hammer.

The iron being discharged from the machine so hot, rolls
better and is much easier on the rollers and machinery.

The bars roll sounder, and are much better finished.

The subscriber feels confident that persons who will examine
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Chief Engineer Havana Railroad Compa
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C. Floyd-Jones,
Engineer Alton and St. Louis Railroad,
Residence, Vandalia, Ill.

Gay, Edward F.,
Civil Engineer, Philadelphia, Pa.

Robert B. Gorsuch,
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MEXICO.

James H. Grant,
Civil Engineer, Christiansburg, Rutherford Co., Tenn.

Theodore D. Judah,
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San Francisco and Sacramento Railroad, and of
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Eliwood Morris,
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Mills, John B., Civil Engineer,
Lake Ontario and Hudson R. R. R., 20 Exchange Place, N. Y.

Osborne, Richard B.,
Civil Engineer, Office 73 South 4th st., Philadelphia

W. Milnor Roberts,
Civil Engineer, Carlisle, Pa.

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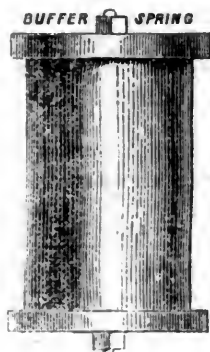
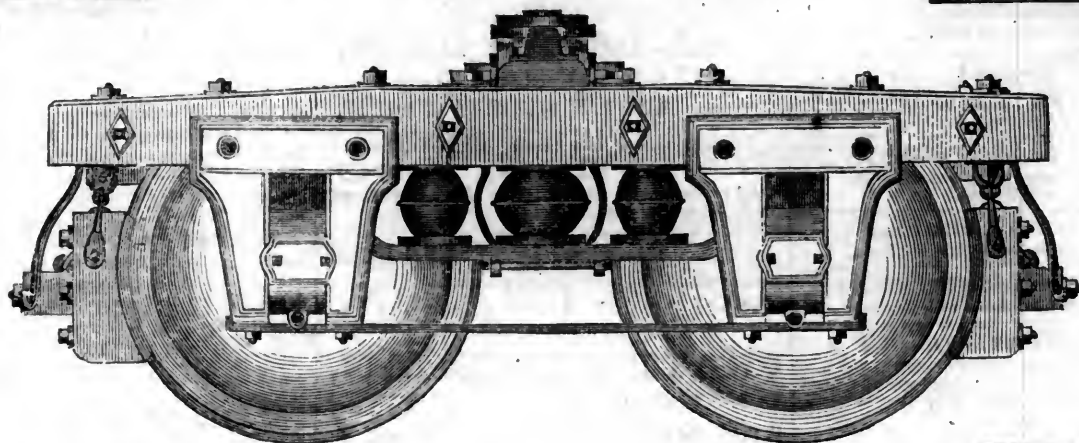
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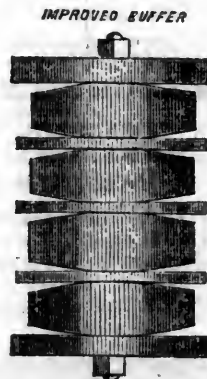
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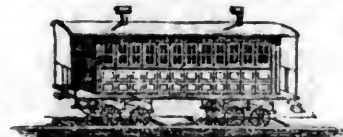
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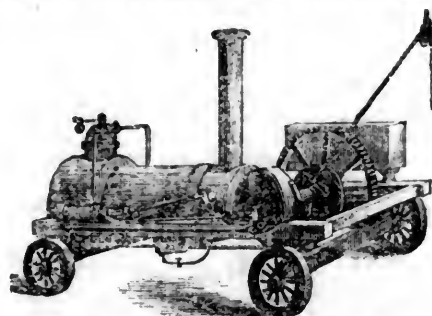
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EFFECTUALLY obviates the Formation of Scale on the Plates by separating the incrusting matter from the water before it enters the boiler, at the same time condensing a large portion of the steam and supplying the surface of water to the boiler at about boiling heat. The apparatus is compact, simple, and applicable to all kinds of Engines. Recent modifications render it still more efficient than heretofore. Testimony is to its successful operation in preventing scale, and that as a HEATER AND CONDENSER, can be furnished by the subscriber.

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The fire-surface of No. 1 is given at	feet.	portion.
3 " " " "	783	1.00
7 " " " "	1,204	1.537
8 " " " "	902	1.152
8 " " " "	1,188	1.517

Thus we observe that in addition to the superiority of tractive power of cylinders and the tractive adhesion to the rails possessed by the English engines, their ability to sustain that power by the generation of a sufficiency of steam exceeds by about 50 per cent. that of the American engines.

In this we find one of the reasons of the well known economy of consumption of fuel by the former; the heat applied being more completely absorbed by the water in the boiler.

Clark in his large work on Locomotive Engines says: "Practically there can never be too much heating surface as regards economical consumption, but there may be too little."

But there is perhaps another reason for the economy referred to, viz:—in the relative proportions of grate and heating surface in the American engines. I am of opinion that this has not been well considered, the "Santiago" being the worst of the two in this respect.

Having demonstrated the superiority of the English over the American engines by the application of the usual formula, I will now seek to know and show what extent of additional power they will possess in the operations upon the line.

Let us suppose the line straight and level in the first instance, that the air is calm, and that the frontage of train is equal to 60 sq. feet.

We will assume the friction as 6 lbs. per ton, and the resistance due to concussions (varying as

The following is a summary of the dimensions and comparative calculated powers of Locomotive Engines on the Southern Railway of Chile.

GOODS ENGINES.

"Varas" "Su. Bernardo"

English American
by by
R. & W. the Rogers
Hawthorne. L. & M.
Works.

28.60	28.11	.... Total weight in tons of 2240 lbs.	27.61	27.78
64,081	39,160	.... Weight on driving wheels in English lbs.	46,122	39,576
6	4	.... Number of driving wheels	4	4
4½	4¾	.... Diameter of driving wheels in feet	5½	5½
16½×24	16×24	.... Dimensions of cylinders in inches	15×22	14×24
168	162	.... Number of tubes	170	140
1¾	1¾	.... Inside diameter of tubes in inches	1¾	1¾
14½	11½	.... Length of tubes in feet	14½	11
97	76	.... Fire-box surface in square feet	81	77
1,091	826	.... Tube surface	1,123	706
1,188	912	.... Total Fire	1,204	783
17	14	.... Area of Grate	15	14
4,436.64	3,952.17	.... Cubic feet of steam used in a mile	2,927.16	2,613.23

DECIMAL COMPARISON.

1.64	1.00	.... In reference to weight on driving wheels.	1.16	1.00
1.27	1.00	.... " " Fire-box surface	1.05	1.00
1.32	1.00	.... " " Tube "	1.59	1.00
1.30	1.00	.... " " Total Fire "	1.54	1.00
1.21	1.00	.... " " Grate Area "	1.07	1.00
1.12	1.00	.... " " Traction of power at equal pressure	1.12	1.00

SANTIAGO, July 1st, 1859.

It will be seen by the above statement that the English engines should have exerted an effect more than 11 per cent. greater than the American. Now for the result as shown by Notes taken at the trial.

NOTES IN REFERENCE TO TRIAL TRIPS ON THE SOUTHERN RAILWAY OF CHILE.

The 1st day, July 19th, 1859.—The "San Bernardo," American Goods Engine, by The Rogers' Locomotive and Machine Works, of Paterson, New Jersey, took her train of 35 eight-wheeled cars, gross tonnage 587, from Santiago to the summit, 11½ miles, in 41 minutes, making one experimental stop of 1½ minutes on the way, to see if she had adhesion sufficient to start her train on a gradient of 13 feet per mile, which she did without slipping, one brake being on by carelessness. At 13¾ miles stopped and switched off 10 cars, took water, and carried 25 cars to the Maipo river. Returning, carried back to Santiago 20 loaded cars, total, 369 gross tons—run to the summit from the bridge, 6 miles; in 20½ minutes—made steam very free—had to keep the fire-door open most of the time to keep the steam down to the limit, 115 pounds.

The 2d day, July 20th.—The "Varas," English

the speed of the train which we will take as 20 miles per hour) to be 7 lbs. per ton, and the resistance of the atmosphere at 1 lb. per square ft. of train or 60 lbs. We must now assume that the train weighs 100 tons. Thus for a train of this weight we shall have:

Resistance due to friction	600 lbs.
Do. concussions	700 "
Do. atmosphere	60 "
	1,360 lbs.

and $\frac{1,360}{100} = 13.6$ lbs. average resistance per ton of train.

Having found the tractive power of the engines and the resistance per ton of train, it is easy to ascertain how many tons each engine will draw under the above circumstances.

	Proportion of strength.	Grade.	Will draw ab't on Level Line.	Proportion of power.
American Pass. Engine	1.00	138	366 Tons.	1.00
English " "	1.28	177	411 "	1.12
American Goods Engine	1.45	200	554 "	1.51
English " "	2.31	319	623 "	1.70

PASSENGER ENGINES.

"Montt" "Santiago"
English American
by by
R. & W. the Rogers
Hawthorne. L. & M.
Works.

27.61	27.78
46,122	39,576
4	4
5½	5½
15×22	14×24
170	140
1¾	1¾
14½	11
81	77
1,123	706
1,204	783
15	14
2,927.16	2,613.23

Goods Engine, by R. & W. Hawthorne, of New Castle, started the same train of 35 cars, load 587 tons of the day before, on a descending gradient of 20 feet per mile for one mile, thence one mile nearly level, thence one mile ascending a gradient of 31½ feet per mile—she ran this distance of 3 miles in 10 minutes, and then stopped for want of steam.

The train was then backed to the 1½ mile post, and again started with 130 pounds of steam; this time she reached the 2½ mile point, and again stopped, not being able to supply herself with steam. The train was then backed to the station, when a 3d trial was made; with 20 loaded cars, gross tonnage, including engine and tender, 370, she ran to the 4½ mile point in 14½ minutes, and stopped for want of steam; stopped 20 minutes, then started with 115 pounds of steam, and ran to the 9½ mile point in 30 minutes, and again stopped for want of steam; remained there 16 minutes, and again started with 95 pounds of steam, and ran to the 11th mile in 7 minutes, making the 11 miles in 88 minutes!!!

She then stopped, and returned with the train to Santiago.

The 3d day, July 21st.—The English Passenger

Engine "Montt," by R. & W. Hawthorne, of New Castle, started from the Santiago station, taking a train of 15 loaded eight-wheeled cars—gross tonnage of train, 288—running to the summit, 11½ miles, in 37' 50" minutes, including one stop of 3' 15" minutes to experiment on starting, which she did without difficulty. Total time to the 17th mile, the end of the route, 49 minutes; returning she carried back the same train to the summit, 6 miles from the Maipo river, in 25' 04" minutes, and returned with her train down grade to Santiago.

The 4th day, July 22d.—The American Passenger Engine "Santiago," by the Rogers Locomotive and Machine Works, of Paterson, started from the Santiago station, taking a train of 15 loaded eight-wheeled cars, gross tonnage of train, 290—running to the summit, 11½ miles, in 26' 06" minutes, including one stop of 1 minute to experiment on starting, which she did without difficulty. Total time to the 17th mile, the end of the route, 34' 30" minutes.

Returning, she carried back the same train to the summit, 6 miles from the Maipo bridge, in 22' 31" minutes, and returned with her train down grade to Santiago.

This closed the trial which resulted in the superiority of the Rogers Locomotives, of both classes, going and coming, although the calculated power of the Hawthorne engines was, in each class, 12 per cent. the greatest as to tractive power; and more as to fire surface and adhesion.

The result of the trial created the liveliest satisfaction on the part of the American Engineers and residents in Chile, as it completely vindicated their national reputation in the matter of mechanical skill, upon which physical superiority, at least, depends; and at once placed them in favor with a people with whom the locomotive engine is too new a wonder not to have its performances viewed with admiration, and who accept superior merit in such an affair, as a test of national superiority. The manufacturers, though some 10,000 miles away, whose skill supplied the means for the triumph, came in for a large share of the gratification felt and expressed.

From the data given, we are unable to point out the precise cause of the superiority of the American engine. Whatever it may have been, it must be referred to superior mechanical skill, either in the better adjustment of the parts, in their more perfect finish, or in the use of those contrivances which utilize the power generated in the highest degree. For the English Engineer to point out the cause of the unsatisfactory results attending his engines at the trial, would be simply a confession of mechanical inferiority.

A triumph like the one recorded, is of national value. The reputation of the Rogers' Works at home has been firmly established, by the uniform excellence of the engines constructed by it, from the first one turned out to the present time. To create a reputation for its engines in other countries, is to elevate in the eyes of the world our mechanical skill as a people, and to open outlets for the products of our industry, in which others can share as well as those who, by the excellence of their work, first opened the markets to us.

Railroad to Boonton.

It is to be presumed the people of Paterson do not want the Boonton Railroad to connect with this place. The Boonton people subscribed thirty thousand dollars toward the project; but whilst the books have been open two days at Congress Hall, not a Paterson man has been there to subscribe. Newark will probably secure the Boonton Railroad.—Paterson Guardian.

Pennsylvania Railroad--Tonnage Tax.

This interesting case, the *Commonwealth of Pennsylvania vs. The Pennsylvania Railroad Company*, in which was involved the construction of the provision of the Federal Constitution, which declares that "No State shall, without the consent of Congress, lay any duty on tonnage," was recently tried and determined in the Dauphin County Court.

The suit came up on an appeal by the company from a settlement made by the Auditor-General and State Treasurer with the company, by which they were found indebted to the State in the sum of \$87,000, for a period of five months up to the first of November last, for tonnage due the State passing over the road from Philadelphia to Harrisburg. The railroad company contended that they are not liable to pay tax on goods coming from States and passing this State, and also that the law imposing this tax is unconstitutional. The company presented a mass of testimony showing their connexions with different railroads, steamboat lines, &c. The Commonwealth, on the other hand, contended that the Pennsylvania Railroad was only a local road, and possessed no chartered privileges outside of the State, and that the company had no right to act warehousemen to receive goods and forward them—that their legitimate business consisted only in shipping goods over their road when brought to them, &c.

The opinion of Judge Pearson, before whom the case was heard, as well as the final verdict were, of course, adverse to the assumption of the company. The *Harrisburg Telegraph* of the 1st inst., gives the following as a summary of the Judge's remarks on the merits of the case:

The arguments being closed last evening, His Honor Judge Pearson delivered a lengthy, elaborate, and able opinion of the case, reviewing the points as they had been presented to the Court. His Honor remarked that the case presented new and important features; a large amount of money was involved in it—perhaps, millions of dollars—together with important questions involving the rights of States. The question presented had no precedent in decisions given in this State, or by the Supreme Court of the United States. He was, therefore, bound to declare the law as he found it, regardless of all consequences, and that the Judiciary ought not, and would not, be influenced by the feeling of the State on any subject. He had no doubt that it was the duty of any Court of this State to declare a law unconstitutional, if it should be found in conflict with the Constitution of the United States. The Judge remarked that the Pennsylvania Railroad Company was incorporated on the 13th of April, 1846, for the purpose of building a railroad from Harrisburg to Pittsburg, and a burden was at that time imposed upon them that they should pay a tonnage tax upon goods carried over their road, and that after the expiration of twelve years they come now to contest the claim upon them made by the State, and the Court is called to decide the constitutional powers of this State. The constitutional power of this State to impose a tax upon goods carried in the State is not doubted; but the right to trammel foreign commerce is disputed. If the duties were merely imposed upon foreign goods passing through this State, it might present another question; but the burden was thrown upon the corporation alone, and not upon citizens of other States. The citizens of this State, as well as those of others, were equally taxed; and it would not do at this time for the railroad company to come into Court and say, "We have collected the money from those who shipped goods over our road, but we won't pay it over because we deem the law imposing those duties unconstitutional." His Honor then inquired, "Who can take advantage of the unconstitu-

tionality of the law?" "Certainly the railroad company cannot; but the party paying the duties might test its constitutionality." He held the law to be a contract between the railroad and the State to pay certain amounts for the franchises received from the commonwealth, and hooted at the idea of the railroad company coming into Court and contesting this claim. They had no defence at all on this plea; they could not come and say, in good conscience, that they had collected this money, but refused to pay it over because they considered the law unconstitutional. The only party that might bring such a plea must be a citizen of another State. He did not look upon them as the agents for the State to collect this tax, but they collected it for themselves. The agent cannot say to the principal that he had collected this money, but refused to pay it over. After explaining the case fully, His Honor directed the jury to return a verdict in favor of the State for the full amount claimed, with interest from the date of the settlement; whereupon the jury retired, and in a short time returned a verdict against the railroad company for the sum of \$91,196 61, debt and interest to date.

It is the intention of the company to carry their case into the higher courts, and there contest the State's constitutional ability, or disability, to levy tonnage duties on the transit of merchandise over their road.

New York and Erie Railroad.

We republish, with some alterations the proposition of Messrs. Heseltine & Powell of London, in reference to the affairs of the Erie railroad. The suggestions made, with those coming from other quarters, will help to form the conclusions finally to be adopted for restoring the finances and position of this company.

We presume little will be done previous to the election of the new board, which is to take place on the 11th proximo. The intervening time will be well occupied in discussing the merits of the various plans laid before the public.

We believe there is a growing confidence that matters can be made right again, so far, at least, as the bondholders are concerned. The road is doing well, and is in a pretty fair condition. Its capacity to earn a very large sum is thoroughly established. What is now wanted is some plan for re-organization that shall command public confidence. This will come by and by. We learn that the Persia brought out Mr. WM. L. SPLATT and Mr. WM. EVANS of London, who are somewhat interested in the road, and very likely largely represent the views of English bondholders. These gentlemen are looking into the affairs of the company, and their opinions or recommendations may have much influence in reference to the plan finally to be adopted.

PREMISES AND ARGUMENTS.

The revenue is so abundant for the 1st, 2d and 3d mortgage bondholders, that many of them may be expected to insist on their rights—and, if not paid early, to mar the whole plan of a *friendly* foreclosure under 4th and 5th, by pressing a *hostile* foreclosure under 1st, 2d, or 3d, with a view of enforcing *par* on each.

Therefore, means ought to be found to pay them early all arrears.

The "floating" creditors might force a sacrifice of 4th mortgage bonds, to the serious prejudice of the other 4th and of all subordinate bondholders, or they might procure embarrassing judgments.

Therefore, they ought to be got rid of, and the bonds redeemed.

Without some money being raised, there appears no little peril that before the surplus revenue over and above accruing interest shall have accumulated enough to pay off all arrears and floating debts; some one or more early bondholders or creditors will have grown impatient and hostile, and mar all the friendly plans of re-organization.

Assuming money to be necessary, the terms of re-organization must be such as to raise it by compulsion, i. e., raise it from certain classes as a condition of being admitted, otherwise the "willing horses" are overburdened to save drones.

It is very desirable to avoid even the appearance of using the sponge on any part of the debt, seeing how large an European interest has to be consulted, and how advantageous it will be to avoid even the semblance of dishonor or repudiation.

Therefore do not let objections be raised to the mere appearance of a large common capital stock. It can make no difference *intrinsically* whether a bondholder convert his \$1,000 into \$1,000 stock, part of a total of \$10,000,000, or into \$500, part of a total of \$5,000,000, but it may make a considerable difference in the feelings with which an irritated and aggrieved bondholder would discuss the proposal.

To induce the advance of money by the subordinate interests invited to re-organize, you must remove all *serious risk* of damage from *excessive mortgage* charges. It cannot be considered that this point is attained to the extent that will satisfy English notions, if more than \$13,000,000 of mortgage debt remain.

Therefore, the 4th and 5th mortgage bonds ought to be converted into something less perilous, but yet retaining the same order of priority. Let them both be converted into one preference stock, the 5th paying a contribution to the *cash fund*, for the privilege of ranking along with the 4th, and the 4th being let off from all new contributions of cash. So, then, the 4th will retain the same *relative order or priority* as if they should foreclose entirely on their own account; but they will not have the monopoly of the surplus after the first three mortgages; and, on the other hand, they will, as a compensation, be relieved from providing the cash, which they must find if they foreclose on their own account.

The unsecured bondholders should turn their claims, both principal and arrears, into a new capital stock at *par*, and the shareholders should turn their shares into the same stock, but valuing them at a discount of 70 per cent.

The contributions to the cash fund to become preferred stock. Assuming that \$1,000,000 is wanted to pay off arrears of interest and the floating debt; a contribution of about 10 per cent. on the 5th mortgage bonds, and on the suggested capital stock of, say, \$10,000,000 (see below) would be ample.

The preferred stock dividends to be accumulative, in case of any temporary omission of dividend, and a clause to be inserted in the new charter prohibiting the company from borrowing any money on bonds or preference shares, in excess of \$13,000,000, and \$6,000,000 thus assimilating the proportions of bond, preference and share capital to that of English railways. Should there be any difficulty in obtaining the insertion of such a

clause, it is proposed to cover the preference capital by a 4th mortgage at a long date, with a sinking fund of 1 per cent. This new mortgage would be necessary, as foreclosing on the present 4th mortgage deed would annul it.

RESULTS.

		Annual Interest at 7 per ct.
Mortgages	\$13,000,000	\$910,000
<i>Preferred stock.</i>		
To be secured by a 4th mortgage if necessary.		
From 4th mort. ..	\$3,600,000	
From 5th do. ..	1,000,000	
From 10 per cent. subscription by unsecur'd bondholders & shareholder on \$10,000 new share capital	1,000,000	
From 10 per cent. subscription by 5th mort. bondholders	100,000	
	5,700,000	399,000
<i>Common stock.</i>		
Unsecured bonds and arrears	\$8,000,000	
* 30 per cent. on \$11,000,000 present Erie Share capital	3,300,000	
	\$11,300,000	
Recusants	1,300,000	
	10,000,000	700,000
Total capital.	\$28,700,000	\$2,009,000
Being 40 per cent. net receipts on a gross take of	\$5,022,500	
The average for 5 years ending Sept. 30, 1858	\$5,618,432	

Journal of Railroad Law.

BODILY INJURIES AND SUFFERING.—WHAT DAMAGES ARE RECOVERABLE FOR THEM.

When a passenger is injured by a railroad accident or other disaster, it often happens that the injury, and even the pain and suffering which accompany it, are not confined to the time immediately following the calamity, but they extend on through a long series of years and even through the whole lifetime of the sufferer. So also a personal injury is frequently followed by evils which were not fully apprehended at the outset, but break out only after lapse of time. And it is often a delicate and difficult question to determine how far these future or prospective injuries, are a proper subject of compensation in damages.

The general rule of law on this subject is that while the party through whose negligence the accident happened, is, by no means, to be charged with damages for every item of injury or pain which may, possibly, or even probably, ensue in consequence of it, so, on the other hand, his liability is not to be limited absolutely to those injuries which have already happened at the time when the question is brought to a determination. The law draws the line midway between the two extremes. The defendant must pay damages for all future injuries which, it is shown to a reasonable certainty, will result from the accident, but there his liability ends.

The principles above stated are applied in the

* Each Erie share of \$100 will, on subscribing \$3, receive \$30 in the new capital stock.

late case of *Curtis vs. the Rochester and Syracuse Railroad Company*.

The plaintiff in this action was a female who took passage in the defendants' cars at Geneva with the intention of going to Auburn.

All went well, until the train reached Waterloo. There a switch was deranged, or as the defendants attempted to show on the trial, the rails spread apart, and the train ran from the track.

The plaintiff's ankle was wrenched and her leg bruised. Her injuries did not stop here. A running sore, or ulcer, succeeded upon the bruised place, which continued running down to the time of the trial, nearly two years after the accident.

There was considerable medical testimony admitted in respect to the probability of the sores being healed at some future time and as to the continued effect of the plaintiff's injuries in causing bodily pain and affecting her general health.

Upon the trial, the Judge, in instructing the jury, in reference to the data upon which they were to estimate damages, told the jury that they were to take into consideration "the bodily pain and suffering which the plaintiff suffered or *was likely to suffer*, in consequence of the neglect of the defendants."

The defendants excepted to this part of the charge and the point was argued upon the appeal.

Judge SELDEN said, on this point, in delivering the opinion of the Court:

"The jury are told that in estimating the damages, they would be justified in taking into consideration 'the bodily pain and suffering which the plaintiff suffered, or *was likely to suffer*, in consequence of the neglect of the defendants.' This construction, in so far as it relates to future pain and suffering, is clearly erroneous; and if it had not been subsequently modified, the error would, I think, have been necessarily fatal to the judgment. *There is no doubt that bodily pain and suffering is a proper item of damages in such cases.* (*Ransom vs. N. Y. & Erie R. R. Co.*, 15 N. Y., 415.)

"Nor is the estimate necessarily limited to suffering which is past, where the proof renders it *reasonably certain* that further pain and suffering is inevitable.

"In estimating the pecuniary loss, in such cases, all the consequences of the injury, future as well as past are to be taken into consideration; and there seems to be no reason why a different rule should prevail in respect to bodily pain and suffering. But the objection to the charge is, that it authorizes an allowance of damages for future pain which is rendered *probable merely*. Damages are to be proved; and none can be allowed except such as are shown by the proof to be, at least, to a reasonable degree, certain.

"The error, however, was corrected upon the trial. The judge, upon his attention being called to the point, further instructed the jury, "that future damages could only be awarded where it is rendered reasonably certain, from the evidence, that such damages will inevitably and necessarily result from the original injury." With this qualification, I see no objection to the charge on this subject, and this objection also should, therefore, be overruled.

"Judge Grover upon the same point said: 'The exception to that portion of the charge holding that the plaintiff could recover a compensation for

bodily pain suffered, or that she was likely to suffer,' is general; and it is settled that such an exception is unavailing, when any portion of the charge thus excepted to is correct.

"In the case of *Ransom vs. New York and Erie Railroad Company*, it was decided by this Court, that bodily pain and suffering arising from an injury, was a proper subject for pecuniary compensation. This exception does not render it necessary to examine that portion of the charge holding that the plaintiff could recover for pain and suffering likely to be suffered.

"In this case, the judge, I think, laid down the true rule, in substance, in his charge; that the plaintiff could only recover damages for such pain and suffering as the evidence rendered *reasonably certain* would necessarily result from the injury. But, as remarked above, the exception is too general to present any question as to future pain.

"The judgment should be affirmed."

English vs. American Rails.

To the Editor of the AM. RAILROAD JOURNAL:

Your correspondent "J. R." represents me to have "affirmed the decided superiority of English to American rails," which I did not intend to do; for whatever one's opinion may be, it has but little weight when facts can be obtained; and if such a statement can be found in my article, I beg to withdraw it. The undue notoriety given to the letter of the Superintendent of the C. G. R. R., and the attempt at the conclusion that American rails are better than English, because one trial favored the American, was the cause of my offer to make certain tests, the result of which, if accepted; would surely not settle the question, but only be one additional fact towards a settlement.

It is very certain that a large amount of not very productive bonds have been passed off to the English iron masters, and if they occasionally send in return some "rails that splinter," are they not excusable?

But few will claim for the American rails the uniformity of quality it is acknowledged that the English possess; and although the cost of each is at present nearly the same, the latter, I apprehend, will never be excluded, because of inferior quality, but only by legislation or a reduction of wages in this country, neither of which disasters is likely to occur.

Yours, very respectfully,

R. O.

New Orleans and Jackson Railroad.

The following was the business of the New Orleans, Jackson and Great Northern Railroad for the year ending August 31:

Sept., 1858	\$46,029	March, 1859...	\$78,241
October	84,861	April	70,839
November	100,575	May	54,561
December	112,121	June	45,431
January, 1859..	98,970	July	50,244
February	78,708	August	50,666

Total earnings for twelve months ... \$871,246

The quantity of cotton brought over the road for the year ending 31st August was 144,452 bales.

Genesee Valley Railroad.

We learn from the Rochester Union that the portion of this road extending from Avon to Mt. Morris, has been leased for a term of years to the Buffalo, New York and Erie Railroad Company, who already have control of the northern section of the road, from Rochester to Avon.

ings, etc.

Years.	Cost of r'd and equip-ment.	Main.	Branch.	Length of road.	2d track & sid'gs.	Equiv. in single track.	Paid-up capital	Funded debt.	Floating debt.	Miles of r'd operated.	Total miles run by lo-com.with trains.	Number of pass-engers.	Tons of freight.	Pass'ger traffic.	Freight traffic.	Tot., incl. mails, etc.	Repairs & operating expenses.	Net earn'gs or rec'pts over ex-pendit's.	Am't applied to interest.	Am't applied to div'd's.
'54.	\$25,907,374	297.8	265.0	276.8	859.6	\$23,067,415	\$11,947,121	\$110,700	662.8	3,317,278	163,874,473	81,160,080	\$2,151,514	\$2,479,821	\$5,918,334	\$3,088,041	\$2,830,293	\$666,513	\$1,125,506	
'55.	27,860,731	297.8	268.1	308.2	864.1	23,067,415	14,462,742	.....	655.9	3,351,892	169,052,341	99,660,886	8,242,229	3,189,608	6,563,581	3,401,465	3,162,126	889,928	2,876,767	
'56.	29,786,372	297.8	268.1	313.8	863.7	23,067,400	14,763,897	.....	655.9	3,296,532	165,889,551	145,733,678	8,207,378	4,322,041	7,707,348	4,097,867	3,609,481	931,577	1,919,564	
'57.	30,515,815	297.8	258.1	313.8	863.7	24,136,660	14,607,510	.....	655.9	3,617,421	160,423,541	145,873,776	3,147,637	4,559,275	8,027,251	4,453,515	8,573,736	970,871	1,919,564	
'58.	30,732,517	297.8	258.1	313.8	863.7	24,182,400	14,402,634	.....	655.9	3,669,194	136,091,023	142,691,178	2,532,646	3,700,270	6,528,412	3,487,292	8,041,120	976,192	1,919,564	
14.	302,809	1489.0	1297.4	1526.4	4312.8	117,521,260	70,183,904	110,700	2786.4	17,262,317	795,330,939	615,072,548	15,281,404	18,257,009	34,744,926	18,528,170	16,216,756	4,374,881	9,759,965	
Ar.	28,860,562	297.8	259.4	306.3	862.5	23,504,238	14,086,781	.....	557.2	3,455,463	159,056,188	123,014,509	3,056,281	3,651,402	6,948,985	3,705,654	3,243,351	874,876	1,951,993	

2. TABLE showing the cost of repairing and operating the road, rolling stock, etc.

Years.	Road-bed and iron.	Buildings, fences, etc.	Taxes on real estate.	Total cost of maintain'g r'd.	Engines & tenders.	Cars and trucks.	Tools and machin'y in shops.	Total cost of repairs includ. in- cidentals.	Conductors & brake- men.	Engin'rs & firemen.	Coal and wood.	Used for engines.	Used for cars.	Total cost of operat- ing.	Office and stationery.	General super- intend- ence.	Agents, clerks, sta- tion-men, lab'r's, etc.	Losses and damages.	Incidental expenses.	Tot. cost & charges.	Grand total cost of re- pairs and operating
1854.	\$655,515	\$72,030	\$114,092	\$889,637	\$270,682	\$300,644	\$26,955	\$659,092	\$140,230	\$128,869	\$510,131	\$65,351	\$61,352	\$905,932	\$13,421	\$15,323	\$397,354	\$55,894	\$171,386	\$683,378	\$3,088,041
1855.	\$657,290	64,666	113,529	886,562	400,392	297,387	30,559	778,381	145,000	151,848	589,881	63,003	63,004	1,012,688	7,587	27,007	489,128	91,204	158,218	773,844	3,401,455
1856.	853,567	131,877	143,054	1,130,429	445,451	353,834	40,664	877,780	149,287	160,060	768,688	62,851	62,861	1,209,634	4,045	83,408	587,057	131,140	124,424	880,074	4,507,867
1857.	1,049,468	129,699	133,873	1,315,543	435,384	368,636	30,807	893,983	157,046	170,553	847,853	61,844	61,844	1,299,140	28,073	53,795	622,774	88,102	146,215	938,849	4,453,515
1858.	866,154	123,690	122,906	1,114,294	283,487	229,543	24,057	571,326	131,131	166,351	549,178	45,324	42,400	934,444	23,726	51,307	585,382	137,786	69,027	861,228	3,487,292
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
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4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
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4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
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4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
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4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,885,359	1,550,155	153,102	3,756,492	722,768	783,701	3,265,676	298,373	291,431	5,361,838	77,752	180,840	2,681,695	534,126	620,260	4,144,373	18,528,170	
4,078,934	521,962	625,954	5,236,461	1,																	

3. TABLE showing the cost (in cents) per mile run by locomotives with trains, reduced from Table No. 2

1854,....	13.70	2.17	3.44	25.32	11.94	9.06	0.91	19.87	4.23	8.89	15.87	1.97	1.85	27.82	0.40	0.46	11.98	2.59	5.17	20.61	38.12
1855,....	19.61	1.92	3.39	24.96	8.96	8.89	0.91	23.82	4.53	4.63	17.69	1.89	1.89	30.21	0.23	0.82	14.69	2.72	4.72	23.08	101.47
1856,....	26.89	4.00	4.34	34.29	13.61	10.73	1.23	26.62	4.53	5.04	23.31	1.91	1.90	36.69	0.12	1.01	17.81	3.98	3.77	26.69	124.80
1857,....	28.77	3.65	3.68	36.07	18.62	10.18	0.84	24.65	4.31	4.68	23.24	1.69	1.69	35.61	0.79	1.47	17.01	2.41	4.09	26.77	122.10
1858,....	23.68	3.87	3.36	30.37	7.74	11.94	6.25	16.67	3.68	4.64	14.97	1.23	1.15	26.47	0.65	1.40	15.95	3.75	1.88	23.63	95.04
117.65	15.01		18.20	151.01	53.57	45.11	4.44	109.93	20.96	22.68	94.48	8.69	8.48	155.80	2.19	5.16	77.34	15.45	19.63	119.78	536.08
Average . 28.51	8.00		3.64	30.20	10.71	9.02	0.89	21.98	4.19	4.54	18.89	1.74	1.69	31.06	0.44	1.03	15.47	3.09	3.92	23.96	107.20

4. TABLE showing the receipts, etc., per mile run, and the ratio of specific expenses.

Years.	Total receipts p. mile run.	Tot. expenses p. mile run.	Total net re- c'pts p. mile run.	Ratio of ex- pendit's to tot. rec'pts.	Road track, etc.	Rolling stock, etc.	Cost of operat'g.	Miscellan's expenses.	Years.	Cost of road and equip- ment.	Capital stock.	Funded debt.	Floating debt.	Total receipts per mile.	Total expen- ses per mile.	Net receipts per mile.
1854.....	\$1.78	\$0.93	\$0.85	62.25	27.19	21.34	29.34	22.13	1854.....	\$10,033	\$40,987	\$21,228	\$196	\$10,616	\$5,467	\$5,029
1855.....	1.96	1.01	0.94	61.28	24.60	22.88	29.77	22.74	1855.....	49,210	41,488	26,012	....	11,805	6,117	5,088
1856.....	2.34	1.24	1.10	63.12	27.59	21.43	29.54	21.43	1856.....	53,572	41,488	26,552	....	6,492	7,370	6,088
1857.....	2.20	1.22	0.98	56.45	29.62	20.17	29.16	21.15	1857.....	53,885	43,441	26,272	....	13,857	8,010	6,457
1858.....	1.78	0.95	0.83	64.49	31.95	16.89	26.80	24.85	1858.....	55,274	43,498	25,904	....	11,742	6,272	6,470
Average.....	10.05	5.35	4.70	266.59	140.85	102.21	144.61	112.30	Average.....	258,985	210,897	125,968	196	62,362	33,256	29,106
	2.01	1.07	0.94	53.32	28.17	20.44	28.92	22.46		51,797	42,179	25,194	....	12,472	6,551	5,821

Satisfactory Condition of the U. S. Treasury.

A correspondent of the *N. Y. Times*, in a letter dated Washington, September 14, 1859, says:—

According to official data the importations for the present fiscal year will greatly exceed those of the year 1857, and will reach in amount at least \$390,000,000, which, at the average duty of 16 per cent., will yield revenue of \$62,400,000, or \$6,400,000 more than was estimated for by Secretary Cobb in his last annual report to Congress. It is an interesting fact that while the Government receipts thus exceed the Secretary's estimates, the public expenditures are falling considerably below his figures. The result of this double operation will be the receipt of a sufficient revenue not only to meet the current wants of the Government without any further loan or re-issue of Treasury notes, but the speedy accumulation of a surplus to be again applied to the redemption of the public debt. Never before, since the foundation of our Government, have the recuperative powers of the Federal exchequer been so forcibly exhibited.

Those who feel an interest in the financial condition of the General Government can rely upon the following statement being authentic, and the data from which it is drawn official and reliable. The balance of unexpended appropriations in the Treasury on the 30th of June, 1858, was four millions below the balance the year previous, and amounted to \$26,782,062 62. This balance on the 30th June, 1859, amounted to \$22,455,991 74

Special appropriations for year ending June 30, 1860.....	41,367,699 63
Permanent appropriations for year ending June 30, 1860.....	8,497,724 50
Estimated additional appropriations for present year	9,000,000 00

Total \$81,321,415 87

Reducing the estimated balance of appropriations unexpended again, four millions below the preceding year, we have

18,000,000 00

Leaves estimated expenditures for 1859-60

\$63,321,415 87

To meet these expenditures the government had a balance in the treasury July 1st, 1859

\$4,339,275 54

Balance of loan, 1858

1,380,000 00

Treasury notes re-issuable June 30, 1859

4,953,200 00

Total available means July 1, 1859, \$10,672,475 54

Present estimated receipts from customs

62,400,000 00

Present estimated receipts from lands

2,500,000 00

Present estimated receipts from miscellaneous

1,500,000 00

Estimated means for the year 1859-

1860

\$77,072,475 54

Deduct estimated expenditures ...

63,321,415 87

Estimated surplus for the year ... \$13,751,059 67

After deducting from this surplus the six millions required to be retained in the Treasury for mint purposes, there still remains a balance of \$7,751,059 67 to be applied to the redemption of outstanding Treasury notes, a sum much larger than the whole amount of notes re-issuable on the 30th June last, and it is a fact well ascertained that no notes redeemed subsequent to that date will be re-issued at the Treasury.

If my figures and estimates, drawn from official sources, be correct, it must be apparent to every one that the Treasury will be under no necessity to draw again upon its credit; and that there will not only be no call for another Government loan, but no other re-issue of Treasury notes except a small amount, say two millions of those on hand 30th June last, and then re-issuable, as included above in the "available means July 1, 1859."

How then will the surplus this year of nearly fourteen millions of dollars—with the prospect of

a large increase in the future—be absorbed? With the exception of \$40,000, the public debt is bearing an interest of 5, 5½, 5¾ and 6 per cent.—and the holders will regard it as a first-class permanent investment, and be reluctant to surrender the stock to the Government even after the Treasury is in funds to reimburse it.

What a change a single twelvemonth presents in the condition of our national finances. Then every effort was directed to the raising of revenue—now the Treasury Department is already planning for a redemption of the public debt in advance of its maturity. Well may our government stock be eagerly sought after by capitalists at home and abroad, for with us a pecuniary embarrassment must always be temporary.

Trade and Commerce of Cincinnati.

A supplement to the "*Cincinnati Price Current*," published on the 14th inst., gives a statement of the Trade and Commerce of that city for the year ending 31st August, 1859. It occupies nineteen columns of the sheet, and exhibits the progress of the city since its foundation in 1788.

At first called Losantiville, but subsequently Cincinnati, it was many years after the date of its foundation that the city began to rise into eminence. In 1819 it was incorporated, only 40 years ago; and already it has become the third city of the Union—New York and Philadelphia only exceeding it in population. We may also give it the same rank in wealth and importance. The report claims for it 250,000 inhabitants; and styles it the most extensive provision market in this or any other country, famous for the skill and enterprise of her mechanics, the extent of her manufactures, and the wonderful progress and magnitude of her commerce, now reaching probably \$200,000,000 annually.

Commercially, and financially, the past year has been one of general prosperity; and the increase in the commerce and industry of the city has been at once large, legitimate and healthy. The dark clouds which obscured the business horizon in 1857 and 1858 have all been dispersed during the past year, and prosperity has once more revisited its former abode. Buildings, massive and extensive, have been erected, old buildings have been replaced by new, new streets opened, and the city vastly extended over the available vicinity, especially on the west side. The expansion of commerce has been noteworthy. The increase in the grocery trade particularly will attract attention. The imports of coffee increased 11 per cent., of sugar 30 per cent., and of molasses 60 per cent. One-sixth of all the sugar, and one-fifth of all the molasses of Louisiana found a market here, and also an eighth of all the coffee imported into the United States from Brazil; and notwithstanding these heavy importations, they were not in excess of the demand. The exports have also largely increased both in amount and value. Capital has been abundant and easily obtained upon acceptable security, at 10 to 12 per cent., and exchange on the east has been kept down to ½ and ¾ premium. All this exhibits a state of unprecedented prosperity, and an ability in the West which is highly agreeable to contemplate, so soon after the financial revolution to which all interests have been subjected.

Referring to the footings of a synoptical statement of the value of the manufactures of the city, we find that in 1840 the amount was \$17,780,033, in 1850, \$54,550,134, and in 1859, \$112,254,000, having tripled in the first ten years, and more

than doubled in the next nine years. The value of the leading products manufactured at these periods has been as follows:

	1840.	1850.	1859.
Agricult' implement's and machinery..	\$86,000	\$78,000	\$1,290,000
Alcohol and spirits of wine.....	145,000	608,260	2,260,000
Ale and beer.....	126,000	566,000	1,500,000
Boots and shoes ..	488,000	1,182,650	1,750,450
Butcher's meat ...	1,098,015	2,850,000	4,370,000
Candles, lard, oil, &c.....	353,940	4,490,900	6,114,500
Carpen'r and building work	418,600	2,116,000	2,760,000
Clothing.....	1,223,800	1,947,500	15,000,000
Cooper ware	167,000	387,000	1,510,000
Feed and flour....	816,700	1,690,000	3,216,000
Foundry castings.	668,657	3,676,500	6,353,400
Furniture.....	676,800	1,660,000	3,656,000
Iron, bar, sheet, etc., and nails ..	394,000	1,146,000	4,334,000
Iron, wrought, etc. ....	.....	.....	1,000,000
Liquors, domestic.	145,000	726,000	3,600,000
Medicines, patent.	68,000	952,000	1,960,000
Millinery	120,000	820,000	1,750,000
Pork & beef pack'g	3,074,912	5,760,990	6,300,000
Publications, books newspapers, etc.	518,500	1,276,540	2,610,050
Sashes, blinds, doors etc.....	71,700	312,000	1,380,000
Stone cutting.....	83,000	222,000	1,125,000
Tailoring	276,000	832,000	2,035,000
Tanneries	335,000	965,000	1,520,000
Tobacco, snuff and cigars	325,000	931,000	1,667,000
Whiskey	145,000	2,857,920	5,318,730

In the above no products are included but those which were valued at a million and upwards in the last year. This table is followed by a detailed statement of each of the products of trade separately, and the import and export of each for a series of years.

The following table compares the imports and exports in the two past years, 1858 and 1859:

	1858.	1859.	Increase.
Imports ..	\$83,614,747	\$96,213,274	\$12,668,527
Exports ..	91,906,506	107,007,707	15,101,201

Total .. \$175,551,253 \$203,220,981 \$27,669,728

The arrivals and departures of steamboats during the years 1855-6, and 1858-9, inclusive, are showing in the annexed:

ARRIVALS.				
From	1855-6.	1856-7.	1857-8.	1858-9.
New Orleans...	143	127	158	172
Pittsburg	530	385	414	340
St. Louis.....	279	315	262	263
Other ports....	1,844	1,878	2,334	2,381
Total.....	2,796	2,703	3,168	3,106

DEPARTURES.				
	1855-6.	1856-7.	1857-8.	1858-9.
New Orleans...	146	101	153	182
Pittsburg	453	393	392	330
St. Louis.....	374	376	237	244
Other ports ...	1,810	1,781	2,408	2,116
Total.....	2,783	2,648	3,190	2,872

The number of steamboats and barges which have run between Cincinnati and other ports for each year since 1850 has been as follows:

	Number.	Tonnage.
1850-51.....	233	49,274 Tons.
1851-52.....	203	50,512 "
1852-53.....	298	76,647 "
1853-54.....	314	80,266 "
1854-55.....	318	80,874 "
1855-56.....	365	92,401 "
1856-57.....	357	87,458 "
1857-58.....	319	74,483 "
1858-59.....	327	73,222 "

The following shows the whole number, with the tonnage of steamboats and barges built, for each year since 1847-58:

	Number.	Tonnage.
1847-48.....	29	10,233 Tons.
1848-49.....	23	7,281 "
1849-50.....	16	4,560 "
1850-51.....	31	8,206 "
1851-52.....	33	8,696 "
1852-53.....	29	10,252 "
1853-54.....	31	9,858 "
1854-55.....	27	8,698 "
1855-56.....	33	11,526 "
1856-57.....	34	10,600 "
1857-58.....	14	5,334 "
1858-59.....	11	3,735 "

Such is in brief a view of the commerce and industry of this city. It is but a type of the general progress and prospects of the country. Pittsburg, Louisville, St. Louis and Chicago, can probably show equally satisfactory results for the year. New Orleans has already reported, and shows a large increase of commerce over any former year; and what with the redundant harvest with which we have been blessed may not the next year bring forth.

Cost of Transporting Coal on the Baltimore and Ohio Railroad.

The following estimates of the actual cost to this company of transporting coal from Piedmont and Cumberland to Baltimore, were made by an experienced and competent official connected with the practical working of the road:

The cost of transporting one ton of coal from Piedmont to Baltimore, 206 miles, is:

For locomotive and train expenses, due to hauling one ton of coal.....71.7

Repairs of coal cars.....17.7

Maintenance of railway bridges, &c.....49.4

Total cost.....138.8

The cost of transporting one ton of coal from Cumberland, 180 miles, to Baltimore, is:

For locomotive and train expenses, due to hauling one ton of coal.....65.7

Repairs of coal cars.....15.4

Maintenance of railway bridges, &c.....43.2

Total cost.....124.3

In the calculation from which the above results are obtained, no expenses are taken into consideration but those immediately connected with the coal trade, or in other words, it is intended to represent the amount of money expended by the Baltimore and Ohio Railroad Company to enable them to haul one ton of coal (2,240 lbs.) from Piedmont and Cumberland to Baltimore, whilst they are at the same time engaged in a general transportation and passenger business, maintaining the expenditure necessary thereto.

Gulf and Ship Island Railroad.

The design of this road is to build up the interests of Mississippi. It proposes to run from the coast of that State, somewhere near Mississippi City, up through the centre of the State. A route has already been laid off to cross the Southern road about fourteen miles east of Brandon. Some of the Mississippians feel a State pride in this matter, as it is believed that it will build up a State commercial metropolis which can successfully compete with New Orleans and Mobile in the cotton trade, by virtue of the fine port near its proposed terminus on the coast.—Livingston (Ala.) Democrat.

Pittsburg and Connelville Railroad.

The first payment of \$5,000 has been made to the parties having the contract for the construction of their section of this road, between Turtle Creek and Pittsburg. The work is being rapidly pushed towards completion.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending September 29, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.....	6s.....86	
Covington and Lexington, 2d Mortgage.....	7s.....60	
Ohio & Miss. R. D., Construction.....	7s.....25	
Cinc., Ham. and Dayton, 2d Mortgage.....	7s.....82½	
Indianap. & Cincinnati, do. do.....	7s.....82½	
STOCKS.		
Cincinnati, Hamilton & Dayton.....	70	
Columbus and Xenia.....	83	
Indianapolis & Cincinnati.....	50	
Little Miami.....	86	

Railroad Earnings.

The earnings of the Central Railroad Company of New Jersey, for the month of August, 1859, were.....\$91,746 86

For August, 1858.....77,845 30

Increase, 18 per cent.....\$13,901 56

The earnings of the Ohio and Mississippi Railroad Company for August, 1859, were, \$166,777 23

August, 1858.....146,297 99

Increase.....\$20,479 24

The revenue of the Baltimore and Ohio railroad, for August, 1859, was:—

MAIN STEM.	
Passengers.....	\$68,502 66
Mails.....	7,833 34
Express.....	3,929 97
Tonnage.....	246,914 97
	\$327,180 94

WASHINGTON BRANCH.	
Passengers.....	\$30,075 29
Mails.....	1,000 00
Express.....	1,350 00
Tonnage.....	6,144 44
	38,569 73

N. W. VIRGINIA BRANCH.	
Passengers.....	\$3,533 38
Mails.....	866 66
Tonnage.....	6,790 21
	11,190 25
Total.....	\$376,940 92

Compared with the same month in 1858, the returns show the following result:

	Aug., 1859.	Aug., 1858.
Main stem.....	\$327,180 94	\$315,058 92
Washington branch.....	38,569 73	40,913 16
N. W. Virginia branch.....	11,190 25	14,539 28
Totals.....	\$376,940 92	\$370,511 36
Increase.....		\$6,429 56

Revenue of July, 1859, compared with August, 1859:—

MAIN STEM.	Passenger.	Tonnage.	Totals.
Aug., 1859..	\$68,502 66	\$258,678 28	\$327,180 94
July, 1859..	59,982 85	207,296 42	267,278 77
Increase.....	\$8,520 31	\$51,381 86	\$59,902 17

WASHINGTON BRANCH.	
Aug., 1859..	\$30,075 29
July, 1859..	26,467 80
Increase.....	\$3,607 49
	2,022 02
	\$5,629 51

N. W. VIRGINIA.	
Aug., 1859..	\$3,533 38
July, 1859..	2,179 77
Increase.....	\$1,353 61
Tonnage decr.	\$878 69
Total increase.....	\$474 82

Total increase of passengers in Aug., 1859, over July.....	13,481 41
Total increase of tonnage on Main Stem and Washington branch.....	53,403 88
Less decrease on tonnage on the North-western Virginia railroad.....	878 79
Total increase of tonnage over July.....	\$52,525 09
Total increase of revenue on the 3 roads.....	\$66,006 50

The comparison of the earnings of the present with those of the last fiscal year, shows the following results:

	1858.	1857.
October.....	\$392,503 02	\$396,191 85
November.....	383,159 22	361,443 38
December.....	336,861 01	379,259 02
	1859.	1858.
January.....	327,176 63	317,518 73
February.....	321,391 10	277,035 49
March.....	410,061 21	439,256 23
April.....	369,067 33	483,558 45
May.....	397,959 53	397,770 07
June.....	359,029 01	400,730 00
July.....	310,934 42	358,604 65
August.....	376,940 92	370,511 36
	\$3,985,083 21	\$4,184,874 23
Decrease present y'r.,	\$199,791 02	

The following statement shows the business of the Philadelphia and Reading Railroad Company, for the month of August, 1859, compared with the corresponding month of last year:—

	1859.	1858.
Received from coal.....	\$173,851 02	\$190,171 06
Do. merchandise.....	31,433 92	27,090 70
Do. travel, etc.	36,410 39	29,798 06
Total.....	\$241,695 33	\$247,068 82
Transportation, road-way, dumpage, renewal Fund, and all charges.....	126,995 54	122,862 85
Net profit for the m'th.....	114,700 09	\$124,205 97
Do. for previous 8 mos.....	735,868 06	646,510 50

Total net profit for 9 months.....\$850,568 15 \$770,745 47

The following statement represents the monthly receipts of the Sixth and Eighth avenue railroads since January 1, according to the reports made at the Comptroller's office:—

	Sixth Av.	Eighth Av.
January.....	\$25,373 46	\$29,847 77
February.....	22,166 63	26,274 02
March.....	26,435 87	31,326 53
April.....	27,099 85	31,828 87
May.....	30,404 00	35,554 66
June.....	28,793 38	34,167 72
July.....	27,876 21	34,630 37
August.....	28,553 98	33,682 23
Total.....	\$216,703 38	\$256,980 17

It will be seen that the month of May was the busiest on both roads, and the month of February the other extreme. The average number of passengers in a month on the Sixth avenue road was, therefore, 541,738; in one day, 18,058. On the Eighth avenue road the average number of passengers in a month exceeds that of the Sixth by about 10,000; daily, about 330.

The receipts of the Grand Trunk Railway of Canada for the week ending Sept. 10,

were.....	\$48,758 68
Week ending Sept. 11, 1858.....	41,753 80
Increase.....	\$7,004 88
Total traffic from July 1st.....	\$482,735 15
Same period last year.....	408,738 09
Increase.....	\$23,997 06

Staten Island Railroad.

The Staten Island Railroad is being pushed forward as rapidly as possible. A very fine substantial bridge has been thrown over Chestnut avenue at Clifton, which will cost about \$1,000. In filling in the meadows, the new earth sinks two or three feet in a night, displacing the black mud, which rises up on each side. The north-western end of

the road, near Tottenville, will be equipped first; that portion has been thoroughly graded and settled. It is anticipated that the road will be in operation by Christmas.

American Railroad Journal.

Saturday, September 24, 1859.

ERRATUM.—In the tabular statement accompanying our article upon the New York and Erie Railroad in last week's issue, under the head of "Passenger Traffic," the receipts from the transportation of passengers for 1858, are stated at "\$1,682,258," instead of \$1,182,258. This error is the more annoying from the fact that in the remarks immediately preceding the table, particular reference is made to this column of figures. We think we can vouch for the correctness of every other figure in the statement.

Sale of Pacific Railroad Lands.

The Pacific railroad company of Missouri have put on the market a large amount of free lands. These lands are situated in the counties of St. Charles, Jefferson, Washington, Franklin and Crawford, on both sides of the main line, and South-west branch of the Pacific railroad, and comprise upwards of 125,000 acres. The sales will commence at the Court House in St. Louis on the 3d of October. On that and the following day, 6,869 acres in St. Charles county will be offered; on the 5th will commence the sale of 36,571 acres in Jefferson county; on the 11th the sale of 35,410 acres in Washington county; on the 17th of 34,241 acres in Franklin county; and on the 21st of 13,328 acres in Crawford county.

The company have issued a pamphlet giving a full and minute description of these lands, so that any one by inspecting it can inform himself exactly what advantages each tract possesses, whether in regard to soil, timber or mineral prospects. He can ascertain whether it is upland or bottom, or mixture of both; whether watered or not; whether heavily timbered, and the kinds of growth upon it; the minerals discovered upon it, and in many cases exact distance from the road, or from a depot.

Albany Northern Railroad.

This road is 32 $\frac{3}{4}$ miles in length, extending from Albany to Eagle bridge, at which point it forms a connection with the Rutland and Washington Railroad, and through that road, with the Rutland and Burlington, Vermont Central, and Vermont and Canada roads. Its construction was commenced in 1851, and completed in July, 1853. The original capital of the company was 6,000 shares of the stock, of the par value of \$100 per share. But this was not all paid in, the revenues from the sale of stock amounting to but \$139,004 97. To aid in the construction of the road there were issued and realized

First mortgage bonds	.....	\$600,000
Second do.	.....	500,000
Third do.	.....	45,600
Fourth do.	.....	364,339

Making a total realized of....\$1,509,939

In 1854, the property passed into the hands of Receivers, and was by them operated until something more than a year ago, when a sale was made by the Trustees of the second mortgage bonds. For some reason this sale was never con-

summated, and default being made in the payment of interest on the first mortgages, they were foreclosed, and the road sold on the 14th inst. at Albany to Hon. Abijah Mann, who, in trust for a portion of the holders of the first bonds, pays the sum of \$25,000 for the property—taking it subject to demands yet to be liquidated, which may reach \$130,000.

With the exception of \$500,000 of the first mortgage bonds, which it is understood Mr. Mann represents, the total capital is annihilated by this sale, viz:

Stock subscriptions	.....	\$439,004 97
Bonds	.....	1,509,399 00

Total capital	.....	\$1,948,403 97
Interest on this 7 years	.....	975,717 89
Floating debt in 1854	.....	100,000 00
Interest 5 years	.....	35,000 00

Total.....\$3,059,121 86
—From which is to be deducted the amount of the purchase money, \$25,000, leaving a loss of \$3,034,121 86 to be divided among the stockholders and those who purchased the bonds.

Pennsylvania Tonnage Tax.

When the Pennsylvania Railroad Company was chartered, it was made a condition that the tonnage carried over the works it might construct, should be subject to a certain tax. This was considered an absolute necessity in order to indemnify the State for any anticipated injury that might accrue to the State works from competition; and until December last the tax had been submitted to by the company without complaint. But at the latter date the Pennsylvania railroad company had purchased the very works from the State which this tax was originally designed to protect; and hence the tax ought in justice to have ceased. The State authorities, however, decided otherwise; but the company by advice of council, withheld the usual payment. Hence a law-suit, which from its interest to the commercial world, has attracted universal attention. In another part of this day's issue we have given an abstract of the cause as presented by the parties contestant and also the opinion of the judge before whom it was tried, and the final verdict. So far as the result is concerned we are satisfied that it is *legally* correct; but *morally* and in all *equity* the company ought not to be saddled with a *legal* wrong. The case will be carried up to the higher courts, and probably with a like adverse result. But in our opinion this is scarcely a matter for the courts: relief ought to be sought in the abrogation of the law imposing the tax. Such an abrogation is necessary not only for the relief of the company, but also for the interests of commerce; and since the motive for the continuance of this odious tax has been removed, we are unable to conceive on what basis its future continuance can be advocated or maintained. Under any circumstances, the imposition of such a tax on commercial intercourse would be impolitic, and, in the present instance, is arbitrary and oppressive, a wrong to a section and of benefit to no portion of the State.

The Chenango Canal.

The surveys for the Chenango Canal extension are rapidly going forward, the party of engineers having already reached Campville.

St. Louis and Memphis Railroad Project.

Among the anomalies of the railroad system of the Mississippi valley, is the non-existence of a direct railroad between St. Louis and Memphis. The indirect route by Sandoval, Cairo, etc., is too long and inconvenient, and requires too frequent transshipment to become at all eligible for the pressing wants of the commerce between the two places. The distance by a direct line is stated at 279 miles—that by the indirect line, including 20 miles of steamboating between Cairo and Columbus, is 350 miles. The latter distance is involved in five several lines, viz: The Ohio and Mississippi, from St. Louis to Sandoval, 61 miles; the Illinois Central, from Sandoval to Cairo, 118 miles; Steamboat Line, from Cairo to Columbus, 20 miles; the Mobile and Ohio Railroad, from Columbus to Humboldt, 69 miles; and the Memphis and Ohio, from Humboldt to Memphis, 82 miles; and such is the only present route, except that wholly by steamboat on the river, 420 miles, between these great marts of commerce.

Of the projected route, 85 miles are already in operation, extending from St. Louis south to Pilot Knob, one of the great Missouri iron mountains, and hence the length of new road required to complete the connection is, at most, 194 miles, and it is believed that even this distance may be reduced on a full examination and accurate survey, so as not to exceed 180 or 185 miles.

To give some idea of the grades of the proposed road, it may be stated that the St. Louis and Iron Mountain Railroad reaches its maximum, 735 feet, at its southern terminus; and beyond this, 94 miles from St. Louis, the elevation is 780 feet above the level of that city. From this point, after descending southward for a distance of 22 miles, the road is again on a level with St. Louis; and 38 miles further south, to or near Indian Ford, in the "flat lands," 153 miles from St. Louis, it reaches a level, 38 or 40 feet below the assumed base.

It will thus be seen that the serious and heavy part of the projected road is confined to the 20 miles next to the Iron Mountain region, and charging this section on the average of the Iron Mountain Railroad, it would cost only \$37,166 per mile. The remaining sections to Memphis will be the cheapest part of the whole, being through flat lands, and the cost is rated at almost one-half that of the elevated sections, or \$18,500. Such is the estimate of the engineers of the St. Louis and Iron Mountain Railroad.

Their report sets down the figures for the "probable expenditures to put in operation the whole road to the Arkansas line," on the route therein suggested, at \$8,104,640, namely: \$4,800,000 to Pilot Knob, (85 miles,) and \$3,304,640 from Pilot Knob to the Arkansas Line, (133 miles.) The cost of the Arkansas section of the road, 61 miles, is estimated at \$1,098,000. The unfinished portion of this route is, therefore, to cost \$4,402,640, or in other words, the 194 miles to be constructed is to cost \$397,360 less than the 85 miles already constructed! This would, nevertheless, average about \$22,700 per mile, and is probably as much as an economical administration would demand.

But at whatever moderate cost, this road ought to be and must be built; or some other road having the same termini. This link in the system, in-

deed, is too important to be longer neglected. Memphis is already connected by railroad with New Orleans on the South, and Savannah, Charleston, Richmond, and Baltimore, on the Atlantic coast. This railroad, now under consideration, would give to St. Louis the same outlets, and Memphis and its correspondent ports would, on the other hand, have access through St. Louis, with the whole upper region of the great interior valleys, and with the country of the great Lakes.

But while advocating any connecting road between these points, we may be allowed to suggest other routes; and the one that appears to our mind as being most eligible would depart from St. Louis by the Iron Mountain Railroad, and so continue on that line (already constructed) to the point where it leaves the Mississippi, some 26 or 27 miles from the point of beginning, and thence following as direct a course as possible, terminate at a point opposite Hickman, Ky. The length of new line required would be about 140, or probably 150 miles. At Hickman the Nashville and North-western Railroad commences, and after a course of say 18 miles reaches Union City, connecting there with the Mobile and Ohio Railroad, and at Humboldt, on the latter road, the Memphis and Ohio Railroad forms a connection. Together, these roads would give a distance, between the two cities, of 321 miles, as follows:

By the St. Louis & Iron Mountain R.R.	27 miles.
By the new road.....	150 "
By the Nashville & North-western R.R.	18 "
By the Mobile and Ohio Railroad.....	44 "
By the Memphis and Ohio Railroad....	82 "

—a length somewhat superior to the projected road, of which we have hitherto spoken, but immensely superior to it in its Southern connections. It would, in fact, bring St. Louis into direct connection not only with Memphis, but also with Nashville and the Atlantic ports by the shortest routes, and also with Mobile and New Orleans. It would, moreover, involve a less original capital in its construction, first by avoiding the high grades in the Iron Mountain regions, and secondly, by the shorter length of the line to be constructed. It must be remembered that the Mobile and Ohio, and the Mississippi Central, connect at Jackson, 18 miles south of Humboldt, or 62 miles from Hickman, and are thence continued south directly to Mobile and New Orleans, respectively.

Alabama and Florida Railroad.

We learn from the *Montgomery Mail* that the Alabama Company has concluded the purchase of two thousands tons for the continuation of this road below Greenville. This, with what was before secured, will iron 35 miles of the road. Track-laying below Greenville, will be resumed in about ten days, and continue until the entire line is finished.

The Florida Company have completed a negotiation for iron enough to lay the track within the limits of that State. The friends of the enterprise look forward to the completion of the whole work from Pensacola to Montgomery by the close of next year.

Boston and Maine Railroad.

The following gentlemen have been re-elected Directors of this road for the ensuing year: Francis Cogswell, James H. Duncan, George W. Kittredge, Daniel M. Christie, Peter T. Homer, Israel M. Spelman, Henry Saltonstall.

North Missouri Railroad.

We learn from the St. Louis papers that the proposition of the Messrs. Kelly to finish this road from the junction to Lancaster, at the rate of \$15,000 per mile, has been accepted and the contract signed. The work is to be commenced at once on the line of the road from Macon City, north of the junction with the Hannibal and St. Joseph Railroad. The contractors are ready, having their shanties erected, their teams, &c., on the ground, and hay cut for the winter. The Board directed an order to be made to the counties of Schuyler and Adair, to pay up thirty per cent. of their subscriptions—\$50,000 each—and it is understood that these counties will at once comply with this request. Beyond Lancaster, the people of Iowa are willing and anxious to construct the road to Ottumwa.

Interest and Dividends.

The Philadelphia, Wilmington and Baltimore Railroad Company has declared a semi-annual dividend of three per cent., payable October 1st, to holders 15th inst., and leaving a surplus for the year of \$123,000—over two per cent. of the capital—after deducting all expenses and appropriations to the sinking fund.

New York and Erie Railroad.

Mr. Satterthwaite's London Circular suggests the following plan for the re organization of this company:

The New York and Erie Railroad has paid the penalty of its faulty organization under its charter powers, and has fallen into the hands of the law courts.

Under the existing deficiency of net revenue to provide for the interest on all its bonds, and with the whole Sinking Fund Loan of 1857 being due from default of payment of interest and sinking fund, according to the terms of its issue, and with the power of \$4,000,000 Second Mortgage Bonds, due 1st March, 1859, to demand payment or to foreclosure, we conceive the appointment of a Receiver, with a view to a speedy sale of the road, and organization of a new company on a better basis, to be the wisest course for all parties concerned.

It is estimated that whatever form may be adopted, at least \$1,000,000 must be raised by the new organization, to pay employees and to keep the mortgage creditors from foreclosing in an unfriendly manner.

It is evident that it must be the great aim of all parties interested in the organization of the new company, so to frame it that those parties who pay the \$1,000,000 shall not throw good money after bad, and to insure this, the lower the amount of mortgage debt, the safer will it be to subscribe. In this view to foreclose under the Fourth Mortgage would be the safest for all parties, unless it can be proved beyond a doubt that the company can easily earn more than the interest on the Fourth Mortgage and maintain the road. We believe the new organization will be best effected under the General Railroad Act of the State of New York, and that no scheme of Preference Stock can be allowed under that Act. It would result, therefore, that the capital of the new company must consist of Stock and Bonds only.

In case the Fourth Mortgage will consent to arrange with the other interests, the new stock would be for \$12,000,000, to be divided in such proportions as can be agreed on; but if the Fourth Mortgage prefer to take the road themselves they can do so, unless the unsecured bondholders bid such a price for the road as takes it out of their hands and pay the arrears of interest.

We do not feel it timely to dictate any plan, but we believe that the deputation about to go out will meet, on their arrival in New York, with a committee who will have had suggestions made from

every interest concerned, and that the benefit to all parties in this country will be very great in having some gentlemen, at this crisis, ready and able to represent them in America.

We would suggest the following plan as being, in our opinion, a safe one, if all parties can be brought to agree:

Proposed basis of capital for New Company.....	\$25,000,000
First mortgage.....	\$3,000,000
Second mortgage.....	4,000,000
Third mortgage.....	6,000,000

Bonds to stand as they are.....	\$13,000,000
Leaving as capital to be raised and divided.....	\$12,000,000

Cash capital known to be required, to be raised by the future purchasers of the road, to form part of the new stock to be arranged by the various parties, in interest, in fair proportions, \$1,000,000 as under:

Fourth mortgage, \$3,600,000, allow stock at par without payment.....	\$3,600,000
Fifth Mortgage.....	\$1,200,000

1862 } Bonds. 8,000,000	
1871 } " " " " " "	
1875 } " " " " " "	
\$8,000,000—5½ per ct. or	\$9,200,000
9,200,000—69½ " " "	\$506,000 cash,
	6,394,000 st'k,

75 " " " " " "	\$6,900,000	6,900,000
Stock, \$11,000,000 allow	\$1,000,000 st'k	
	500,000 cash	1,500,000

	\$12,000,000
On this basis the annual charge would be 7 per cent. on \$13,000,000 mortgage bonds..	\$910,000
Rents and leases.....	100,000
Capital required to maintain road, from revenue.....	200,000

Annual charge.....	\$1,210,000
The revenue for this year, say.....	\$4,500,000
Expenses.....	3,000,000

	\$1,500,000
Deduct annual charge.....	1,210,000

Or about 2½ per cent. on \$12,000,000 stock.....	\$230,000
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The Wealth of Wisconsin.

The Wisconsin Secretary of State furnishes the following figures of the wealth of this State:

	1858.	1859.
Number of acres.....	16,493,518 05	17,411,318 79
Value per acre.....	\$5 90½	
Aggregate value.....	\$110,269,274 05	102,814,502 14
Aggregate value of city and village lots.....	40,655,647 73	36,115,304 82
Aggregate value of person'l property.....	25,522,577 15	13,607,893 04
Total aggregate..	177,820,765 96	172,537,700 00

Returns of personal property have fallen off immensely in consequence of the deduction of debts from personal property, authorized by the present assessment law.

Virginia Central Railroad.

It is stated that by the recent 4½ per cent. dividend of the Virginia Central Railroad Company, the Treasury of the State will receive \$90,000. The State has an investment of \$2,000,000 in the stock of the company.

Osage Valley Railroad.

The work of construction was commenced upon this road at Tipton on the 21st ult. The Osage Valley road branches from the Pacific at Tipton, and is intended to run south-westwardly to the Missouri border, and thence through Southern Kansas.

Sunday Street Railroad Travel.

The Chairman of a Committee in Philadelphia for procuring the repeal of the law forbidding Sunday travel, recently addressed letters to the Mayors of New York, Brooklyn and Boston, inquiring whether the running of the Street cars on Sunday in those cities, had proved detrimental or otherwise to the morals of the community. In reply Mayor Tiemann, of New York, says:

I know of no instance of any riot or other disorder having occurred in consequence of the running of such cars on Sunday, nor of any great gathering of disorderly or other persons at the several termini of our railroads on that day. The practice has, on the contrary, been found of great convenience to all classes of our citizens—and the cars, although used on the day alluded to chiefly by a different class from those who travel in them on week days, still many of our best citizens, intelligent and religious, avail themselves of the public accommodation afforded by these cars on Sundays, in going to and from the several churches in our city, and in other acts which the most strictly religious would admit as compatible with the observance of that holy day.

There are some six lines of railroads in our city, all of them running from the lower to the upper part of it, and two of them extending their trips as far as Harlem, a distance of eight miles from the lower termini; and although they are filled with passengers, more than on other days, no disturbance has ever, to my knowledge, occurred in them, or in consequence of their running on that day. * * * * *

In a city with a small population, I will admit there can be no great public necessity for these conveyances on Sunday, but in a large and densely populated metropolis, situated on an island, extending in its extreme length from eight to thirteen miles, and not more than two miles wide in any part of it, they are absolutely required to be run as well on Sunday as on other days. In this respect I believe that all classes of our community acquiesce.

Mayor Lincoln, of Boston, writes:

The propriety of the horse railroad cars running on the Sabbath, I believe, has never been seriously discussed, either by the City Council or the public press. I think it would be a serious evil if all our roads should run on that day, but they do not; only three carry passengers on that day, and they only to a limited extent.

The Metropolitan Railroad does the most business, and runs on Sunday, and connects us with the city of Roxbury. The greater portion of the travel, however, is from Ward Eleven, the south-easterly section of the city. This part of the city has recently been built, and its inhabitants are mostly those who have moved from the other wards, but are still connected with the churches down town. The railroad furnishes them a means to keep up their connection with their accustomed places of worship. I believe it is generally used by people of all denominations, although I have heard occasionally of a clergyman or some other conscientious person object to the mode of conveyance. The cars seem to run with less noise and confusion than on other days; the bells are not rung, and there is evidently an effort on the part of the conductors to observe the proprieties of the Sabbath.

I have no doubt that to some extent they are urged as a matter of pleasure, but the evil that was apprehended, that large companies of idlers would rush into the country, and spend the day in dissipation, much to the discomfort and peace of the inhabitants of the suburbs, has not been realized in fact. There is a general regard for the Sabbath in our city and vicinity; it is not kept as strictly as it was by our fathers, but yet a good sentiment pervades all classes of our people, and seldom is anything seen which is objectionable."

Mayor Powell, of Brooklyn, thus expresses his views:

In a communication to the Common Council, on the 5th of January, 1857, (a copy of which I send

you,) I recommended, for the reasons therein set forth, the running of rail cars on Sunday. The subject was taken up and fully discussed by the Common Council and the citizens generally. Public meetings were held, and the project was severely denounced by many of the clergy and our leading citizens, as being a desecration of the day, and that it would lead to riot and disorder, and tend to all sorts of evil, especially in the suburbs of the city.

That they were sincere in these views no one can doubt. But, as I think, fortunately, their views did not prevail, and the cars were set in motion, and have now been running more than a year with the most gratifying results. Feeling in a great degree responsible for the measure, I watched its effects with some solicitude, and find that, while the cars are filled during the day with passengers, they are, with scarcely any exceptions, of the most orderly and respectable class of our citizens, and, I think, a large majority are females. I have not heard of a single complaint from the people living in the suburbs, of anything like disorder or riotous assemblages; and, from repeated personal observation, I am sure that no cause of complaint exists. The cars are likewise patronized to a great extent by our church-going people, and many extras are required to accommodate them at the close of the evening services.

In fact, so general is now the acquiescence of the people in this measure, that I am convinced if it was brought to the test of a popular vote, that an overwhelming majority would approve it. One of the great benefits experienced in running the cars is, that it prevents the thoroughfares from being overcrowded. Before they were in use, the sidewalks were crowded with pedestrians, to that extent, frequently, that it was difficult to get along with comfort; and the change that has been produced in this respect is remarkable, and is noticed by all who have occasion to travel on that day. In short, from every point of view, I think the benefits we derive from the accommodations of Sunday travel far outweigh the evils, real or imaginary, that attend it.

Alabama and Florida Railroad.

The last link of a great unbroken chain of railroads, connecting the Gulf of St. Lawrence with the Gulf of Mexico, is the road now in vigorous progress from our State Capital (Montgomery) to Pensacola. Let any one cast a glance on the map and he cannot escape the conviction that this last short link—about 170 miles of road through mostly a level country—was a predestined and inevitable necessity; and that the natural terminus of this colossal railway chain of over 2,000 miles is a harbor—one of the best, if not the very best, on the Gulf of Mexico. By direct connection with the rich coal regions of Alabama, this port must become a great coaling station, facilitating the operations as well as promoting the establishment of steam lines in the incalculable expansive Brazilian and Central American trades, and in other respects cannot fail to grow eventually into a place of very considerable importance. The project of this road to Pensacola once excited some uneasiness in Mobile, whose interests are by some thought to be jeopardized by its execution. Even were it so, it is unwise to shut our eyes to disagreeable facts, it is the part of prudence to meet them early and face them boldly. But we cannot believe that anything tending to develop the resources of Alabama, and to increase the wealth and greatness of the South, will ever conflict with the interests of Mobile. On the contrary, we believe it self-evident that no place will derive greater advantages from any new stimulus to the Gulf trade than our own city. This we are prepared to prove, if necessary, by undeniable facts and the simplest reasoning. Our present purpose is to awaken our people to the urgency of prompt and energetic action. The Alabama and Florida Railroad Company, under the management of the pioneer of railroad enterprise in Alabama, and one of the ablest financiers of the South, Mr. C. T. Pollard, is in a most prosperous and promising condition. All but 22 miles of the road is now

prepared for the reception of the rails, a portion of which is already purchased and on its way, or about to be purchased. To pay for the iron, the company has issued coupon bonds for the sum of \$550,000, payable 1st of July, 1860, and bearing interest at 8 per cent. The bonds being secured by mortgage on 400,000 acres of, for the most part, desirable lands, are expected to be taken readily at par, and, indeed, although but quite recently issued, \$30,000 have already been sold at par. The lands are valued at an average of \$3 an acre, and on the easy terms proposed, will, no doubt, meet with a brisk sale. In view of all these facts, the President announced to the stockholders at their last annual meeting that there is reasonable prospect of the connection with the Gulf being completed by the close of the year 1860.—*Mobile Register*.

Valuation of Worcester.

The annual valuation of Worcester has been completed. The real estate of the city is appraised at \$11,122,950; the personal at \$5,693,480; total \$16,816,430, an increase of \$430,430 since last year. Number of polls, 5,784. Rate of taxation—polls \$1 50, property \$7 per \$1,000.

Export Trade of New Orleans.

The fear was entertained when New York, Philadelphia, Baltimore, and Charleston, tapped the Mississippi valley, that the railroads connecting the Mississippi and the seaboard would seriously affect the commerce of New Orleans. Many supposed the products of the great Western valleys would go direct to the Atlantic across the country, instead of coming by the river to this city. To some extent this has been realized. To supply a sudden demand at any Eastern seaport, breadstuffs and provisions have been sent forward by rail; but the greater expense of transportation by land carriage has forbidden, and must ever prevent, a serious diversion of bulky Western produce over such routes.

The cheap freights on the Erie Canal secure more wheat, flour and provisions, than the two great New York railways can command. So the less cost of transport by flat-boat and steamer, will continue to control the direction of a large proportion of the products of the West, demanded for shipment to this port.

Passenger travel will follow the lines of railways; heavy freights continue to seek our great rivers. The result has been a change, to some extent, in the character of our river craft; capacity for large freights becoming more an object than speed. This feature of the steamers that ply on the Mississippi and its tributary streams, will become more and more general, until the present floating palaces, fitted out with almost Oriental magnificence, will be rare, the few remaining in the trade being calculated to supply a demand for the comfort of families, rather than to secure the profits of large cargoes.

The lines of roads perpendicular to and almost parallel with our great river, have been long enough worked to demonstrate the effect they are likely to have upon our receipt of Western produce, or the direction which the trade of the West is destined to take.

We are not of the opinion that the falling off in some of the leading articles of Western trade the past year results from the influence of railroad communication with the Atlantic seaboard. Statistics of the coast cities show quite as great a loss of Western business the past year as New Orleans has experienced. The absence of foreign demand for breadstuffs, and the hoarding upon plantations of tobacco in hopes of a higher price, will satisfactorily account for any loss we have experienced, and we may feel assured that as long as means exist for bulky freights to reach a market cheaper than by railways, they will follow the river, though not so soon placed in market.

The statistics of exports from New Orleans for several years past will show the soundness of this opinion, and prove that after making the experiment of sending produce to market over the rail-

roads constructed, shippers and producers have reverted to the old method of water carriage. We received, for the years, ending June 30:

1853	\$67,768,724
1854	60,176,683
1855	55,688,552
1856	30,547,963
1857	91,514,286
1858	88,332,485
1859	100,350,658

A glance at the table will show that, in 1854 and 1855, when the opportunity for reaching the Eastern seaboard by direct Eastern routes was first offered, a serious falling off in receipts at this port was felt; but subsequently the old trade returned, and has continued steadily to increase.

The inference is inevitable that Philadelphia, Boston and Baltimore, will not have availed themselves of all the facilities of trade which lie at their command, until they have established lines of steam communication or sailing vessels with this city. Nature has determined that we shall receive the bulk of Western produce which cannot cheaply reach the Erie Canal. The cities of the seaboard not in direct communication with this artery of water conveyance, must find means of connecting themselves with this city to control the highest possible amount of trade.—N. O. Picayune.

The Great Eastern.

As a matter of curiosity we append the tonnage of the Great Eastern, as compared with the principal vessels of the United States Navy:

Names.	Tonnage.
Pennsylvania	3,241
Columbus	2,480
Ohio	2,747
North Carolina	2,633
Delaware	2,633
Vermont	2,633
New Orleans	2,805
Alabama	2,633
Virginia	2,633
New York	2,633
Total	28,131
Great Eastern	26,000

Her tonnage is nearly as great as the combined tonnage of the ten tremendous line of battle ships—including the once unrivalled Pennsylvania—that are registered on the United States Navy list.

Association of Engineers.

The following are the officers of the National Association of Engineers for the coming year:

President—R. M. Smith, of Pittsburg, Fort Wayne and Chicago Railroad. Vice President—Wm. Franklin, of the Baltimore and Ohio Railroad. Secretary—Chas. Fellows, of the Cleveland and Pittsburg Railroad. Corresponding Secretary—John T. Sheppard, of the Baltimore and Ohio Railroad. Treasurer—Wm. W. Wills, of the Pennsylvania Central Railroad. Finance Committee—Chas. W. Burger and C. R. Church, of the Pittsburg, Fort Wayne and Chicago Railroad.

The object of the Association is to obtain such legislative enactments in the different States as may be necessary to ensure a high standard of qualifications in applicants for the position of Railroad Engineers.

Mobile and Ohio Railroad.

The total receipts of cotton by this road at Mobile, the last year, were 137,430 bales. In 1858, they were 107,450 bales; in 1857, 79,254. The total earnings of the road during the last year were \$772,955; in 1858, \$617,501; in 1857, \$509,700.

Marietta and Cincinnati Railroad.

The Cincinnati Commercial of 16th inst. says:—We learn that passenger and freight trains passed over the Union road on yesterday. The Cincinnati and Parkersburg line is now operating to a point within four miles of Belpre, opposite Parkersburg.

Personal.

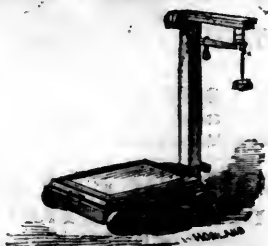
J. B. Moulton, Esq., has been elected Chief Engineer and Superintendent of the North Missouri Railroad, Major Robert Walker having retired from that post.

The Philadelphia Bulletin states that Charles Macalester, Esq., has been appointed Receiver for the Williamsport and Elmira Railroad Company.

Lake Superior Iron.

The Detroit Tribune, of Sept. 12th, says that the Wyandotte Rolling Mills are busy turning out 3,000 tons of Railroad bars, made from Lake Superior iron, for laying the track of the railroad between Lansing and Owosso. This work is to be carried to an early completion.

FAIRBANKS'



STANDARD SCALES,

Adapted to every branch of business where a correct and durable Scale is required.

SCALES FOR RAILROADS,

SCALES FOR COAL DEALERS & MINERS,

SCALES FOR HAY AND CATTLE DEALERS,

WAREHOUSE AND TRANSPORTATION SCALES,

PORTABLE AND DORMANT SCALES FOR STORES,

Scales for Grain and Flour Dealers,

Counter Scales, every variety,

BANKERS' AND JEWELLERS' BALANCES,

SCALES FOR FAMILY AND FARM USE,

WEIGH-MASTERS' BEAMS,

POST OFFICE SCALES, ETC., ETC.,

All of which are WARRANTED in every particular.

Call and examine, or send for an illustrated circular.

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189 Broadway, New York.

ROUND OAK IRON WORKS,

STAFFORDSHIRE.

LORD WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,

SHEETS, HOOPS AND BARS of every variety.

Address RICHARD SMITH, Esq., Dudley.

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NEW YORK, No. 17 Nassau St.

BALTIMORE, over Farmers' & Mer. Bank.

NORRIS & BROTHER, Agents.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH PORT.

C. CONGREVE & SON,

13 Cliff St., N. Y.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GREST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad St.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping point in Wales.

WAINWRIGHT & TAPPAN,

Boston, June, 1851.

29 Central Wharf.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address J. H. SCRANTON, President, Scranton, Pa.
or DAVID S. DODGE, Treasurer, 46 Exchange Place, NEW YORK.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,

10 Wall St., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COMPTON,

44 Exchange Place.

New York, 1st June, 1859.

WINDOW, PICTURE AND CAR

GLASS.

F. HOPKINS & BROTHER,

IMPORTERS,

193 Pearl St., NEW YORK.

A GENTLEMAN who has upwards of 26 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.

Address S. box 952 Baltimore Post Office. 3m92

METALS for RAILROAD COMPANIES.

LUCIUS HART,

IMPORTER AND DEALER IN METALS,

4 and 6 Burling Slip, NEW YORK.

BLOCK TIN. SPELTER. BABBITT METAL.

ANTIMONY. PIG LEAD. INGOT COPPER.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JONESTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA { NORTH PENNA. R. R. BUILDING,
OFFICE, { No. 407 Walnut St.

MORRIS & JONES & CO.,

IRON MERCHANTS,

MARKET AND SIXTEENTH STREETS,

PHILADELPHIA.

IRON AND STEEL

IN ALL THEIR VARIETIES.

ROILER PLATE, CAR AXLES,

BOILER RIVETS, RAILROAD IRON,

CUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.

August 16, 1854.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,

54 Exchange Place,

NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,
MANUFACTURERS OF
LOCOMOTIVE TIRES;
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPANY,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the **ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG.,** are prepared to contract for the sale of **RAILROAD IRON** of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Secy.
WHEELING, VA.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY,** and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.

New York, Aug. 1, 1858.

RAILROAD IRON.

THE RENSSLAER IRON COMPANY,
TROY, N. Y.,

OFFER RAILS of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:
BUSSING, CROCKER & DODGE,
32 Cliff St.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.

CAR SPRING STEEL.

Far superior to the ordinary kind.

FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.

ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
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IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

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MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
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STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAR. WHEELER, JR.,
STEPHEN P. M. TASKER.

RAILROAD IRON.

THE subscribers are prepared to contract for **RAILS** delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

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COPAL VARNISHES AND
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Also, PUTTY, PAINTS and COLORS.

THE
RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,

MANUFACTURERS EXCLUSIVELY OF

RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old RAILS. The capacity is Forty Tons per day. It is well situated for receiving old RAILS, either by Railroad or Lake.

Orders are now solicited.

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

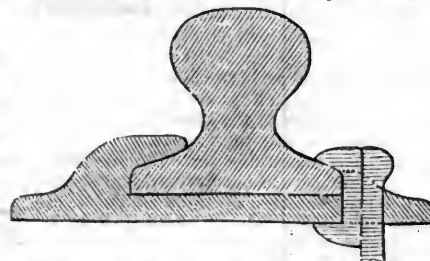
President of the Incorporation

February, 1858.

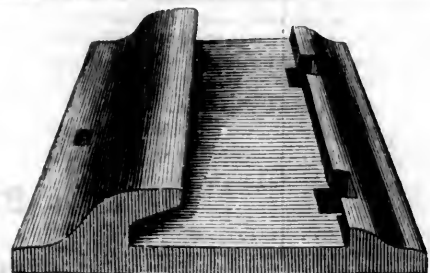
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SUCCESSORS TO PORTER, ROLFE & SWETT,
MANUFACTURERS OF

RAILROAD SPIKES
AND CHAIRS,
PITTSBURG, PA.



HAVING built a large Rolling Mill with new and improved Machinery, we are fully prepared to execute orders at the lowest rates, for any amount of **SPIKES** and **CHAIRS** made of the best **JUNIATA IRON.**



Particular attention is invited to our **NEW WROUGHT IRON CHAIR**, as being the best in use.

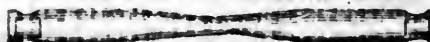
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CAR AXLE WORKS.



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OFFICE No. 410 WALNUT STREET,
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Rolled or Hammered Car Axles, Bar Iron and Forgings.

ST. LOUIS STEAM FORGE.



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MANUFACTURE

CAR AXLES,
AND EVERY DESCRIPTION OF
LOCOMOTIVE FORGINGS.

ALSO,

STEAMBOAT SHAFTS, CRANKS, TOBAKKO SCREWS,
HAMMERED BAR IRON,

AND EVERY VARIETY OF

Forgings for Machinery's Use.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, July 9, 1859.

RAILROAD IRON.

500 TONS American RAILS, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about

250 Tons English RAILS same size and weight.

M. K. JESUP & COMPANY,
New York, June, 1859. 44 Exchange Place.

THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY
J. C. HULL & SONS,
(Formerly W. Hull & Son,)

Nos. 108, 110, 112, 114, 116 & 118 Cliff St.,
NEW YORK,

**For Railroads,
Machine Shops,
Steamships,
Mills, etc.**

THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is much less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

6th. It will remain limpid at as low a temperature as sperm.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

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Sperm, Whale and Elephant Oils,
Adamantine Car and other Candles,

AND MANUFACTURERS OF

TAW'S LUBRICATING GREASE

FOR RAILROAD CARS
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THIS celebrated GREASE has been in use upwards of Ten years, and is in the opinion of FORTY RAILROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or description of machinery.

TAW & BEERS,
18 SOUTH WATER ST.
Philadelphia.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF
MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent more durable than Sperm Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM

In no case has it failed to meet the approval of the consumer. The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

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Reliable orders filled for any part of the United States or Europe.

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MOORE & ADAMS,
MANUFACTURERS OF

DOUBLE and SINGLE PLATE
CAR, ENGINE AND TRUCK WHEELS,

MANUFACTURERS AND PROPRIETORS OF
MOORE'S PATENT

TRIPLE PLATE CAR WHEEL.

CHILLED LOCOMOTIVE TIRES,
Made from the best Charcoal Cold Blast Iron.

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BUSH & LOBDELL,
WILMINGTON, DELAWARE,

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES, FOR RAILROAD CARS

AND

**Locomotive Engines,
ARE PREPARED TO EXECUTE PROMPTLY
ORDERS TO ANY EXTENT FOR THEIR
CELEBRATED WHEELS,**

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTED

To HAMMERED or ROLLED AXLES,
IN THE BEST MANNER, AT THE SHORTEST NOTICE,
AND ON THE MOST REASONABLE TERMS.

A. WHITNEY & SONS CAR WHEEL WORKS,

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FURNISH

CHILLED WHEELS,

FOR CARS, TRUCKS, and TENDERS.

CHILLED

Driving Wheels and Tires.

FOR LOCOMOTIVES.

ROLLED AND HAMMERED AXLES

WHEELS and AXLES,

FITTED COMPLETE.

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RECEIVER AND FORWARDER OF
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Also Cars, Locomotives,
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JAS. T. SOUTER, Esq., Pres't B'k Republic, } New York City
American Exchange Bank,
Banks and Bankers, Richmond and Lynchburg, Va.

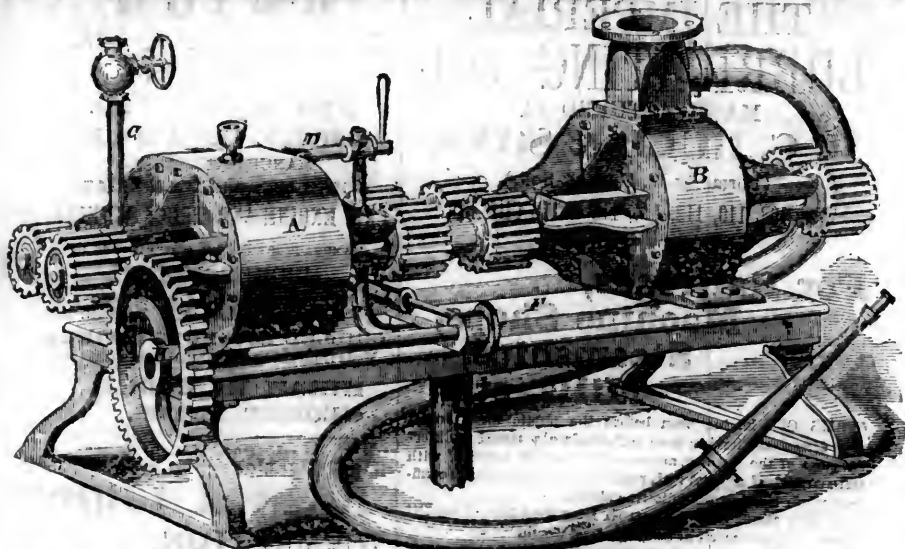
DUNCAN, SHERMAN & CO.,
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CIRCULAR NOTES AND LETTERS OF CREDIT,
FOR TRAVELERS,
AVAILABLE IN ALL THE PRINCIPAL CITIES OF THE WORLD.
ALSO, MERCANTILE CREDITS,
For use in EUROPE, CHINA, etc.

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BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)
STOCKS and BONDS Bought and Sold on Commission.
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH,
New York, May 11, 1858.

CHAS. A. FISHER,
Late of the firm of FISHER, DENNY & CO.,
No. 18 Exchange Place.
STOCKS and Bonds bought and sold on commission. Loan
negotiated.

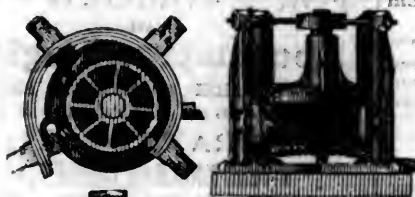
RAILROAD STEAM PUMPS.



HOLLY'S PATENT ROTARY PUMP and ENGINE, the most simple, durable and reliable
PUMPING APPARATUS, yet introduced. Adapted for Steam Fire Engines, Railroad Stations and Factories, and arranged
to be driven by Steam, by Power or by Hand.

C. W. COPELAND, 122 Broadway, New York.

HENRY BURDEN'S PATENT REVOLVING SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this
Machine for the United States, now offers to make transfers
of the Right to run said Machine, or sell to those who may be
desirous to purchase the Right for one or more of the States.
This machine is now in successful operation in ten or twelve
iron Works in and about the vicinity of Pittsburg, also at
Phoenixville, and Reading, Pa. Covington Iron Works, Md.
Troy Rolling Mills, and Troy Iron and Nail Factory, Troy,
N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are num-
erous:
Considerable saving in first cost; saving in power; the entire
saving in shingler's, or hammerman's wages, as no attendance
whatever is necessary.

It being entirely self-acting; saving in time from the quan-
tity of work done, as one machine is capable of working the
iron from sixty puddling furnaces; saving of waste, as nothing
but the scoria is thrown off, and that most effectually; saving
of staffs, as none are used or required.

The time required to furnish a bloom being only about six
seconds, the scoria has no time to set, consequently is got rid
of much easier than when allowed to congeal, as under the
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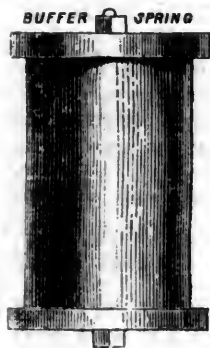
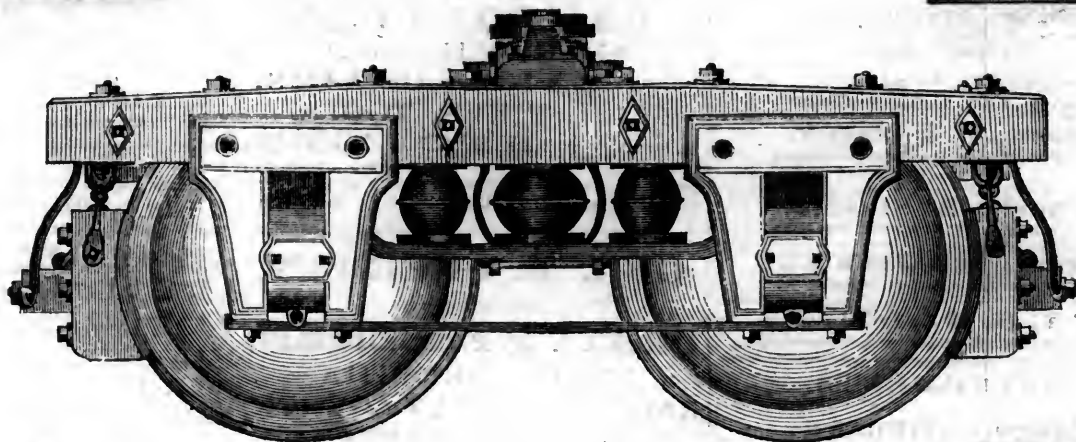
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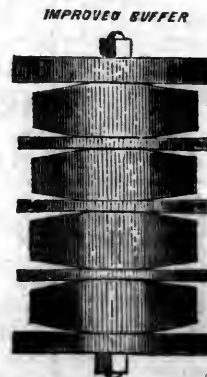
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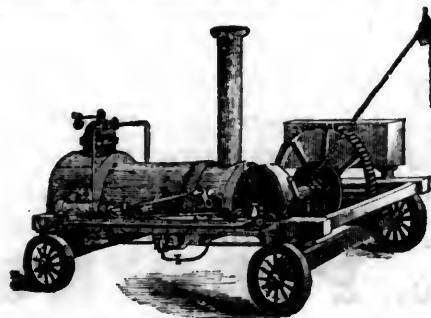
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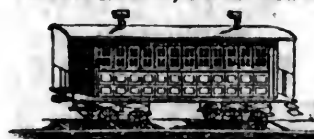
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ESTABLISHED IN 1831.

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[WHOLE No. 1,224, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, October 1, 1859.

The Gauge of Russian Railways.—The Arguments of Col. Whistler in Reference thereto.

We present herewith the Report of Col. Geo. W. WHISTLER, formerly engineer in chief of the St. Petersburg and Moscow railroad, in reference to the best gauge to be adopted for that great work. The matter was referred to him for a report, and he recommended a gauge of five feet. His report was not agreed to by the Commission of Russian Engineers to whom it was sent, who recommended instead, a gauge of six feet. Col. Whistler rejoined, and the result was the final adoption of his recommendation. We publish these reports for the first time. They are interesting as matters of history as well as for the arguments presented upon a question which has so long divided the engineering profession.

To His Excellency, the Count KLEIMICH, Aide-Camp General, etc., etc., etc.

ST. PETERSBURG, Sept. 9, 1842.

As it is important that the question of width, or gauge of track, and the form and weight of the iron rails to be used on the St. Petersburg and Moscow railroad, should be determined as soon as possible, I beg leave to submit the following remarks and recommendations.

The gauge of the track of almost all the railroads in Europe and America, with some few exceptions, is uniform, and 4 feet 8½ inches; and however arbitrarily these particular dimensions may have been fixed upon originally, experience, I believe, has shown no sufficient cause for any material change. Having been adopted on the earliest roads in England, its precise dimension continued from the necessary connections in the extension of the system, and I believe the question of altering it, was not made until a very material increase in width was adopted in the construction of the Great Western railroad in that country; since when it has frequently been the subject of investigation and discussion. All have agreed the original gauge of 4 feet 8½ inches is narrow enough; the question has therefore been confined entirely to an increase, and the advantage to be derived from this increase is generally stated to be an increased speed beyond that heretofore acquired on roads of the ordinary gauge; and this is to be attained:

1st. By the mechanical advantages or diminution of friction, by increasing the diameter of the wheels which may be done.

2d. Greater stability to the carriages on the track, and consequently greater steadiness of motion, and

3d. By increased facilities for the adoption of large and more powerful engines, necessary for the anticipated increased speed.

In relation to this anticipated increased speed, the experiments instituted to aid in the investigation of this question, and reported upon by Mr. Nicholas Wood, an eminent English Engineer, clearly show, that any such extraordinary speed is acquired only by a very great sacrifice of power; and it seems to me, there can be little doubt, that the rapid increase of resistance with the increase of speed must lead to the conclusion, that it is not advisable to attempt an extreme rate of speed, and in my opinion 30 to 35 miles an hour may be considered as the limit of practical speed for passenger trains, with due consideration to economy, and a proper accommodation of the public.

This rate of speed is attained on the roads of the ordinary gauge with the same facility as on

those of wider gauge, and may be increased if thought advisable.

In reference to the mechanical advantage to be obtained by increasing the diameter of the carriage wheels, it is true there will be a diminution of friction with the increase of the diameter of the wheels, but I have no reason to believe that raising the body of the carriage within the limits of a practical increase of the wheel, would effect the result; while on the other hand I do not think it would be advisable to increase beyond the ordinary practice for such a purpose, since the small advantage to be thus attained in the diminution of friction would be at the expense of heavier wheels and axles for equal strength; and in my opinion, increase of speed had better be acquired, if necessary, by an expenditure of power as a greater means of security against accidents; for large wheels cannot be made as strong as small ones.

In relation to the greater stability of the carriages on the wider gauge, and consequent increased steadiness of motion, this is so dependent upon the construction of the carriages themselves, and the manner in which they may be connected together in the trains, that I cannot see what effect the gauge, (within practical limits), can possibly have upon it. The experiments on this head have not shown any advantages of the wider, over the ordinary gauge.

In relation to the last mentioned advantage, viz, the facilities for adopting larger and more powerful engines, I can only say, the result of my own experience and the opinion of all the builders with whom I have conversed, tend to show that an increased width of gauge is not necessary to this end, since engines may be and have been constructed for roads of the ordinary gauge, of the maximum weight and consequent power due to the capacity, (strength,) of any rails now in use, and to increase the engine's power beyond this, would involve the necessity of an increase in the weight of the rail which I believe to be unnecessary in this case, as I have no doubt engines may be constructed for the ordinary gauge, of sufficient power to draw the maximum, practically, manageable trains.

The objections to a material increase in the gauge beyond that in general use, are:

1st. That the necessarily increased weight of the carriages, consequent upon increased length of axles, which must also be increased in diameter to preserve, equal strength, not only increases the cost, but the proportion of weight of cars to goods carried, which upon a road like that between St. Petersburg and Moscow, intended as it is for the transportation of large quantities of goods, should be avoided as much as possible.

2d. A material increase of gauge involves an increased cost in the formation of an increased width of road-bed, the precise amount of which I am not at present prepared to say, but it is evident that in a line of such extent as this, it must be very considerable.

These are the principal disadvantages of an increased gauge, as immediately applicable to the St. Petersburg and Moscow railroad, and I think it must be admitted that they are not met by any equivalent advantages; I would, therefore, recommend that 5 feet be adopted as the width or gauge of the track. I have adopted the additional three and a-half inches, because it is not necessary in this case to adhere to the precise dimension of 4 feet 8½ inches, for the purpose of connecting with other roads of that gauge, and because it is too small an increase to affect materially the important question of cost; and will be available for convenience in the construction of engines.

THE FORM AND WEIGHT OF IRON RAILS.

It will be unnecessary here to repeat all that has been said on the various forms and weights of rails. The question has always been one of great importance, and early became the subject of scientific investigation, from which the general form for maximum strength has been deduced, and confirmed by experience, and generally adopted with such modifications, as the peculiar mode of fastening seemed to require. This form for maximum strength is that given to what is usually called the T rail.

In the management of the exact form of the section of this rail, there are practical courses governing the distribution of the metal, in addition to the more important one of maximum strength; one of these is, that whatever the general form or weight of the rail, the "head," or upper bearing part, should have some certain dimensions and weight with reference to the wheels moving over it,—aside from its duty as a part of the rail for supporting the weight. Another is the peculiar form to be given to the bottom web, with reference to its steadiness in the chair, or the mode that may be adopted for its fastenings.

In England and in Europe generally, the rails are secured by means of cast iron chains, fastened to stone blocks or wooden sleepers at each bearing point, and, for this purpose, the bottom web is made not over 1½ to 2 inches wide, and rests in the chair secured by iron or wooden keys.

In America generally the rails rest on the stone block or wooden sleepers, without the intervention of cast iron chairs except at the end of each rail, where the better to secure the relative position of the end of the two rails, they are made to rest on a cast iron platform, the whole being secured to the sleepers by iron spikes. For this purpose the bottom web of the rail is extended in width sufficiently to give a firm bearing on the sleeper, without the aid of a chair, by which means the weight of the chair is applied to give strength to the

rail. The result of my own experience, and the opinion generally among engineers where this mode has been used, has led me to the conclusion that this form of rail called in America the H rail, and mode of fastening, gives at least equal, if not greater stability; greater simplicity and economy than any other. I would, therefore, recommend that this form be adopted. In relation to the weight of the rail as this is a question of strength, and has been the subject of direct experiment, it is dependent (within certain practical limits) upon the length of bearing or distance between the supports, and the weight upon any one pair of wheels to pass over it; the practical limits for the distance between the bearings, is assumed to be between three and five feet, and the question then is between the economy of an increased weight of iron in the rails for a long bearing, or an increased number of supports for the shorter, and I have decided as the case is similar to America, that the wooden sleepers will be cheaper than the iron rails, and as the weight upon any one pair of wheels to pass over the rails need not exceed eight tons, I would recommend that the weight of the rail be established at sixty pounds to the yard, to be supported at intervals of every three feet.

Which is respectfully submitted

By Your Excellency's

Most Ob't Serv't

G. W. W.

REPORT OF THE RUSSIAN COMMISSION ON THE MOST ADVANTAGEOUS WIDTH FOR THE ST. PETERSBURG & MOSCOW RAILROAD.

The determination of the most advantageous width, or inside measurement of space between the two rails, for the St. Petersburg and Moscow railroad forms a question of the greatest importance, not only for this particular line, but for all Russia; for in the course of time there will doubtless be many other railroads converging towards Moscow, to which it will be necessary to give, for the sake of continuity, the same dimensions, so that whatever width be adopted for the Moscow railroad, will become in a manner the model for all the rest of the empire.

This question deserves also a peculiarly careful investigation, inasmuch as it has not been hitherto maturely considered owing to the rapid development of this mode of conveyance within little more than ten years.

In the first railways in England, the tram roads of the mining and coal districts, were taken as models, their gauge being 4 feet 8½ inches. These dimensions, owing to the novelty of the operations and the rapidity with which the rail roads were constructed, were inconsiderately adopted, and passed from one to another, until they became so general, that for the preservation of uniformity, they were made compulsory by an especial act of Parliament. Soon, however, experience proved the inconvenience of this limitation; and in the year 1836, the act was repealed and the width of the lines left to the discretion of the constructors. But by this time a great part of the principal chain of roads in the centre of England, was already constructed, and all the branches which were subsequently connected with these lines, were compelled of necessity to adopt the same dimensions; on the other hand, where the constructors were not tied down to this peculiar

measure, they adopted a greater width of gauge. On the Eastern Counties line, 5 feet were adopted. On several of the Scottish roads, 5½ feet; in Ireland 6 feet and 2 inches; and on the road from London to Bristol and Exeter, 7 feet.

In Belgium and those parts of Germany where railroads were early introduced, the English dimensions of 4 feet 8½ inches, were by imitation adopted, and thus was introduced the necessity of adhering for the sake of uniformity to this inadequate width; but when the construction of railroads was introduced later, a wider gauge was chosen, as for instance by the governments of Baden and Darmstadt, which adopted 5 feet 3 inches English measure.

The above examples are sufficient to show by experience, that there was an inclination to widen the lines, and if this widening of the lines had not been universally adopted, it may be attributed to the desire of the constructors, particularly those acting for private companies, to diminish the original cost, even at the expense of future utility. On the contrary, where the projectors were unshackled, they have chosen the wider dimensions. The best example of this, is the report of the committee appointed by the English government to suggest a chain of railroads in Ireland. The members having executed their task with the greatest care and precision, declare, among other matters in their report to the Queen, that having collected the opinions of the most celebrated Engineers, and given them the most mature consideration, they had come to the conclusion that the most advantageous width for a railroad was 6 feet 2 inches.

This dimension is nearly the same as that recommended in the latest theory of the construction of railroads as taught in the London University, by one of the most celebrated English Engineers in this department, Professor Vignoles; and in the works of the celebrated Tredgold, who several years ago advised the adoption of a six foot gauge on roads where rapid conveyance was necessary. It is somewhat remarkable, however, that the advice of Tredgold, a man highly respected by the Engineers of England, should have remained unnoticed. The reason of this neglect may be the above-mentioned circumstance of the rapid spread of railroads, which left the engineers scarcely time to construct, and no leisure to investigate how far the originally chosen width was adapted to the new and continually improving application of steam to the purposes of locomotion. Thus, for the most part, in the prospects of railroads executed up to the present time, but little attention was bestowed on the subject of width; and in general, the original dimension of 4 feet 8½ inches was considered sufficient until the manufacturers of locomotives began to urge the necessity of a wider space, and in some few instances, as it were in compliance with their wishes, a small deviation from the established limits, was made by extending the width to 5 feet; and yet the following reasons may be urged why a preference may be given to a line 6 feet in width instead of 5 feet.

1st. The extension of the road one foot in width, without incurring danger, allows the diameter of the wheels to be enlarged, thereby lessening the friction, and resistance in the same

proportion; for on railroads, all other circumstances being equal, this resistance decreases in the reverse ratio of the increase of the diameter of the wheels. Thus, for example, if one and the same wagon be attached first with wheels, 2 feet and a-half in diameter, and then with wheels, 3 feet in diameter; in the former instance it will be propelled by 1.5th greater force than is necessary in the latter.

2d. With the extension of the road in width, the size of the wagons is proportionally enlarged, thereby affording greater convenience for placing the luggage, and the conveyance of a greater quantity of goods in proportion to the dead weight of the empty wagons.

3d. By extending the road to 6 feet, the steadiness of the wagons and locomotives is sensibly increased; and in the same proportion, the undulatory motion, alike destructive of the road and equipages diminished, causing a saving in the expense of repairs, and removal; and what is still more important, a great increase of security—for up to the present time there has not been a single instance of the wheels getting off the track on the Poolosky 6 feet road, while accidents of this nature are by no means of unfrequent occurrence on narrower lines.

4th. The unavoidably frequent derangement of the upper surface of the embankment from the rapid changes of the atmosphere in spring and autumn, will sometimes cause the rails to diverge from their true horizontal position, but on a wider line the divergence will be less sensibly felt.

5th. The extension of the road one foot in width will afford increased room for the mechanism of the locomotive, allow it to be kept in a better state, and the more important parts thereof to be enlarged, thereby attaining increased force and diminished expenditure. Thus, for instance, the enlarged dimensions of the boiler, and the greater surface exposed to the heat, will furnish according to the calculations of railway engineers, a saving of 13 per cent. in the fuel of the engine, on a line 6 feet wide over a line 5 feet in width; and this alone would form for the Moscow railroad according to the proposed estimate, an item of 75,000 Roubles silver, annually, being equivalent to a capital of a million and a-half of Rouble silver.

6th. And finally. In addition to the above enumerated advantages which a 6 feet line has over one only 5 feet in width, we must take into consideration the prospect of its simplicity at a future period, wherein it is impossible not to foresee a great improvement, when we consider that scarce 13 years have passed since the first application of steam as a means of locomotion on land, and that the power and utility of these machines have during this time increased tenfold. Such augmentation of power is the more important for the Moscow road on account of its great extent, the desideratum being cheap, as it secures rapidity, and the application, without loss, of the moving force, to the conveyance of the great mass of goods that may be expected to be transported from one Capital to the other.

Having thus stated the advantages of a 6 feet line over one only 5 feet in width, we will now examine into the disadvantages inseparable from such enlargement. For the Moscow railroad they are confined to the following—the increased diffi-

culty of clearing away the snow, and the additional expenditure of construction. The mass of snow to be cleared away during the winter journeys, will certainly be a whole foot wider for each of the tracks, but this difficulty can only be sensibly felt on occasions of snow storms which seldom occur; but which as the engines will be larger and more powerful on the 6 feet line; so the proportionate increase of labor cannot present any great difficulty; and in every case this cannot be considered as an essential objection. We pass therefore to the second objection: the increase of the original cost of construction attendant on a wider line. But here also the difference is less than might be expected. A separately subjoined calculation, in which the most liberal allowance is intentionally made, shows that the difference between the cost of construction of a 5 feet, and a 6 feet line, would amount to one million one hundred thousand roubles silver, or less than three per cent. on the whole amount of the sum calculated as necessary for the construction of the railroad to Moscow, and this difference would be made up by the annual savings to be effected as above stated, and of which, the article of fuel alone, would be equivalent to a capital of 1,500,000 roubles silver.

Regarding the St. Petersburg and Moscow railroad with all the interest and circumspection that so great an undertaking of the State demands, can we allow the adoption of a 5 feet line, which would incur not only the sacrifice of various present advantages, and in some measure, also of security; but even shackle the future extension and spread of such roads, and all this only for the sake of a temporary saving, that may be more than compensated by the future annual economy?

The majority of the Commission cannot, therefore, acknowledge the propriety of this, but, on the other hand, considering that the line of 7 feet width, introduced in one of the principal railroads in England, (The Great Western,) has proved too wide, while a width of six feet has been shown by experience, both here and in foreign countries, to be perfectly satisfactory.

It is, therefore, proposed for the St. Petersburg and Moscow Railroad, 6 feet English or Russian measure, should be adopted as the width or distance between one rail and the other.

Signed { General DESTREM,
" GODMAN,
" TCHIFFKIN,
" RAKASOFFSKY,
" DAVATHAN,
Count BOBLINSKY,
Director FISCHER,
Colonel KRAFFT.

Col. MILNIKOFF, of the Commission, did not sign.
COUNTER REPORT OF COL. WHISTLER.

To His Excellency, the Count KLEIONMICHEL, Aide-de-Camp General, &c., &c., &c.

ST. PETERSBURG, Oct. 31st, 1842.

I have read with much care and attention, the paper "On the Most Advantageous Width of the St. Petersburg and Moscow Railroad," submitted by the majority of the Technical Commission at their meeting of the 10th inst., and am constrained to acknowledge my inability to comprehend and appreciate, as they do, the advantages of six feet over five for the width of gauge. I have felt a desire to agree in opinion with the majority of the Commission on this question, for I must naturally doubt the correctness of my own judgment

when differing with so many gentlemen of high-standing and professional reputation, but I have sought in vain for the conviction that I am wrong.

I agree entirely with the majority of the Commission that the determination of the most advantageous width of the St. Petersburg and Moscow railroad forms a question of the greatest importance, and I should feel the responsibility of differing with these gentlemen very great if my opinion were to have weight, were it not that I do not believe the decision of this question, limited as it now seems to be, to a choice between five and six feet, involves so seriously the utility and ultimate interests of this road and the railroad system in Russia. In other words, while I admit the importance of the most advantageous width, I cannot attach such serious consequences to the choice between five and six feet as they do; for while I remain firm in the belief that five feet will answer every possible purpose for which the railroad can be desired, I know of no other material disadvantage that can arise from the adoption of six feet, than the extra costs attending it. These extra costs, however, I fully believe to be unnecessary, not only as effects this road, but as far as this road may become the standard for others, is an unnecessary cost entailed upon all others to be constructed hereafter.

After stating the great importance of this subject, the paper proceeds to say: "This question deserves a peculiarly careful investigation, inasmuch as it has not heretofore been maturely considered, owing to the sudden impulse given to the development of this mode of conveyance within little more than ten years." Yet it would seem to me that one of the strongest reasons operating upon the minds of the Commission in favor of the six foot track, is a belief that there exists at present, as the result of investigation and experience, the width of track elsewhere, citing, as instances, the report on the investigation of the Irish Railroad Committee, as recommending six feet two inches; the "Eastern Counties" Railroad as having adopted, (what I recommend here,) five feet; some Scotch railroads, 5 feet 6 inches; the Great Western Railroad, 7 feet; and the railways of Baden and Darmstadt, 5 feet 3 inches; and attributing the adherence to the narrow gauge, to the desire of the constructors, especially those acting for private companies, to diminish the original cost, even at the expense of future utility; and again that the adhering to the original width of 4 feet 8½ inches to so great an extent, may be attributed to the want of leisure on the part of the Engineers to investigate this subject.

Now it would seem to me that the well known liberal expenditures in the first cost of about all the railroads in England, even to the luxury of architectural display, could hardly justify the conclusion, that a desire to curtail the first cost would lead to the adoption of a narrow track at the expense of future utility. Nor can I believe it possible that the want of leisure on the part of the Engineers to investigate this question, can be a reason for their adhering so generally to the original gauge.

(To be continued.)

Illinois Central Railroad.—Land Department.

The receipts in the Land Department of the Illinois Central Company are increasing, \$46,000 up to the 26th against \$29,847 64 for August.

New York and Erie Railroad.

To the Editor of the AM. RAILROAD JOURNAL.

3 Threadneedle Street, E. C.
LONDON, 9th September, 1859. }

SIR:—As the representatives of a large amount of New York and Erie Railroad Bonds of every class, but more especially of the 3d and subsequent mortgages, and of each of the unsecured classes, we have anxiously and carefully examined a plan of re-organization, said to emanate from the Board, proposing in substance:

To keep all the five mortgages on foot.

To make a new capital stock from the unsecured bonds at 80, and from the existing shares at 20.

To levy 10 per cent. cash on the new stock—producing \$858,400.

To raise \$330,000 by subscription in coupons of 4th and 5th mortgage bonds.

As much as 12 months indulgence, if needed, is asked for payment of 1st September coupons, on the 3d mortgage bonds (\$210,000.)

These levies would raise \$858,400 in cash immediately, \$330,000 gradually out of the first year's revenue, and the temporary use of \$210,000 for a few months.

We beg leave very briefly to express our objections to parts of this plan:

1st. We object, and we venture to say that every unsecured bondholder whom we represent will object, to the wanton and useless reduction of their bonds from 100 cents to 80 cents on the dollar, in converting it into a new stock. If 80 for bonds and 20 for shares be the just proportion, let the bonds come in at par, and the shares at 25. The portion interest of each in the joint stock partnership will be precisely the same—unnecessary irritation of the bondholders will be avoided if their full nominal claims are recognized. The total capital in that footing will not be one cent more than the *bona fide* outlay and par value of the property; and, for our part, although we can see immense advantages in arranging for the permanent debt being as low as possible, we can see no advantage, nor have we ever heard the faintest suggestion of any, in cutting down the nominal value of the bonds, for the mere name of producing a small capital stock. If cutting down is a good thing in the abstract, if there is any charm or magic in it which will increase the amount of divisible earnings, pray let us know the reason why, and then we will consider it, and we will go for cutting down; but then we shall ask—Why do the thing so faint-heartedly, why not cut down to 8 for bonds and 2 for shares, (or to 4 and 1,) instead of 80 and 20? Meanwhile, till some reason for be suggested, we beg leave strongly to protest against the reduction of the nominal value of the bonds. You may say, if the substance is the same, "What's in a name?" We reply there may be a good deal in it when the name of the substance in one light is *honor*, and in the other *reputation*, it concerns all parties to choose the former.

2d. We object to have the work done in a milk and water fashion. Let us have the arrears of mortgage coupons somehow at once disposed of, and punctual payment of interest on all the mortgages that continue on foot, (whether three, four, or five,) resumed immediately. If \$1,200,000 of cash be wanted, let it be levied at once in cash, (but we venture to think that Mr. Marsh will manage out of the revenue to reduce this want before

1st December.) A 10 per cent. levy will raise much more under our plan of converting the unsecured bonds at par instead of 80. There is no doubt that the bondholders and stockholders will consent to the conversion with promptitude and alacrity, if the plan be effective and complete at the commencement, for the clearer the start is, the sooner will there be a dividend, the more confidence will there be, and the better will be the price of all the securities of the company, from the highest to the lowest, and thereby the whole operation will be materially facilitated in every way.

3d. Inasmuch as all the claims for which money is required at present either take rank with, or priority over, the 4th mortgage bonds, (except a small sum for 5th mortgage coupons,) it will be nothing less than simple justice that the new money raised shall receive either 4th mortgage bonds at par, or whatever else the 4th mortgage bonds generally may (if at all) be turned into. It is repeatedly stated that about \$3,600,000 only of 4th mortgage bonds are issued, but in fact \$1,500,000 beyond that amount are issued by deposit, with power of sale, and but for the present movement, some or all of them might be forced to sale.

We very much fear, from the avowed prejudices of the 4th and 5th mortgage bondholders, and from the slow advance as yet made in the United States in the art of sound railway finance, that they (or at least the 4th) will insist on retaining their old or receiving a new mortgage security. If this were (beyond dispute) to their advantage, we should not suggest a word against it; but we have a lively appreciation of the excellent financial position the company would occupy. If the debt could be permanently reduced to \$13,000,000 (as far as liability to *repay capital* is concerned,) by the 4th and 5th mortgagees consenting to take Preference stock for their bonds, or even perpetual annuities, with a right to a Receiver in case of arrears, but no power of an absolute foreclosure. We only commend this with the understanding that they shall be secured that no encumbrance beyond the \$13,000,000 shall ever take precedence over them without their own consent, and from the conviction that the immensely better financial position of the company in that case, would make their Preference stock or perpetual annuities command a better price than a low sounding and low ranking 4th and 5th mortgage bond, and would encourage the stockholders at all times, good or bad, to keep the road and property in good order, and to spend their means liberally upon, as all reasonable fear of foreclosure would be forever extinguished. We are, sir,

Your obt. serv'ts,

HESELTINE & POWELL.

In this connection, we copy the following article furnished by Mr. Powell to the *London Railway Times*:

To the Editor of the *London Railway Times*.

SIR:—I am glad you so clearly reported that the scheme which I propounded at the meeting on the 26th August, was only my own individual suggestion, and that the gentlemen who form the Committee are in no way committed to it, nor to any other scheme of re-organization; indeed, I feel at full liberty myself to modify it, or adopt another, without being chargeable with inconsistency.

I do not suppose, however, that I am likely to depart from the fundamental principles on which I framed that scheme, viz—1st. That the relative

positions of the different classes of bondholders shall be regarded and preserved as far as can be done consistently with good practical working of the new scheme, whatever it may be. 2d. That no sponge shall be applied to any part of the company's debt. And 3d. That the scheme shall be as simple as possible, based on the existing relations of all parties concerned, and not a baphazard, wanton, unreasoning cutting down of various classes of bonds and shares into a new capital stock, for the useless purpose of producing an appearance of small capital.

With regard to the conversion of fourth mortgage bonds into a new Preference capital (secured by some means from having anything but the 1st, 2d, and 3d, put over its head without its own consent), I have nothing to urge in its favor but the strong reasons of financial soundness. I believe most sincerely, that when the financial framework of a company is sound and prudent, all the securities are the more esteemed by it; and that if the new scheme could be finally settled, so that a Preference share capital of five or six million dollars stand between the common shares and \$13,000,000 of debt (in the English fashion), that Preference capital will command a better price and be more esteemed than a parcel of low ranking and low sounding mortgage bonds would, if such should be decided on rather than Preference shares.

It is, however, a question which must be settled by the majority of the 4th mortgage bondholders; if they require that in the intended new combination, and its consequent purchase of the road under foreclosure by the machinery of their 4th mortgage, their bonds must be represented by a new set of bonds and mortgage, equivalent in position and priority to their present mortgage, there can be no doubt their wishes will be acceded to. I have no wish to take away one cent of their real advantages. The charge on the revenue will just be the same, and there can, at least, be no objection to such new mortgage being a long-dated one, so as to allow its gradual extinction by a sinking fund when the new company shall be in a position to command one for that special purpose. The figures and results will remain the same; and, with your permission, I will again state the outline of my scheme in a tabular form:

Annual Interest at 7 pr. ct.			
Mortgages	\$13,000,000	\$910,000	
<i>Preferred Stock:</i>			
To be secured by a 4th mortgage, if necessary.			
From			
4th mortg'es.	\$3,600,000		
5th "	1,000,000		
10 pr. ct. subsc'pt'n by unsec'd bondholders and sh'r'h'd'rs on	\$10,000,000		
new share capital	1,000,000		
10 pr. ct. subsc'pt. by 5th mort. bondholders	100,000—	5,700,000	399,000
<i>Common Stock:</i>			
Unsec'd bonds and arrears.	8,000,000		
30 per cent. on \$11,000,000, present Erie share capital*	3,300,000		
	\$11,000,000		
Recusants ...	1,300,000—	10,000,000	700,000
Total capital	\$23,700,000	2,009,000	
Being 40 p.ct. net rec't's on a gross take of \$5,022,500			
The average for 5 y'rs end'g Sept., 1858..			
		5,618,482	

* Each Erie share of 100 dollars will, on subscribing 3 dollars, receive 30 dollars in the new capital stock.

The year ending 30th September, 1856, yielded \$6,348,990. A contribution of 9 or 10 per cent. on the 5th mortgage bonds and new ordinary capital would be ample to raise the needful cash, if our information of the company's circumstances is correct, and I have no reason to doubt that it is so.

Yours, &c., T. W. POWELL.

Journal of Railroad Law.

ACTIONS ARISING OUT OF ACCIDENTS—BURDEN OF PROOF.

It is a well-grounded principle in law, that every man is *presumed* to be innocent until he has been *proved* to be guilty. A principle analogous to this, and founded upon the same broad reasons, has been recently established by the New York Court of Appeals. The principle alluded to is this: In a suit against a Railroad Company, arising out of an accident, or in a suit against any company or individual arising out of an accident, the plaintiff is to be deemed free from all negligence which might have contributed to the accident, and thus tended to free the defendant from liability, until the *proof shows* the plaintiff to have, in some degree, been negligent. If, however, there is *any* proof tending to show that the plaintiff was negligent, then the plaintiff is obliged to show by *further* proof that he was exercising reasonable caution at the time of the accident, and that there was no negligence on his part.

Whenever there is a conflict of testimony the balance must be in favor of the plaintiff, to entitle him to recovery. In such cases the *onus* is cast upon the plaintiff, and he must show himself free from *all* blame.

In the night of November, 1853, at 11 o'clock, the husband of Margaret Button met his death by being run over by the cars of the Hudson River Railroad. He had been drinking at one or more dram shops during the evening, and was probably in a state of intoxication, as five minutes before the accident occurred, he left a drinking saloon in West street, where he was known to have been indulging in liquors. The accident occurred in West street, near this saloon, and when found, his body was lying straight across the track, the head upon one rail, and the legs across the other.

The driver of the car which ran over Button, testified that he was driving at the rate of four miles an hour; that he could see the leading horses, and could have seen a man if *standing* upon the track; that at the place where the accident took place, the leading horses suddenly jumped sideways from the track, and seeing something upon the track the driver applied the brakes, but before he could arrest the car, it had passed over the deceased. There was other evidence tending to show that the car was driven at a higher speed than four miles an hour.

Here certainly was evidence to show some negligence upon the part of Button, the intestate. In reference to it, Judge Strong, upon the appeal, said:

"The point presents the question, Upon whom was the burden of proof in reference to negligence of the intestate conducing to the injury—whether it belonged to the plaintiff to prove affirmatively the presence of such negligence.

"In regard to all the circumstances essential to the cause of action, the plaintiff held and was required to sustain the affirmative. Among those circumstances were, that the defendants were negligent, and that the injury resulted from that neg-

ligence. If the intestate was negligent, and his negligence concurred with that of the defendants in producing the injury, the plaintiff had no cause of action. The reason why no right of action would exist is, that both the intestate and the defendants being guilty of negligence, they were the common authors of what immediately flowed from it, and it was not a consequence of the negligence of either.

"The Court cannot accurately, and will not undertake to, discriminate between them as to the extent of the negligence of each, and the share of the result produced by each; neither, therefore, could alledge against the other any wrong, and without a wrong there can be no legal injury.

"In this view, *the exercise of due care by the intestate, (Button,) was an element of the cause of action, without proof of it, it would not appear that the negligence of the defendants caused the injury.*"

After citing cases bearing upon the point, the Judge continued:

"It must not be understood that it was incumbent on the plaintiff, *in the first instance*, to give evidence for the direct and special object of establishing the observance of due care by the intestate; it would be enough if the proof introduced, of the negligence of the defendants, and the circumstances of the injury, *prima facie*, established, that the injury was occasioned by the negligence of the defendants; as such evidence would exclude the idea of a want of due care by the intestate aiding to the result.

"Ordinarily, in similar actions, when there has been no fault on the part of the plaintiff, it will sufficiently appear in showing the fault of the defendant, and that it was a cause of the injury; and when it does so, no further evidence on the subject is necessary. The fact must appear in some way, but in what particular mode is unimportant. The evidence of it may be direct and positive, or only circumstantial. Whatever the nature of the evidence, if there is any conflict as to the fact, there must be a preponderance of proof in support of it, or the action must fail.

"In cases like the present, it is often of great practical importance, that the jury be properly instructed as to the burden of proof, in respect to the care required of the plaintiff to entitle him to recover. The party holding it must do more than make a balanced case on that point. The scales must ultimately turn in his favor."

"We can hardly conceive of a case, arising out of an accident of the nature, we are discussing, in which the proof, which the plaintiff would be obliged to produce upon the trial, in order to show the *negligence of the defendant*, would not also tend to show negligence upon the part of the plaintiff, if *in fact* the plaintiff was in the least negligent.

"But supposing such a case to arise, it might be a difficult question, which party to the suit would be obliged to first introduce affirmative evidence. We, however, incline to the opinion that in the absence of *all* proof tending to show negligence on the part of the plaintiff; the burden of proving such negligence would be, with the defendants.

"In this opinion we are confirmed, by a note we find appended to the report of this case in which it is stated that Judge Selden objected to an im-

plication, which he conceived to lurk in the opinion of Judge Strong, *but which Judge Strong disclaimed*, that, in the absence of proof of any circumstances imparting negligence on the part of the plaintiff, there might be a presumption thereof which he is required to repel; whereas his negligence must be *inferred from evidence*, and is not to be presumed."

Locomotive Department of the Chicago, Burlington and Quincy Railroad.

The result of the operations of this department for the month of July was as follows:

No. of Engines.....	60
Miles run by Passenger trains.....	21,938
" " Freight " 	21,580
" " Other " 	21,297
Total miles run.....	67,815
Cords of wood consumed.....	821
Tons of coal consumed.....	749
Pints of oil used.....	3,399
Pounds of waste used.....	2,674
" tallow " 	994
Paid labor for repairs.....	\$4,870
" for material for repairs.....	5,350
C't of oil, waste and tallow, pr. mile run.....	.83
" fuel " " " 	7.91
" repairs " " " 	15.07
Paid wages of enginemen and firemen.....	7.47
Total cost per mile run.....	30.28
Miles run to pint of oil.....	15.57
" " cord of wood.....	53.03
" " ton of coal.....	38.06
No. of miles run by wood-burners.....	29,288
" " " coal-burners.....	28,527
Cords wood consumed by wood-burners.....	740 3/4
" " " coal-b'ners to fire up.....	81
Tons of coal " " coal-burners.....	749 3/4
Av. cost per mile for engineers, firemen and wipers.....	6.47
Do. fuel for wood-burners.....	11.03
Do. fuel for pass'g'r trains, wood-burn's.....	7.39
Do. " freight " " 	14.34
Do. " " " coal-burn's.....	7.77

Wood is rated at \$1.25 per cord. Coal is rated at \$2.50 per ton on tenders.

One pound tallow is rated as one pint oil. Oil in lanterns and headlights is included in the above.

Rebuilding, superintending, teaming, and all expenditures for repairs, are included in cost of repairs.

C. F. JAUBERT, M. M.

Boston and Worcester Railroad--Railway Economy.

We give on the following page the results of the operations of this road for a period of 10 years, ending Nov. 30, 1858. During this period, nearly the entire superstructure and rolling stock of the road must have been renewed. As the road has not in the meantime increased its construction account, and has been well maintained, the results form a valuable and instructive addition to the science of railway economy. The road has a very large traffic, and the cost of maintaining it, is equal to that of any railroad in the country of equal length, or the mileage of its trains. It is very probable that the road might have been operated with greater economy; but it is certain that the ratio of its *net* to gross earnings should not in any of our leading roads be less than in this.

One of the most favorable features of the exhibit, is the uniformity of the results year by year. The road has earned and paid dividends regularly since it was opened, some 25 years ago, and has now a value that can safely be calculated upon.

We propose, weekly, to give similar tables, till we have embodied in a convenient and intelligent form the results of the operations of all our leading lines.

Boston and Worcester Railroad.

Statement showing the operations of the Boston and Worcester Railroad for the 10 years ending November 30, 1868.

1. TABLE showing the cost of construction and equipments, earnings, etc.

Years.	Cost of r'd and equip-ment.	Main.	Branch.	2d track & sid'gs.	Equiv. in single track.	Paid-up capital.	Funded debt.	Floating debt.	Miles of r'd op'r'd, in-clus. road leased.	Total miles run by lo-com. with trains.	Number of pass-engers.	Tons of freight.	Pass'ger traffic.	Freight traffic.	Tot., incl. mails, etc.	Repairs & operating expenses.	Net earn'gs or rec'pts over ex-pendit's.	Dividends on stock.
1849.....	\$1,908,332	44.7	24.0	57.5	126.2	\$4,600,000	.....	\$679,582	68.7	460,988	17,144,367	9,461,055	\$330,006	\$331,338	\$703,361	\$105,553	\$297,808	\$270,000
1850.....	4,882,618	44.7	24.0	58.0	126.7	4,600,000	\$375,000	208,659	68.7	430,199	19,551,021	9,663,386	337,249	330,781	749,526	377,041	372,485	292,500
1851.....	4,862,748	44.7	24.0	58.0	126.7	4,600,000	425,000	135,657	68.7	468,623	20,236,684	9,065,119	408,362	318,993	743,922	398,687	350,235	315,000
1852.....	4,815,967	44.7	24.0	58.7	127.4	4,600,000	425,000	115,916	68.7	478,819	20,759,387	9,727,640	424,713	314,913	758,819	403,740	349,099	315,000
1853.....	4,850,754	44.7	24.0	58.7	127.4	4,600,000	425,000	165,511	77.3	518,680	24,700,512	11,577,498	481,222	382,558	887,219	453,528	431,697	315,000
1854.....	4,856,371	44.7	24.0	58.7	127.4	4,600,000	425,000	165,511	77.3	518,680	24,700,512	11,577,498	481,222	382,558	887,219	453,528	431,697	315,000
1855.....	4,865,439	44.7	24.0	59.2	127.9	4,500,000	500,000	165,498	77.3	511,528	25,736,826	12,067,532	512,764	405,498	952,895	594,528	594,528	292,500
1856.....	4,865,410	44.7	24.0	59.2	127.9	4,500,000	500,000	165,498	77.3	511,528	25,736,826	12,067,532	512,764	405,498	952,895	594,528	594,528	292,500
1857.....	4,848,779	44.7	24.0	59.2	127.9	4,500,000	500,000	114,514	92.3	566,464	25,200,287	12,406,670	566,125	509,225	1,108,782	684,042	424,740	315,000
1858.....	4,689,098	44.7	24.0	59.2	127.9	4,500,000	600,000	60,774	92.3	531,882	23,296,855	10,605,506	504,268	438,102	1,019,148	824,067	395,081	270,000
Average.	4,846,051	44.7	24.0	58.6	127.3	4,500,000	407,500	189,359	78.3	504,914	22,806,836	10,690,551	469,683	386,197	885,490	509,354	376,135	294,750

2. TABLE showing the cost of repairing and operating the road, rolling stock, etc.

Years.	Repairs of road, bridges, fences, etc.	Renewal of iron.	Wages of switch, etc., signal and watchmen.	Total cost, includ. in-cidentals.	Engines & tenders.	Passenger cars.	Freight cars.	Total, incl. gravel cars.	Coal and wood.	Oil.	Waste, etc.	Salaries & wages, pass. depart'm't.	Salaries & wages, fr't depart'm't.	Total cost of operat-ing.	Office ex-penses & offic'l sal-aries.	Gratuities & damag's.	Taxes and insurance.	Tot. cost & charges.	Grand total cost of re-pairs and operating.
1849.....	\$1,365	\$19,529	\$8,722	\$39,794	\$37,523	\$11,178	\$21,063	\$72,298	\$86,319	\$10,768	\$519	\$47,038	\$64,021	\$208,665	\$22,486	\$4,086	\$6,222	\$34,794	\$405,558
1850.....	67,133	.....	9,907	77,922	37,281	8,096	17,649	63,409	79,840	10,885	445	47,427	63,690	202,238	20,461	4,708	8,612	33,772	\$377,041
1851.....	48,772	12,389	10,332	73,098	42,053	14,388	18,611	75,694	80,062	9,736	612	46,441	63,157	198,998	24,627	12,694	8,576	45,897	398,687
1852.....	59,930	20,421	10,965	91,383	42,712	11,861	16,210	75,386	89,892	10,415	797	47,106	64,802	212,948	22,216	4,762	7,043	34,021	409,740
1853.....	61,967	30,127	11,555	103,651	35,804	12,422	22,100	71,133	95,958	10,608	753	52,118	75,329	234,856	22,447	6,205	8,836	44,488	455,528
1854.....	71,187	32,849	12,223	116,859	48,246	12,422	20,053	81,122	134,486	10,181	884	59,389	109,128	314,063	22,375	5,993	10,414	42,483	504,528
1855.....	72,641	39,204	12,290	124,135	49,670	24,133	22,081	96,673	151,476	10,341	966	62,698	106,060	331,562	30,749	10,566	9,567	51,172	603,543
1856.....	115,163	67,708	12,324	195,200	54,458	16,671	17,051	88,422	131,822	11,356	903	74,087	119,919	337,677	42,613	8,527	11,603	62,748	684,042
1857.....	101,648	47,982	11,382	161,012	48,230	16,132	18,299	84,842	112,165	11,473	1,028	81,271	107,609	313,565	40,595	10,477	13,575	64,647	624,067
1858.....	79,278	37,340	10,482	127,100	49,799	12,040	18,369	81,762	105,522	10,452	1,355	63,412	91,905	272,646	39,315	12,554	12,138	64,307	545,815
Average.	739,389	348,090	110,182	1,201,264	445,776	138,593	191,486	786,741	1,066,992	106,245	8,372	579,987	865,620	2,637,219	29,487	84,572	98,876	478,324	5,093,544
	73,938	34,809	11,018	120,125	44,577	13,859	19,148	78,674	106,699	10,624	837	57,998	86,562	262,721	29,487	84,572	98,876	47,832	509,354

3. TABLE showing the cost (in cents) per mile run by locomotives with trains, reduced from Table No. 2.

1850.....	15.39	.....	2.27	19.48	8.14	2.42	4.57	15.68	18.72	2.33	0.11	10.20	13.88	45.26	4.88	0.88	1.78	7.54	87.97
1851.....	10.45	2.77	2.21	16.27	8.55	1.85	4.05	14.54	18.30	2.48	0.10	10.87	14.61	46.36	4.69	1.08	1.97	7.74	86.44
1852.....	12.45	4.26	2.29	19.08	8.92	2.47	3.99	16.22	17.16	2.08	0.13	9.74	13.64	42.65	5.28	2.72	1.84	9.84	84.39
1853.....	12.06	5.87	2.25	20.45	6.37	2.46	4.30	13.85	18.81	2.17	0.16	9.84	13.63	44.47	4.64	0.99	1.49	9.84	85.57
1854.....	13.01	13.20	2.21	28.42	8.74	4.25	3.63	14.70	24.37	1.84	0.16	10.14	14.66	45.71	5.71	1.21	1.70	8.66	88.69
1855.....	13.41	7.24	2.27	22.92	9.17	4.45	4.07	17.85	27.37	1.89	0.18	11.58	19.68	51.22	4.05	1.76	1.89	7.69	107.73
1856.....	20.33	11.95	2.18	34.46	9.61	2.77	3.01	16.61	22.18	2.00	0.17	13.08	21.17	59.61	5.68	1.95	1.82	9.45	111.45
1857.....	19.01	8.96	2.12	30.10	9.01	3.02	3.42	15.86	20.97	2.14	0.17	15.19	20.12	58.62	7.52	1.51	2.05	11.07	120.76
1858.....	15.90	7.49	2.12	25.51	9.97	2.39	3.68	16.41	21.17	2.09	0.27	12.73	18.44	54.71	7.89	2.58	2.43	12.90	104.53
Average..	14.53	6.59	2.18	23.39	8.81	2.71	3.81	15.56	20.93	2.11	0.16	11.41	16.93	51.55	57.93	16.64	1.95	94.08	999.20
															6.79	1.66	1.95	9.40	99.92

Years.	Total receipts p. mile run.	Tot. expenses p. mile run.	Total net re- c'pts p. mile run.	Ratio of ex- pendit's to tot. rec'pts.	Repairs of road, etc.	Repairs of roll'g stock.	Cost of operat'g.	Miscellan's expenses.	Years.	Cost of road and equip- ment.	Capital stock.	Funded debt.	Floating debt.	Total receipts per mile.	Total expen- ses per mile.	Net receipts per mile.
1849.....	152.68	87.07	64.61	57.00	22.14	17.82	51.45	8.67	1849.....	\$71,445	\$65,502	\$2,458	\$9,899	\$10,238	\$5,003	\$4,835
1850.....	151.83	86.44	65.39	50.31	20.57	16.83	53.64	8.95	1850.....	71,072	65,502	2,964	2,964	10,911	5,488	5,423
1851.....	159.46	84.39	75.07	53.99	18.67	19.22	50.64	11.67	1851.....	70,782	65,502	6,186	1,974	10,829	5,730	5,099
1852.....	159.47	85.57	72.90	53.99	22.29	17.43	51.97	11.67	1852.....	70,538	65,502	6,186	2,409	11,045	5,964	5,081
1853.....	170.80	88.69	82.11	61.92	23.06	16.62	51.54	9.76	1853.....	70,608	65,502	6,186	2,366	13,870	6,631	5,268
1854.....	172.67	107.73	64.94	62.88	21.39	13.04	52.82	7.14	1854.....	70,834	65,502	7,278	2,262	14,672	8,786	5,887
1855.....	186.14	111.45	74.69	61.63	20.56	16.01	54.92	8.48	1855.....	70,691	65,502	7,278	2,262	14,672	8,786	5,887
1856.....	193.74	120.75	74.99	61.63	28.54	12.92	49.35	9.16	1856.....	70,675	65,502	7,278	1,455	16,139	9,778	6,361
1857.....	190.53	116.67	73.86	61.23	25.79	13.99	50.24	10.35	1857.....	70,506	65,502	7,278	884	14,835	8,918	5,917
1858.....	185.27	109.53	75.74	59.12	23.39	14.97	49.94	11.79	1858.....	68,255	65,502	7,278	884	13,438	7,925	5,483
Average.....	174.31	99.92	74.43	57.12	23.12	15.80	51.64	9.42	Average.....	70,540	65,502	6,381	2,756	12,889	7,379	5,508

4. TABLE showing the receipts, etc., per mile run, and the ratio of specific expenses.

5. TABLE showing the cost, capital, receipts, expenditures, etc., per mile of road.

Cincinnati Stock Sales.		
By KIRK & CHEEVER.		
For the week ending September 27, 1859.		
BONDS	Per cent.	and int.
Little Miami, 1st Mort.	68	5
Covington and Lexington, 2d Mortgage	78	60
Cinc. Ham. and Dayton, 2d Mortgage	78	83 1/2
Indianap. & Cincinnati, do.	78	82 1/2
STOCKS.		
Cincinnati, Hamilton & Dayton	70	
Columbus and Xenia	85	
Indianapolis & Cincinnati	60	
Little Miami	87	

Railroad Earnings.

The traffic of the Great Western Railway of Canada for the week ending Sept. 16, 1859, was as follows:

Passengers	\$26,816 73
Freight and live stock	15,553 86
Mails and sundries	1,700 84
Total	\$44,071 44
Corresponding week of last year	45,855 41

Decrease	\$1,783 97
The receipts of the Grand Trunk Railway of Canada for the week ending Sept. 16,	
were	\$48,758 68
Week ending Sept. 11, 1858	41,753 80

Increase	\$7,004 88
Total traffic from July 1st	\$482,735 15
Same period last year	408,738 09

Increase	\$23,997 06
The receipts of the Virginia and Tennessee railroad company for the month of August, 1859, were:—	
Freight	\$27,675 03
Mail and passengers	50,398 74
Total	\$78,073 77

The receipts of the Grand Trunk Railway of Canada for the week ending Sept. 17,	
were	\$51,396 06
Week ending Sept. 18, 1858	41,132 17

Increase	\$10,263 89
Total traffic from July 1st	\$484,131 21
Same period last year	449,870 26
Increase	\$34,260 95

Dubuque Western Railroad Extension.

A contract has been substantially executed between the Directors of the Dubuque Western Railroad Company and Mr. Theodore Kraush of New York, for the extension of the Dubuque Western Railroad from Sand Spring to Anamosa, which, together with the fifteen miles already completed, will make a distance of thirty-one miles from Farley junction. The extension to Anamosa is to be completed by the 1st of April next; and to Laog-worth Station by the 18th of November next. The sub-contract for the construction of the road to the latter point, ten miles from Sand Spring, has been awarded to Messrs. Stewart and Mulconery, and they will put a large force at work on Monday of next week.

As an equivalent for the construction of the road, Mr. Kraush received the note of the Company for \$150,000, to be paid out of the net earnings of the road; 180 first mortgage bonds of \$1,000 each, together with \$6,000 Anamosa bonds. The contractor has also the right to redeem some \$160,000 bonds, pledged as collateral for about \$40,000. He equips and operates the road, and applies the earnings: 1st, to defray running expenses; 2d, to pay interest on construction bonds; 3d, to pay interest on farm mortgages; 4th, ten thousand dollars per annum to be set apart as a trust fund, to apply upon principal or interest of the bonds issued by the city to aid in the construction of the road. Any balance of net earnings to be divided among the shareholders.

This extension will make fifty-one additional miles of railroad tributary to Dubuque, that will be constructed by the 1st of December next. These lines of road, viz: the Dubuque and Pacific and the Dubuque Western, will then have penetrated to one of the most fertile valleys of the State, and the impetus which they will give to the business of this city, will be an important element in restoring our local prosperity.—*Dubuque Times*.

Terre Haute, Alton and St. Louis Railroad.

A meeting of the bondholders of the Terre Haute, Alton and St. Louis Railroad, was held in this city on the 21st inst., to hear the report of Mr. Griswold, the recently elected President of the company. The company, as is well known, has been in default in the interest on all its bonds for sometime past, and Mr. Griswold, at the meeting, proceeded to give some of the reasons therefor. He represented the road and rolling stock to be in a very bad condition.

To the operatives the company was largely indebted, and they were on the eve of revolt. Executions were hanging over the road, ready at any moment to be put on any property that might be found unincumbered. In consequence of this, the officers were at all times resorting to evasive expedients to avoid seizure. Wood was not sold until it was on the tender, and office furniture was held in the name of the officers, that the business might go on. Bridges, tracks, culverts, and cross-ties, were out of repair, with no stock in hand in repair. But a small fraction of the cars were in order for use, and the supply of water along the line was insufficient for running the trains. The treasury, too, was destitute, and large balances were due for tickets sold to other companies, with which they had connection. Moneys, too, were due for engines and cars which had been purchased on conditional sale, and which they were liable to have forfeited at any moment by reason of a non-compliance with the conditions in payment. In this exigency the President had secured means on his personal responsibility, and had paid such arrearages as were imperative, and had made such expenditures for repairs as were unavoidable. This he had been compelled to do, or else run away and abandon the trust. The indebtedness paid and the items purchased were specified in the statement. Still greater expenditures would have to be made to get the road in first-rate condition, and to do this it would be impossible that the company pay any interest on bonds for two years.

Various bondholders questioned Mr. Griswold on points of his statement with the view of eliciting further information. During this, a request was made that Mr. Murdock, late Treasurer of the company, give a statement of the financial condition of the company in June last. He confirmed Mr. Griswold's statements.

A series of resolutions were offered, directing the appointment of a Committee of eight, who, with the President of the meeting, were to investigate the affairs of the company, and report at an early day to a meeting of the bondholders, with suggestions for an equitable adjustment of the different interests in the road.

The following gentlemen were appointed on the Committee:

J. G. Richardson, Judge Radcliff, Rich. Irving, Mr. Hawley, Charles Butler, Wm. D. Thompson, S. J. Tilden, and L. N. Van Hoffman.

At the close of the meeting a resolution of confidence in Mr. Griswold was offered and adopted.

The route of the above road is an excellent one, both for through and local traffic, and no reason but incompetent management exists why it should not be productive. The new President possesses the entire confidence of all parties interested in the road. He is a man of great energy, with a wide experience in the line of his duties, and it is confidently expected that he will succeed in fully

restoring the road and its finances to a sound condition.

American Railroad Journal.

Saturday, October 1, 1859.

Another Canal Convention.

Another convention of canal forwarders was held at Utica on the 28th ult. Owing to the competition of the railroads, these men have been doing a losing business for some years past. They have in the meantime been busy at devising some mode for increasing the cost of transportation on the railroads as a means of increasing the rates of charges on the canal. They have, consequently, raised the cry of monopoly and corruption against the railroads, and of a design of breaking down, then buying up, the canals; and when this terrible achievement shall have been accomplished, the people are to be the next victims of these soulless corporations. The cry being a popular one, they have been seconded by a large number of needy politicians of equivocal standing, and who hope by means of this hobby to get again into places of trust and profit. Such are the motives and organization of the movement which has been set on foot.

We can tell this precious set that they are reckoning without their host. The *people* of the State have five dollars invested in our railroads to one in our canals. If there be a collision between the two, the people will be found where their interests are, and in the issue to be made, the former will find themselves as chaff before the latter.

Of all cries in the world this against the railroads is the most senseless. It is as old as the race; or rather as old as anything like progress in ideas, or physics. All improvement necessarily supplants and destroys an inferior life, or organization. Those supplanted naturally complain; for long continuance in a certain track, or habit has rendered them imbecile and incapable of availing themselves of the *new*. Nothing is left for them but to give up the ghost. Hence the eternal warfare between the active and progressive spirit of mankind, and that which declares our highest and best achievements to have been realized in the past; and hence the contest between the canal forwarders and railroads. The railroad is an improvement upon the canal. It abridges labor in a greater degree, and throws a large number of persons on the canal out of employment. To regain it, they seek to supplant the better by the worse—to reverse the law of society and the universe—in other words to destroy, instead of building up. The same spirit would abolish the canal for the old turnpike, and the turnpike for the batteaux up the Mohawk and down the Oswego.

The day has gone by for all such nonsense. The *canal men* and their associates are simply making themselves ridiculous and wasting their time and money. New York will take no step backwards, but will hail with delight the triumph of the railway, just as it would hail with delight the discovery of some mode of transportation that would render railroads useless. We can no longer afford to maintain a process which the inventive genius of the age has rendered obsolete, Governor Hunt or Mr. Fittsugh to the contrary notwithstanding. These gentlemen will find it so, and will soon awake to a sense of mortifica-

tion at the ridiculousness of their positions, and will be heartily ashamed of the part they are playing.

New York and Erie Railroad—"Where Some of the Money Went Last Year--Or Rather, Where it Did Not Go."

To the Editor of the AM. RAILROAD JOURNAL:

I am much indebted to you for the editorial, under the above caption, in the JOURNAL of 10th inst., as by making at least some specific charge in regard to the management of the New York and Erie Railroad Company, you enable me to refute it. General charges of ignorance, incompetency and mismanagement are easily made, but, unless accompanied by the facts on which they are based, difficult to answer.

You are correct in stating that the eastward bound track on the Susquehanna Division was ballasted when constructed. The wording of that portion of the report on the condition of the road, which you comment on, is certainly improper, as it may be interpreted with a claim that this ballasting had been done during the year 1858. This was certainly not the intention of the writer of that report. All expenditures for ballasting are carried to *repairs of road-bed*, (not to repairs of track, as stated in your editorial.) Upon referring to the detailed account of the expenditures of the company, annexed to the report, it will be seen that the entire expenditures for repairs of road-bed, during the fiscal year, were only \$81,491. It must therefore be self-evident to any person who examines critically these expenditures, that no 85 miles of track were ballasted in 1858, since that alone would have cost more than double the entire expenditure on the road-bed during the year.

If you will be more specific as to the facts which lead you to repeat your "often expressed opinion, that the department for repairs of track was mismanaged on the Erie Railroad the past year, and a great deal of money wasted upon it," you will confer a particular favor on me, as it may enable me to refute the charge satisfactorily to your readers, if not to yourself.

Your obedient servant,

CHARLES MORAN.

NEW YORK, Sept. 14th, 1859.

It is proper to say that the above communication was received at our office at its date. Its publication, however, was delayed to the present time by the absence, at a distant point, of the Editor.

The language quoted is susceptible of but one construction—that given to it by us, as Mr. Moran admits. We cannot quite agree with him that the writer did not intend to convey the idea the language expresses. We entirely exculpate Mr. Moran from any such intention, or from any insinuation incompatible with entire integrity on his part.

The truth is, the report of the Assistant President is a most shambling, unintelligible, inconsistent, and discreditable thing of the kind ever penned, and shows the author to have been a very unfit man for his place. Mr. Moran received it as that of a subordinate officer, and adopted its conclusions. We do not pretend that he was a party to the misstatements it contains; but we think the public have right to complain at his inexperience which suffered himself to be so imposed upon. The Assistant President was, for a long time, Mr. Moran's paragon. He would not hear a word against him from any quarter. We think by this time Mr.

Moran and the public are pretty much of the same opinion as to his Assistant President's qualifications.

And now for another matter. Mr. Moran says he is glad we make direct charges instead of insinuations, and calls upon us for further specifications. Let us see what answer we have for him.

Before replying, we are entitled first to call on Mr. Moran to tell us how he expended the enormous sum of \$1,135,564 upon the track of the road the past year. He was Trustee for the owners of the road. To account fully for the expenditures made under his administration, was one of the duties belonging to his trust. The following is his amplification of this matter:

Repairs of road-bed, (including ballasting). \$81,491
" " track 838,347

Now for Mr. Moran to call on us to show that any portion of this vast sum of \$838,347 was *not* properly expended, is a pretty decided piece of impertinence. He had the vouchers, and could have told us how the money was expended had he chosen to do so. We cannot. Mr. Moran tells us next to nothing, and we have no access to the books and papers of the company. We see, however, that the amount expended upon the track is excessive, and far beyond the average cost of maintaining other roads. The conclusion we come to, therefore, is a logical and necessary one—that a portion of the immense sum charged to repairs of track was thrown away.

But we are not entirely without data on this matter. Let us see to what conclusion this will lead.

Mr. Moran expended on the track of the Erie Railroad the past year \$889,219 *exclusive* of iron; this expenditure is at the rate of 29.64 cents per mile run. On the best managed roads the average cost of maintenance of track, excluding rails, is about 15 cents per mile run—just about one-half the amount expended on the Erie Railroad the past year. The cost of maintaining track per mile run, the past year, on the roads quoted, was as follows:

New York Central	15.91 cents.
Boston and Worcester	15.90 "
Western of Mass.	13.64 "
Boston and Maine	13.07 "
New York and Erie	29.64 !

Now it is quite certain that, as far as the superstructure of the road is concerned, it was barely maintained the past year. The amount and cost of material used, is stated as follows:

5,055 tons of rails, costing	\$126,408
406,583 ties, costing (as estimated by us)	
27½ cents each	111,810
263,894 lbs. cast iron chairs, at 2½ cents	
per lb.	6,597
70,000 lbs. spikes, at 5 cents per lb.	3,500
	\$248,315

The wear of rails will equal about 5 cents per mile run, which would make the depreciation for the past year, at least, \$150,000; the number of miles run being 3,000,000. The wear and tear of rails, consequently, was not made good.

There are about 2,300,000 ties on the road. Their average life will not exceed six years, so that this part of the track was only maintained. The number of chairs and spikes stated to have been used, could not have exceeded their annual wear.

From a careful examination of the Assistant President's report, we estimate the cost of the ballasting actually done, to be \$33,897. Taking

into account the above items, there would be left \$783,415 for adjustment of track, which is equal to \$1,500 per mile of road, and 24.44 per mile run, a sum fully equal to the cost of maintaining the track of this road, including iron, ties, ballasting, and all renewals to the superstructure.

In view, therefore, of the vast expenditures on the Erie railroad the past year, without any adequate visible results, we are fully justified in inferring that a considerable portion of the amount claimed to have been expended was lost in one way or another. Indeed we do not well see how it could have been otherwise. Mr. Moran was too much oppressed by his financial duties to give much time to the road, which was both inadequately and badly officered. It is here that Mr. Moran comes in for censure. He ought to have had a more competent and efficient staff. It was his fault that he did not. That he was devoted to the best interests of the road we have never doubted, but this devotion did not make his administration a successful one, for reasons already fully stated. But it is now one of the things of the past, and will soon be forgotten. If with this reply Mr. Moran is content to let the matter rest, we are.

New York, Providence and Boston R. R.

The receipts of the Stonington railroad for the fiscal year ending August 31, were:

Passengers	\$147,078 87
Freight	104,574 23
Mail service	5,089 24
Interest	1,298 85

\$258,041 19

Balance, Aug. 31, 1859..... 8,801 60

Total

The expenditures have been:

General expenses, salaries, wages, fuel, oil, etc.	\$83,331 93
Repairs of road, bridges, depots, engines, cars, etc.	44,872 62

\$128,204 55

New cars.....\$5,054 20

New engine..... 7,455 55

12,509 75

Paid interest on bonds

20,065 50

Six per cent. bonds paid

2,100 00

Dividends, November, 1858, and July, 1859

73,262 10

Paid unclaimed dividends

175 00

Balance in cash

30,525 89

Total.....\$266,842 79

The indebtedness of the company on the 31st of August, 1859, was as follows:

Six per cent. bonds

\$312,000

Less amount held by the Co. ...\$6,000 00

Am't due but not presented ... 400 00

6,400

\$305,600

The Directors were authorized to negotiate with the New Haven, New London and Stonington Railroad Company for the operations of the extension road of that company.

Cattawissa Railroad.

William D. Lewis, now Trustee of both the first and second mortgages of the Cattawissa Railroad, has been appointed Receiver, being selected as the most suitable person to take charge of the various interests of the company, having been for many years connected with the road, over which he presided for a long time.

Memphis and Charleston Railroad.

We have received a copy of the ninth annual report of the directors of this company to the stockholders, embracing the reports of the Superintendents of the eastern division, of the western division, and of the Chief Engineer, and Treasurers, each giving in detail the operations of the road, in their several departments, for the fiscal year ending June 30, 1859; also a general financial statement of the receipts and disbursements of the company from its organization to that date. The receipts from transportation, etc., during the year, were—

From Passengers.....	\$751,923 01
" Freight	509,991 66
" Mails.....	55,175 00
" Express	10,974 40
" Rents and privileges.....	2,748 33

\$1,330,812 40

Less road expenses, viz:

Conducting transporta'n.....	\$147,863 57
Maintenance of way.....	171,263 99
" motive power.....	179,901 04
" cars	53,747 80

552,776 40

Leaving net receipts

\$778,036 00

Less int. on funded and floating debt.....

195,838 10

Leaving a surplus of.....\$582,197 90

—equal to 12½ per cent. upon the entire cost of road and equipment, and everything incident thereto, amounting, as stated in the annexed balance sheet, to \$6,188,033 49. The operating expenses for the year were a fraction under 42 per cent. of the gross earnings.

Compared with the previous year, the gross earnings show an increase of.....\$366,401 75

And the expenses, an increase of..... 107,363 48

Being an increase in net earnings of..\$259,038 27

The increase in the passenger department is \$159,419 51, or 27 per cent. In the freight department, \$172,795 97, or 51 per cent. Mail, express and other sources, \$34,185 77, or 98 per cent. The increase in the number of bales of cotton transported over the entire road is 72,204, or 59 per cent.

The total net earnings of the road from the commencement of operations to June 30, 1859, after changing off all interest and exchange on borrowed capital, have been \$1,264,611 36—equal to 56½ per cent. on the capital stock. This sum has been used in the construction and equipment of the road, entitling the stockholders to a dividend to that extent when the floating debt is paid.

The floating debt, on the 30th of June last, as given in the annexed statement, was..\$443,616 01

Less cash and assets on hand

201,305 79

Excess of floating debt

\$242,310 22

To which add estimated prospective

liabilities for the current year..... 389,850 00

Making a total debt of.....\$632,160 22

—to meet which the company have to rely upon the receipts of the road after paying expenses.

The board, however, felt assured that reliance may be placed upon the net earnings of the road for the current year, equalling at least those of the past, which will leave a surplus on the 30th of June next, of \$145,875 78—sufficient to pay a semi-annual dividend of 4 per cent. upon the original, as well as the increased stock, should the board decide to adopt the policy of declaring such

a dividend for the surplus earnings expended upon the road.

The following is a summary of the operations of the road for the year:

Total number of passengers	231,229
Equivalent to through passengers	72,655
Passengers carried one mile	18,798,075
Average distance traveled by each passenger—miles	82
Excess in number of passengers carried over the year 1858	7,734
Excess in passenger receipts over the year 1858	\$159,419 51
No. of passengers carried eastward.....	115,597
Total receipts from eastward pass'grs.....	\$373,523 46
No. of passengers carried westward.....	115,632
Total receipts from westward pass'grs.....	\$378,399 65
Difference in No. of passengers eastward and westward	35
Total receipts from through fr't east.....	\$44,019 19
" " " " " west.....	57,714 28
" " " " " local freight east.....	202,183 61
" " " " " west.....	206,074 58
Receipts per mile of road	4,636 98
Expenses " "	1,925 80
Repairs of roadway per mile	560 22
Miles run by passenger trains	252,397
" freight trains	231,335
" ballast and extra trains	78,309

Total miles run

562,041

Repairs of engines per mile run.....

6 5-10

Cost of wood per mile run

6 5-10

" oil, tallow and waste per mile run.....

9-10

" engineers and firemen "

6 9-10

Aggregate cost per mile run.....

20 9-10

No. of bales cotton carried to Memphis.....

184,616

" " " Tuscum'a Ldg.....

1,629

" " " Stevenson....

8,333

Total No. of bales carried on M. & C. R. R.....

194,578

Excess over last year

72,204

The company's property consists of 287 miles of road; 20 miles of sidings; 33 depot buildings; 2 machine shops and machinery; 5 engine houses;

30 water stations; 33 division houses; 4½ sections of woodland, besides real estate at depots;

36 locomotives; 27 first-class, 10 second-class, 15 baggage, 454 freight, and 108 construction cars.

CONDENSED BALANCE SHEET.

	Dr.
Capital stock	\$2,137,665 00
Forfeited stock	17,768 06
State of Tennessee.....	1,100,000 00
Company bonds	1,600,000 00
Bills payable	345,730 00
Individuals	77,881 47
Connecting roads	20,003 90
Profit and loss to June 30, 1858.....	664,645 40
Suspended tickets.....	475 79
Net receipts for past fiscal year.....	768,036 00

\$6,842,206 26

Cr.

Construction.....	\$5,126,954 23
Equipment.....	743,729 40
Incidental to construction.....	317,349 86
Interest on funded and floating debt for the past year	195,838 10
Stock in Miss. Central R. R., materials for road and other property..	248,828 88
Cash and available assets on hand..	209,505 79

\$6,842,206 26

The officers of the company are:

SAMUEL TATE, President.

M. B. PRICHARD, Chief Engineer.

SAMUEL CRUSE, Treasurer Eastern Division.

WM. B. WALDRAN, Treasurer Western Division.

W. J. ROSS, Supt. Eastern Division.

B. AYRES, Supt. Western Division.

Grand Trunk Railroad.

The following is the present equipment of the Grand Trunk Railway:

200 Locomotives.
133 Passenger cars.
52 Baggage and post office cars.
1,063 Covered freight cars.
1,068 Open platform cars.
216 Cattle cars, brake-vans and ballast wagons.
34 Snow ploughs.

In addition to the above, the company has contracted for 300 more freight cars, a portion of which are to be put upon the road immediately.

Judgment Against the City of Pittsburg.

Execution has been issued in the case of Oelrich & Co., New York, against the City of Pittsburg, on a judgment in the United States Court, for amount due upon coupons cut from bonds issued by the city to the Pittsburg and Steubenville and the Chartiers Valley Railroad Companies, and certain gas stocks owned by the city, levied upon.

Pittsburg, Fort Wayne and Chicago R. R.

The earnings of this road for the six months ending June 30, 1859, were:

From Passengers.....	\$385,756 97
" Freight.....	363,047 02
" Mails.....	46,950 00
" Rent of road.....	33,000 00
" Miscellaneous.....	34,935 44
	<hr/>
	\$830,689 43

And the expenses were:

Conducting transportation.....	\$125,984 83
Motive power.....	218,782 17
Maintenance of way.....	164,880 79
" " cars.....	61,486 15
General expenses.....	28,691 93
	<hr/>
	599,825 87

Net earnings.....	\$230,863 56
Less 6 months' interest on floating debt.....	\$44,666 35
Discount on currency received by agents.....	1,684 53
Commission allowed for services in funding coupons.....	1,043 70
Six months' interest on funded debt.....	312,126 50
	<hr/>
	359,521 08

Amount.....	\$128,657 52
Less discount on Sinking Fund bonds redeemed by Trustee.....	2,607 44

Showing an excess of expenses and interest over the total earnings for the six months of.....	\$126,050 08
---	--------------

The earnings of the first six months of 1859, compared with the corresponding period of 1858, show the following increase:

From Passengers.....	\$35,247 33
" Freight.....	65,351 80
" U. S. Mails.....	20,056 26
" Rents and Miscellaneous.....	3,518 97
	<hr/>
	\$124,174 36

The increase in expenses was:

Conducting transportation.....	\$23,209 11
Motive power.....	76,323 34
Maintenance of way.....	48,067 72
" " cars.....	16,299 76
	<hr/>
	\$163,899 93
Less decrease in general expenses.....	4,031 56
	<hr/>
	159,868 37

Making the decrease in net earnings. \$35,694 01

This result is attributable to two causes: the large extraordinary repairs required on the track

machinery and rolling stock; and the small amount of business offered, with the consequent low rates charged for its transportation by competing lines.

The increase in the expenses of conducting transportation is no more than has been required by the increase in the service performed, by reason of the extension of the road to Chicago, and the larger number of trains run during part of the time.

The increase in the expenses of motive power appears large, but it will be remembered that in two of the largest items, viz: consumption of fuel and repairs of locomotives, the increase should be in proportion to the increased length of road which is about 22 per cent. The sum of \$90,315.47 has been expended in the repairs of locomotives, being an increase of \$12,583.55 over last year, the whole consisting of repairs of those connected with the passenger service.

A large amount of extraordinary repairs of machinery has been rendered necessary in consequence of its worn condition at the close of the past year. This, together with the fact that the department of motive power has been charged with the whole amount of fuel purchased during the six months (which has been large), while during the same period last year the consumption was only charged, will account for a large proportion of the increase in this account over and above that resulting from the extension of the line to Chicago.

The increase in the expenses of maintenance of way is not large, if the improvement in the physical condition of the road is taken into consideration. There has been expended during the half year for renewals in the track as follows, viz:

	East. Div'n.	West. Div'n.	Total.
Chairs.....	\$2,600 47	\$5,094 15	\$7,694 62
Cross-ties.....	31,446 41	3,291 73	34,738 14
Frogs.....	959 46	707 69	1,667 15
Iron rails.....	28,145 71	.....	28,145 71

Totals \$63,152 05 \$9,093 57 \$72,245 62

The same accounts last year amounted to \$34,407.67, showing a difference of \$37,837.94 in this class of expenditure, the greater part of which appears to have been made on the Eastern Division.

The increase in the expenses of maintenance of cars is less than the proportionate increase in the length of road, if the improved state of this part of the company's equipment is considered in making a comparison.

The other charges against the revenue for the six months have been \$22,856.13 on account of claims existing prior to January 1, 1859, of which \$10,877.13 were for expenses of transportation in 1857-8 not reported till after the close of the past year; \$9,110.35 for taxes accrued in 1858, not reported by the Solicitors; \$2,525.25 for interest due in 1858 on the bonds issued in 1859, for the funding of sundry coupons of the Fort Wayne and Chicago Railroad Company's Real Estate bonds, the arrangements for the issue of which were perfected since January 1st, ult.; and the balance, \$342.50, for sundry items of interest on stock and bonds accrued in 1858; also \$312,126.50 for six months interest on the funded debt; \$46,350.88 for interest on the floating debt and discount on currency, and \$1,043.70 for commissions allowed the Trustee for the Sinking Fund bonds, for services in funding coupons of old bonds. These charges, amounting to \$982,202.13, are in excess of the earnings for the six months \$151,512.70, from which, if there is deducted \$2,607.44, being amount of discount on the Sinking Fund bonds redeemed by the Trustee, the sum of \$148,905.26 will be shown as the apparent deficiency in the revenue for the half year. If to this deficiency is added the balance to the debit of Income Account at December 31, 1858, viz: \$138,689.95, the result gives \$287,595.16 as the amount of this balance to June 30, ult.

During the past six months the sum of \$589,208.01 has been added to the cost of the road, of which \$19,278.05 has been expended on the Eastern Division, and \$530,491.77 on the Western Division, and \$29,028.49 charged for discounts on bonds issued, and premium on stocks of old com-

panies, the balance being chargeable to the original construction of the old roads. Of the amount charged to the Western Division, the sum of \$478,316.06 was furnished by the Pennsylvania Railroad Company, and is included in the outstanding liabilities of the company.

There is also an apparent increase of \$3,175.95 in the value of the materials unapplied at the close of the half year; \$26,612.37 in the bills and accounts receivable, which are considered good assets. Of the whole amount of these assets, \$46,974.50 is owing by the U. S. Post Office Department, and \$21,115.00 by the Joliet and Chicago Railroad Company.

The uncollected revenue at stations is increased \$2,813.18; the balances due from other companies but \$29.57, and the money remitted by the agents *in transitu*, \$367.86.

The assets in hands of the Chief Engineer and others, are \$649,135.77, of which amount \$623,120.81 belong to the account of the Chief Engineer. The assets in his hands have been reduced \$20,914.71, being the amount of sundry liabilities of the company paid by him during the past six months. In addition to this amount the company are indebted to him for 50 per cent. of the gross earnings of the road between Plymouth and Chicago from December, 1858, to June, 1859, both inclusive, set apart by the Board for the completion of the road. This appropriation for the months named above, amounts to \$12,915.31.

The capital stock of the company has increased but \$2,883.17 since Jan. 1st; but there is shown a much larger increase in bond capital, there having been issued during the half year \$238,145.00, which is distributed as follows, viz:

Increase of Ohio and Pennsylvania R. R. Co.'s Bridge bonds.....	\$17,000
Increase of Mortgage Construction bonds.....	132,000
Increase of Sinking Fund bond.....	89,145

Total \$238,145

The Floating Debt of the company amounted to \$1,889,561.56, being an apparent increase of \$348,265.66, excluding the expenditures in December, 1858, and June, 1859, they being incurred in the current management of the road, and paid in subsequent months on demand. There has, however, been a decrease in this class of the company's liabilities, as the account of the Pennsylvania Railroad Company, having accrued prior to January, although not rendered till subsequently, should be treated as belonging to the debt of last year; deducting, therefore, the apparent increase from this account, viz: \$483,731.02, a decrease of \$135,465.36 will be shown, of which \$106,013.84 is composed of retired acceptances of the company.

At the close of 1858 the overdue acceptances amounted to \$356,218.78, and to fall due in 1859, \$427,114.43, making a total of \$783,333.21. These amounts at the close of June stood as follows, viz: Overdue, \$336,169.20; to become due thereafter to the end of the year, \$282,534.89; total, \$618,704.09; making a difference by extensions and payments of \$164,629.12.

If to the amount of the acceptances overdue and the balances of the bills payable accounts of the old companies, is added the warrants payable, accounts payable, and coupons past due payable in cash, less the amount due Penn. R. R. Co. for iron, &c., and to Michigan Southern and Northern Indiana R. R. Co., for shortage in earnings of special train in 1857-8, the result will show \$863,028.56 as the floating debt overdue at the close of the half year.

The capital stock of the company, as shown by the general exhibit of the Auditor, amounted to..... \$6,263,438 33
Amount of mortgage bonds on road and real estate issued to that date. 9,267,910 00
Floating debt of all classes, including \$35,595 due on coupons unpaid and to be funded. 1,925,156 56
Current expenses for June to be paid in June. 113,001 24

Amount..... \$17,569,506 13

The total cost of the road and equipment to December 31st, 1858, as shown by the last annual report, was	14,631,110 15
Which has been increased since that date as follows, viz: Unadjusted accounts chargeable to cost of road prior to August 1st, 1856—	
Ohio and Penn. R. R. Co. \$1,618 12	
Ohio and Indiana R. R. Co. 7,806 14	
Ft. Wayne & Chicago R.R. 982 44	
Construction expenditures during the six months ending June 30, 1859, on eastern division	\$19,278 05
On western division	530,494 77
Discount on bridge bonds of O. & P. R. R. Co.	4,285 00
Do. Mort. Con. bonds of P., Ft. W. & C. R. R. Co.	24,695 00
Premium on Ft. W. & C. R. R. Co. stock	48 49
Total cost of road and equipment to June 30, 1859	\$15,220,318 16
Cost of real estate owned by the company, exclusive of depot grounds and roadway	964,807 08
Stock and bonds of other companies	91,100 00
Fuel on road and materials on hand at the company's shops	100,881 37
Cash and bills receivable—good...	132,896 88
Mortgage bonds and notes in the hands of the Chief Engineer and other agents	649,135 77
Amounts receivable, bad and doubtful, including \$69,581 93 deficit in account of former Treasurer of the Ohio & Penn. R. R. Co.	121,791 71
Coupons due in New York July 1st, 1859, paid in June	980 00
Balance to debit of income account.	287,595 16
Total	\$17,569,506 13

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SCALES FOR RAILROADS,

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Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH
OF THE CAIRO AND FULTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859

SEALED PROPOSALS for the **GRADUATION** of the First Division of twenty miles eastward from Van Buren, will be received at this office, until **THURSDAY NOON, DECEMBER 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part or the whole of this Division may be made; but no bid for less than one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Estimate of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly as the above terms are not positively settled.

The Company having a large amount of the best lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, on application at the Engineer's Office in Van Buren.

2nd40

JESSE TURNER, President.

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH
OF THE CAIRO AND FULTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859

SEALED PROPOSALS for the **MAINTENANCE** of the First Division of twenty miles eastward from Van Buren, will be received at this office until **THURSDAY NOON, DECEMBER 1st, 1859.** No bids for less than the amount of maintenance upon any one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money stock and land, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office in Van Buren.

2nd40

JESSE TURNER, President.

FULTON FOUNDRY AND MACHINE WORKS,

P. F. GEISSE,

WELLSVILLE, OHIO.

STEAM ENGINES of every variety built to order. **STEAM BOATS AND STEAM FERRY BOATS** contracted for in whole.

PURMAN'S PATENT Turn-Tables (a very superior and simple table) of all sizes built to order at very reasonable rates.

Car Wheels of a quality superior to any ever yet made. I am now manufacturing from the best material, and annealed by a process patented by me in February, 1859, which renders them almost equal to wrought iron. Car Wheels, Steam Engines and all kinds of machinery furnished at as low, if not lower rates than can be found elsewhere.

Rights to manufacture Car Wheels under P. F. Geisse's annealing process may be obtained from the Patentee at Wellsville, O., or from T. Gilbertson, No. 8 Fourth Avenue, N. Y.

Testimonials from the Superintendents and Master Mechanics of the Cleveland and Pittsburg, Little Miami, and Steubenville and Indiana Railroads, as to the superior quality and durability of these Wheels will be furnished on application.

ROUND OAK IRON WORKS,

STAFFORDSHIRE.

LORD WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,

SHEETS, HOOPS AND BARS of every variety.

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NORRIS & BROTHER, Agents.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in **STAFFORDSHIRE AND WALES**, are prepared to contract for delivery on board ship at **LIVERPOOL, or WELSH PORT.**

C. CONGREVE & SON,

13 CHURCH ST., N. Y.

RAILROAD IRON

AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the **Dowlais Iron Works**, near Cardiff, South Wales, are duly authorized to contract for the sale of their **G. L. Railroad Iron**, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,

Boston, June, 1851. 29 Central Wharf.

WINDOW, PICTURE AND CAR**GLASS.**

F. HOPKINS & BROTHER,

IMPORTERS,

193 Pearl St., NEW YORK.

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IRON AND COAL COMPANY,

SCRANTON, LUZERNE CO., PA.

BY the completion of the **DELAWARE, LACKAWANNA AND WESTERN RAILROAD**, this Company are enabled to obtain the **MAGNETIC ORES** from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for **RAILROAD IRON** of any pattern and weight, **Car Axles, Spikes, and Merchant Iron.** They have on hand patterns for **T. Rails**, of the following weights per lineal yard, viz—**25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.** Samples of **RAILS** and **MERCHANT IRON** may be seen at the office of the Company, **46 Exchange Place, N. York.**

Address

J. H. SCRANTON, President,

Scranton, Pa.

or

DAVID S. DODGE, Treasurer,

46 Exchange Place,

NEW YORK.

RAILROAD IRON.

CONTRACTS FOR RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,

10 Wall st., near Broadway, N. Y.

500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or at ship ports in the United States.

M. K. JESUP & COMPT.

44 Exchange Place.

New York, 1st June, 1859.

A **GENTLEMAN** who has upwards of 26 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.

Address **S. box 992 Baltimore Post Office.**

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WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the **CAMBRIDGE IRON COMPANY**, situated at **JOHNSTOWN, Cambria Co., Penna.**, and purchased all their real estate, are now prepared to execute, at short notice, orders for **RAILS** of any required pattern or weight, on the most liberal terms.

PHILADELPHIA (North PENNA. R. R. BUILDING,

OFFICE, No. 407 Walnut st.

MORRIS & JONES & CO.,

IRON MERCHANTS,

MARKET AND SIXTEENTH STREETS,

PHILADELPHIA.

IRON AND STEEL

IN ALL THEIR VARIETIES.

BOILER PLATE. CAR AXLES.

BOILER RIVETS. RAILROAD IRON.

CUT NAILS AND SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of **IRON** can be executed.

August 16, 1854.

RAILROAD IRON.

THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

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Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,
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The undersigned are prepared to execute orders for

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A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

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RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the **ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG.,** are prepared to contract for the sale of **RAILROAD IRON** of a superior quality and on the most advantageous terms.

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ARE now prepared to execute, at short notice, orders for Ralls of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

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Wheeling, VA.

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THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY,** and of weight or pattern as may be required.

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9 South William st.

New York, Aug. 1, 1858.

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THE RENSSLAER IRON COMPANY,
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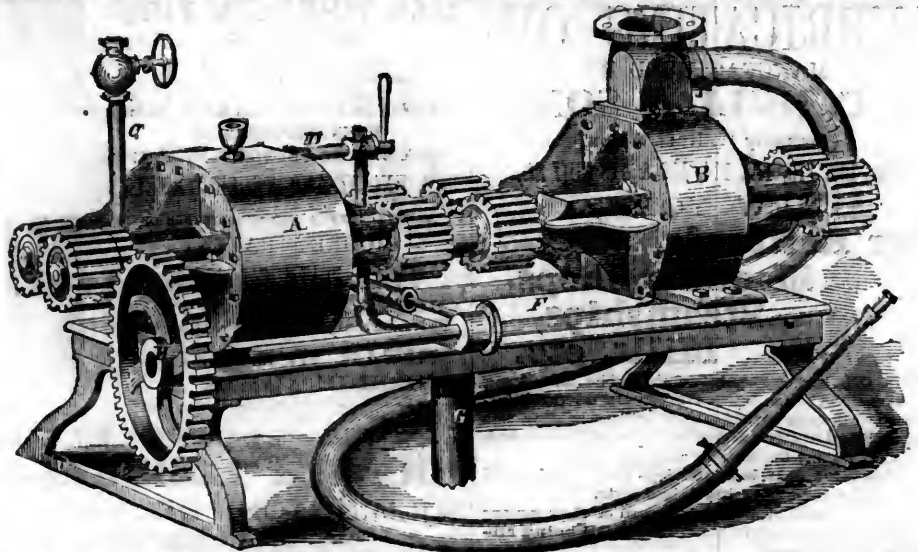
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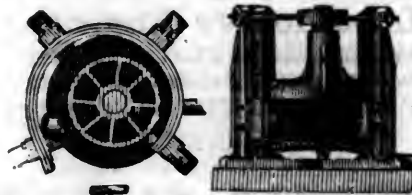
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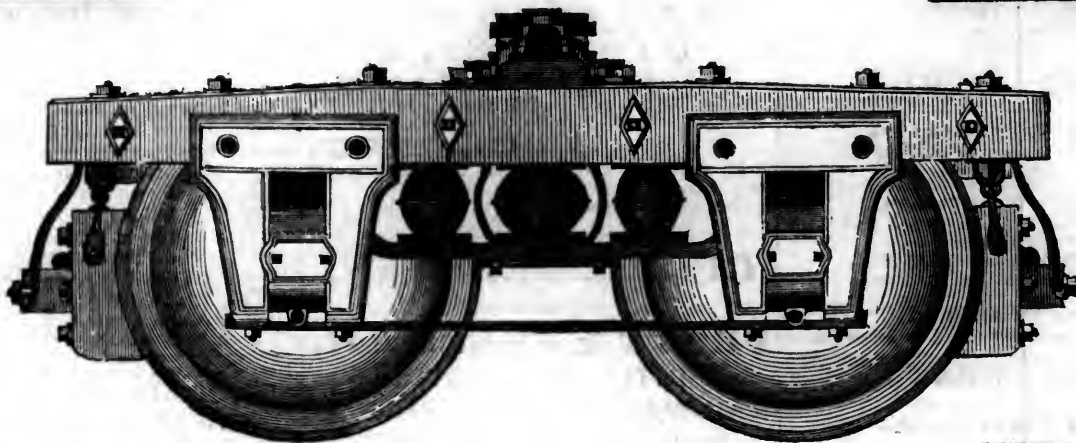
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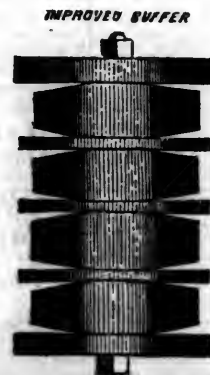
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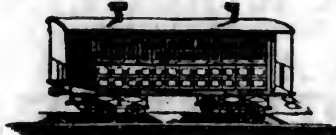
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STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

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American Railroad Journal.

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New York, Saturday, October 8, 1859.

The Gauge of Russian Railways.—The Arguments of Col. Whistler in Reference thereto.

(Continued from p. 627.)

It is true the progress of the railroad system has been very rapid within the last ten or twelve years; yet there could not have been wanting that emulation in the profession that would lead to the investigation of every available point for the improvement of the system, nor were they allowed to lose sight of this question; for as the majority of the Commission state, Mr. Tredgold early drew the attention of the profession to it. May it not, therefore, be more reasonable to attribute the reluctance to adopting a material increase of width of track to the absence of any necessity from inconvenience or ill effects in the power—or in other words, to a conviction from experience—that the narrower has answered and answered every purpose? I think so. The only reason that I know of greater width of track than that I propose here,—are two short ones in Scotland connected with each other, which are 5 feet 6 inches; and the reason given by the Engineer for increasing beyond the customary width in Scotland, which

is only four feet six inches, was to give more space for the construction of engines; yet the engines of these roads are not of greater dimensions or power, than some on roads of only 4 feet 8½ inches. One short road in Ireland, as recommended by the Irish committee, adopted in 1836 the gauge of 6 feet 2 inches. The Great Western railway adopted their gauge in 1835. The Tsarskoe-Selo railroad adopted in 1836 a gauge of 6 feet. Those that may have been built under the order of the Government of Baden, and Darmstadt of 5 feet 3 inches, and one in the United States of 6 feet, which unusual width was adopted, I feel certain, more from a supposed future advantage, rather than any knowledge of actual advantages, or even inconvenience attending the narrower; and because it was believed that there existed a tendency to increase elsewhere. In a recent conversation with one of the ablest engineers of this road, he told me he was satisfied, (there being some 40 miles in operation,) that there were no advantages in this increase of width, commensurate with its increased cost, and this was the more serious, because it is one of the longest roads in the United States, having a line of five hundred miles.

Now since the law restricting the width in England to 4 feet 8½ inches, was repealed in 1836, there have been several roads constructed of that width, and five varying from that width, but not exceeding that which I propose here; that is five feet—yet they had the example of 5 feet 6 inches in Scotland; 6 feet here, 6 feet 2 inches in Ireland, and 7 feet in England.

This does not seem to me to justify the conclusion that there exists a general tendency from experience to go beyond 5 feet. There is another reason, and perhaps the one which operates the strongest in the minds of the majority of the commission; I know it does with all others who are in favor of wide tracks—which is an impression that the progress of improvement in the construction of engines, rather than any present, positive necessity, may require an increased width of track to be availed of, and hence a desire to provide for this possible, or perhaps probable contingency.

This is a proper and wise consideration, but before we make any present sacrifice for a supposed future advantage, it is well to examine into the

probabilities of such a contingency. The locomotive engine is dependent for its power and utility upon two well known principles: first for its power, upon the capacity of its boiler to generate steam, which is strictly in proportion to the amount of steam-heating surface in the boiler, limited always by the proper ratio of that surface to the capacity of the furnace grate to generate heat; second for its utility or means of applying its power to purposes of locomotion on the road, upon the adhesion of its wheels to the rails, which is also strictly in proportion to the weight of those wheels, limited by the capacity of the rails to bear this weight. These are the simple principles upon which this machine acts; it is to this alone we must look for material improvements; and for the probable future improvement here, we cannot perhaps do better than look back, and see what has been the course of improvement from its first introduction to the present day. This may throw some light upon the possibility or probability of the necessity of a wider track to avail of future improvements.

The locomotive engine was first introduced on railroads in England in 1804-38 years ago, but was encumbered with contrivances to provide for a supposed deficiency in the hold, or adhesion of the wheels upon the rails, to effect its locomotion, that it was scarcely avoidable for any useful purpose till stripped of all these contrivances, (of which there were several very ingenious ones,) in 1814, 28 years ago, and left to act simply, as it has ever since, and does now, by the adhesion of the plain surfaces of the wheels upon the rails.

This engine, thus improved, continued to be introduced and employed carefully without material alteration until 1829, just previous to the opening of the Liverpool and Manchester railway. So far as respects the mode of applying its power for the purposes of locomotion, it was as perfect as the present engine. The limit to its effect up to this time, 1829, was the want of capacity in the boiler to generate steam fast enough to supply the cylinders for a greater velocity than some six miles per hour. Even this engine was capable of moving the maximum load due to its weight, which is as much as the present engine can move; but the deficiency in the evaporating power of the boiler rendered it impossible to move with any

speed. The dimensions of its boiler had been increased with a view to improve the deficiency to the capacity of the rails to bear the weight.—Still the velocity was limited to about 6 or 8 miles per hour.

In 1829, Mr. R. Stephenson produced an engine for trial on the Liverpool and Manchester railroad, in which he had introduced an entirely new mode of creating and augmenting the capacity of boilers to generate steam, by a series of small tubes to convey the heat from the fire space through the water to the chimney, whereby he was at once enabled to produce the maximum effect due to the dimensions of the boilers, and thus, by this step, enabled that road to commence its operations in 1830 with useful effect, at velocities of at least 20 miles per hour; in fact, the maximum velocity due to the power, (weight,) of the engine, and, I may say, the *present engine*, limited, as it was then to a weight deemed to be all that the rails could bear. The only material alteration from that time to this, as affecting the power of the engine, has been to increase the capacity of the rail to bear weight, and keep the weight of the engine up to this capacity. Now, was this great step in the improvement of the evaporating power of the engine in 1829, effected by *increased dimensions* of the boiler requiring *increased width of space* to accommodate it? No—quite the reverse. This great, and I may say, only material improvement, (for the others since have been minor, and followed as the natural consequences of it,) had for its object the producing of a greater evaporating power with *diminished dimensions* of boiler, which was accomplished. Thus the very first engine built upon this principle being limited by the conditions of the trial, weighed only $4\frac{1}{4}$ tons, yet had an evaporating power greater than all others up to that time, weighing from 8 to 10 tons.

Another important effect produced by this improvement, in 1829, was the great economy of fuel with which this extraordinary power was produced. As this system of tubes leads *at once* to the means of adopting the most useful ratio of the heating surface in the boiler to the capacity of the furnace, (grate surface,) to generate heat; and if I except the simplifying of the machine, by stripping it of all unnecessary parts; the various changes; the various ratios of the heating and grate surfaces, with a view to arrive at the maximum effect; the improvement in the manufacture of the materials and the improvement in the mechanical skill in putting them together. None of these I venture to say were ever limited by want of more space in the width of track than I propose.

The only alteration in the application of steam power to railroads since 1830, has been improvement in the *mode of using it*, rather than an *improvement in the machine itself*—that is, by increasing the power of the engine, (not improving it,) which has always been attended by a proportional increase of weight, and increased strength of rail to bear this weight; and thus the progress of improvement has been principally to increase the capacity of the rail to bear this weight and increase the power of the engine, (not improve it,) by keeping its weight up to this capacity until we have arrived at that point where the commission are unanimous in agreeing with me, viz, that

a rail of sixty pounds to the yard is all that can be necessary to serve the purposes of the St. Petersburg and Moscow railroad. Now if engines can be built of the maximum power due to this weight of rail with the width of track I propose; of which there can be no doubt, for they are built of this power for tracks of even less width, is it necessary to increase the width for this purpose? I must say, *no*. Is it probable that in future improvements, (not increase of power,) but increased dimensions requiring increased width of track will be the result? Was this the result in the great step in the improvement in 1829?—*No*; on the contrary, as I have said before, this improvement had for its object—it was a necessary condition to its being an improvement—to produce greater useful effect with less dimensions, and this was the great point accomplished. It would hardly be considered an improvement in this locomotive machine to increase its bulk and weight, without increasing its power; and since this power is now limited by the weight of the rail—and I know engines can be built for a five feet track of the maximum power that the 60 lbs. rail can bear. I cannot see, that present necessity, or probable future advantages require a greater width than *five feet*.

Having thus attempted to show that neither the result of experience, nor probable future advantages, call for a greater width of track than I propose, I will now proceed to examine the reasons given by the majority of the Commission for their preference of the six feet track over that of five.

1st. That an increase of width of one foot allows diameter of the wheels to be increased without danger, thereby lessening the friction and resistance in the same proportion. In addition to what I said on this subject in my communication of the 9th September last, to which I respectfully refer, I would observe that if the example given by the majority of the Commission, of a comparison between $2\frac{1}{2}$ and 3 feet, they suppose I intend to limit the diameter of the wheels to $2\frac{1}{2}$ feet, they have misunderstood me. Three feet is the usual size of wheels used on tracks of 4 feet $8\frac{1}{2}$ inches, and no larger are used on 6 feet tracks; and I would repeat here, that while I admit the principle of diminished friction with increased diameter, all other things being equal, and am satisfied that any decrease of friction within the limits of a practical increase of the diameter of the wheels, may with equal safety be effected on the 5 feet as the 6 feet track, I cannot believe it will ever be found necessary or advisable to increase the diameter much, if any, beyond the usual practice of 3 feet.

At high velocities of *passenger* trains, friction forms such a small proportion of the whole resistance, that any slight diminution of it by the increase of the diameter would be scarcely felt; and at the slow velocities of *goods* trains, there can be no danger in lifting the centre of gravity to avail of any advantages of a practical increase of diameter of wheel. But the *disadvantages* of any material increase must not be lost sight of. Among these disadvantages are, that large wheels cannot be made as strong as small ones, for one of the principles of diminished resistance in large wheels is their greater facility of increased leverage in greater length of spoke to pass over obstacles. It is for this reason that small wheels are used almost

always for the leading wheels of engines intended for great velocities.

Again, to make the comparison just between large and small wheels for relative frictions, all other things must be equal; but in practice, and especially when the widths of track differ, all other things cannot be equal. To be so, the capacity of the cars must be equal, their strength must be equal. The only thing to differ is the diameter of the wheels. But in two cases of equal capacity, the one on the 6 feet track must, of necessity, have longer axles, which to be of equal strength, must also be larger, therefore heavier. The wheels to be larger, must be heavier, to be equal in strength. These and other additions to the weight of car of equal capacity for a 5 feet track, will very much diminish the advantages that might arise from an increased diameter of wheel, when all other things are equal, viz: an increased capacity of cars—greater convenience of stowage, and greater proportion of goods carried to weight of cars.

The capacity of cars is limited by the practical facility of handling them in the various operations of loading and arranging them in trains at the several stations; and since this necessarily limited capacity is easily attained on the 4 feet $8\frac{1}{2}$ inches track, if an increased capacity was a natural consequence of the increased width of track, it is not required.

The width of the cars used on tracks of 4 feet $8\frac{1}{2}$ inches is now the maximum, *without an increased space between the tracks*; and if it were necessary or desirable to increase the capacity of the cars beyond that now in practice, it would be much better, in my opinion, to increase their length than their width. This would not require additional space between the tracks, and the increased resistance from the atmosphere is much in proportion to the width of the car.

As to the greater convenience of stowage, there cannot be any practical difference between the width now in use on roads 4 feet $8\frac{1}{2}$ inches, (between 8 and 9 feet in goods cars,) and any probable increase of width likely to take place on the 6 feet track; and which cannot take place *without an increased width of space between the tracks*. Again, since the capacity of the car is limited, as I think I have shown by causes independent of the width of track, (the maximum being attainable on the 4 feet $8\frac{1}{2}$ inches track,) the only *necessary difference* between cars of equal capacity for 5 and 6 feet track, is the increased length, and consequent *increased weight of axles for the latter*. Thus the proportion of weight of car to goods carried, must be greater on the 6 feet, than on the 5 feet track.

3d. Increased steadiness to engines and cars; consequent diminished wear and tear, and greater safety. This and the 4th reason relating to the same thing, constitute the most important considerations connected with this subject; and I would here state that if in all my experience of railroad traveling, I had ever known a single accident, the cause of which could be attributed to a want of width in the track, or when the cause was most evident, and such as would have produced the effect with any width of track, I would at once say it was necessary to increase the width. But I have not, and my experience has been much on roads and with cars, where any defect of this kind

would, if ever, be exhibited. Many of the roads that I am familiar with, are extremely crooked, slightly built, and often in very bad order; certainly in much worse order than I should ever expect to see the St. Petersburg and Moscow road. Cars of extreme width, as wide as those on the Tsarskoe Selo, or even on the South Western, much higher, high enough for the tallest man to stand upright in; yet I have never known a car to run off, except where the cause was evident, and which would have produced the same effect with any width of track. That cars have never run off the Tsarskoe Selo road is certainly no evidence that it is because that track is 6 feet, for cars have run off a 6 feet track; (and, if I mistake not, have run off even a 7 feet track, the Great Western,) it may be the evidence of good and careful management; but it must be borne in mind that the Tsarskoe Selo road is a short, level, (nearly so,) and straight line, where any defects or obstacles likely to throw cars from the track are always clearly in view. I never knew cars to run off any track under such circumstances.

One of the advantages claimed in these two last reasons for the 6 feet track, seems to be based upon the increased width of track *without increased width of car*—that there may be greater width of base to stand on in proportion to width of car; yet *increased width of car* is claimed as an advantage in the preceding reason. Now, while I admit that on a 6 feet track the effect of any deviation from the level of the rails transversely to the track will be less felt than on the 5 feet track, I think the difference is practically nothing. Let us see, for example. Suppose two tracks, the one 6 feet, the other 5. We will suppose the centre of gravity of the cars or engines, in both cases 5 feet high; higher than it is, or even need be. Now suppose the rail on one side to be depressed one inch, two inches, and three inches. This, I think, may be considered as the maximum derangement of the level of the rails. What is the difference in the change of position, or motion of the centre of gravity, on the two tracks? In the first it is 17-100 of an inch; in the second, 34-100 of an inch; and in the third, it is only one-half an inch. But suppose an extreme case of a depression of 6 inches, the difference is still but one inch. I think I may be justified in attaching little importance to these differences.

5th. The increased facilities for constructing the engines, keeping them in order, making them stronger, and the most important thing—the increased economy of 13 per cent. in fuel, according to the calculations of the Engineer Inhin.

As to increased facilities for constructing engines and keeping them in repair, I think I may say positively, of my own knowledge, that they do not require a width greater than I propose, 5 feet; and as to the strength of the machine, I am equally positive, that so far from this being a natural consequence of a 6 feet track, extra pains must be taken to make the engines for a 6 feet track as strong as one for a less width.

I regret that the paper of the majority of the Commission, does not explain the principle upon which Mr. Inhin bases his calculations; but I have examined his book, and from what he says himself, I hardly think he claims to be authority. But that the economy he shows for increased width, is the result of calculation, based upon data, he ac-

knowledges to require confirmation. He starts with the object of finding the proper ratio of the fire surface in the boiler to that in the furnace; assuming that heretofore adopted is not correct; but whether to decrease the one, or increase the other, he admits his doubts, and assumes it would be best to increase the surface in the boiler, and taking it for granted that the only way to do this is to increase the diameter of the boiler, he proceeds to show, that in proportion to the increase of the diameter of the boiler, there will be an increased proportion of fire surface in the boiler, and because there will be an increased proportion of fire surface in the boiler, there will be increased space to apply more tubes, and hence economy of fuel results in this proportion. I now admit that the ratio of fire surface in the boiler to that in the furnace is not what it should be to produce the greatest economy. It is not proposed to increase the power of the engines by any alteration of this ratio. That is not necessary, the power being limited by the weight, is now all that a 60 lb. rail will bear.

It is the economy of this power that is to be effected by this alteration. It is the extravagance of too much heat for the surface to be heated that requires attention; therefore, the furnace should be diminished, instead of increasing the dimensions of the boiler.

This ratio, however, may not be established with the nice calculation of Mr. Inhin. Experience is a much better guide in this matter. Different kinds of fuel may require a different ratio, and experiment has brought this very near the maximum effects; for I have often seen ill effects by changing the ratio of these surfaces backwards and forwards.

But admitting it was necessary for economy of fuel to increase the surface in the tubes, it can be as well done by increasing the length of the boiler, as the diameter, and better too; for length of tube will retain the heat in the boiler longer. Boilers are safer, because stronger as their diameters are diminished; consequently weaken as their diameters are increased.

If the results of Mr. Inhin's calculations were to be relied on, my objections to an increased width of track beyond 5 feet, viz: *unnecessary extra cost* could be removed, because he could show an absolute economy instead of unnecessary cost attending it; and as he shows the same economy between 6 and 7 as between 5 and 6, I could see no reason why 7 feet should not be preferred to 6; and if all the reasons given by the majority of the Commission in favor of the 6 feet track holds good, it seems to me that it must follow that the 7 feet would be better than the 6.

But I must differ entirely with Mr. Inhin, and have endeavored to show why I do not consider the advantages of the 6 feet track, as shown by the majority of the Commission, sufficient to justify the extra expenses attending it.

The 6th and last reason given by the majority of the Commission, I have endeavored to answer in the first part of this paper, and I will close by saying that whatever width may be adopted, the distance between the tracks will not admit of reduction, without serious injury to the road. I consider 6 feet as the *very maximum*; therefore, no allowance should be made for a diminution of the extra cost of constructing the 6 feet track as men-

tioned in N. B. No. 2 of the estimate accompanying the paper of the majority of the Commission.

Which is respectfully submitted

By Your Excellency's

Most Ob't Serv't

G. W. W.

Journal of Railroad Law.

PROXIMATE AND REMOTE NEGLIGENCE.

We noticed in our last issue the case of *Button vs. the Hudson River Railroad company*. This case is interesting not only as deciding the point we then alluded to, but the further question as to the bearing of *proximate*, and *remote* negligence upon the issue.

The plaintiff in an action, brought to recover against the defendants for the latter's negligence, must show that he, himself, is entirely free from negligence. Where there is merely a preponderance of negligence, upon the part of the defendant, be it ever so great a preponderance, it will not avail the plaintiff, and his own negligence debars him from recovery. A case might easily occur in which the operation of this rule would be manifestly unjust. For instance, suppose a farmer living near the line of a railroad, carelessly allows his gate to get out of repair and as a consequence of this his cattle wander out upon the public highway, and following the highway some distance, come upon the track of the railroad. While they are quietly grazing upon its side, a train approaches, and the driver of the engine, instead of being at his post, looking out, is engaged somewhere else, and thus on account, not only of the cattle being there negligently allowed to stay upon the track, but on account of the gross negligence of the engineer, the cattle are run over and several of them killed.

Here is negligence on both sides, but on the part of the plaintiff it is slight, while on the part of the defendant it is gross; according to the rule above stated, however, the plaintiff could not recover: not even if the engineer was intoxicated, and utterly unfit for his position.

The application of the rule to such a case as this might operate hardly. But in such cases a distinction between *proximate* and *remote* negligence, is applied by which the injustice which would often be caused by the unqualified application of the general rule is avoided. The decision in *Button vs. the Hudson River Railroad company* establishes the following rules:—

1st. Where the negligence of the plaintiff, at the time of the accident, in any way concurred to produce it, the plaintiff cannot recover.

2nd. Where the negligence of the plaintiff is *proximate*, and the defendant's *remote*, no action can be sustained.

3rd. But where the negligence of the defendant is *proximate* and that of the plaintiff *remote*, the action may be sustained.

The supposed case of the farmer and his stray cattle, is fully protected by this last proposition. If it were decided by the rule first mentioned, alone, the decision would be against the plaintiff, but following the latter rule he would be allowed to recover.

It will be remembered that the facts brought out upon the trial of *Button's* case were as follows. The plaintiff intestate had been drinking at one or more dram shops during the evening previous

to the accident; about five minutes after he left one of them, which was in West street, and near the track of the defendants' road, the cars passed and he was killed. His body was found lying straight across the track, the head upon one rail and the legs upon the other.

The driver of the car which ran over Button, testified that he was driving at the rate of four miles per hour: that he could see the leading horses and could have seen a man if standing upon the track: that at the place where the accident occurred the leading horses suddenly jumped sideways from the track, and seeing something upon the track, the driver applied the brakes, but before he could arrest the car, it had passed over the deceased. There was some evidence tending to show that the car was driven at a higher speed than four miles an hour.

The plaintiff obtained judgment, and the defendant appealed. The following was the decision.

HARRIS, J.—The verdict of the jury was clearly against evidence, even as the law was given to them by the judge who presided at the trial. The deceased, when first seen after he left Lynning's oyster saloon, was lying directly across the track, with his head on one rail and his feet upon the other. How long he came there, or how long he had been there, no witness was able to state. All that was proved was that he had been drinking at the oyster saloon, and had left there but a few minutes before he was found in this position. In view of these facts the jury were told, very properly, that if the deceased strolling there while in a state of intoxication, had laid himself down before the cars or had tumbled down unable to support himself from intoxication, then, unquestionably, it was his negligence to which the disaster was to be attributed; and if the driver did not see him in time to avoid him, the defendants were not liable. This part of the charge was unobjectionable. If it was his own fault that he was lying on the track in the position in which he was first discovered and he was not seen in time to stop the car before it reached him, then the deceased was himself the cause of his own death and the defendants were blameless. The testimony warranted no other finding. But then the judge proceeded to open before the minds of the jury a field of conjecture. He stated that the deceased had a right to be where he was found, and the question for the jury was, whether he was there through any fault of his own, or whether he was passing over and was knocked down by the cars; that if he was passing prudently and properly across the track, and was run over by the cars, and the defendant had omitted the use of such precautions and care as, if used, would have prevented the disaster, the plaintiff was entitled to a verdict. This part of the charge was erroneous. The testimony presented no such question. The deceased was found lying upon the track. It was not the defendants' fault that he was there. All that the court was called upon to do was, to instruct the jury as to the rule of law applicable to the case, as it was presented by the testimony. But to this part of the charge though erroneous, there seems to have been no exception.

In another part of the charge, the jury were told that the defendants were only liable in case

the catastrophe was brought about by their culpable negligence, and without any negligence upon the part of the deceased "directly contributing to produce the catastrophe." To the use of the word "directly" there was an exception. The difficulty with this part of the charge is, that it leaves the question vague and indefinite. What were the jury to understand by negligence directly contributing to produce the catastrophe? The same force of expression pervades the entire charge. The fact that the deceased was found lying on the track was uncontroverted. There was no evidence to show that it was any fault of the defendants that he was there. It should have been assumed, nothing appearing to the contrary, that it was his own fault.

Why, then, ask the jury to say whether there was any negligence upon the part of the deceased which *directly* contributed to the accident? There was no such question in the case. The deceased was found lying on the track. This fact was as much the proximate and immediate cause of his death as the fact that the defendants' cars passed over his body. The death was the combined result of both causes. The jury should have been instructed that, this being the case, the only question for them to decide was whether, by the exercise of reasonable care and prudence, after the deceased was discovered, the driver might have saved his life. * * *

The fact that a man was on the wrong side of the road, does not necessarily constitute a defence in an action against another by whom he was run over; but if his being there was the *immediate* cause of the accident, it is a defence, even though the person by whom the injury was committed was himself at fault. One man cannot by his own negligence, cast upon another the necessity of extraordinary care. * * *

Where the negligence of the plaintiff is proximate, and that of the defendant remote, no action can be sustained. In such a case the plaintiff himself is the immediate cause of the accident. This rule embraces all that class of cases where, at the time of the injury, the plaintiff was chargeable with a want of proper care. On the other hand, where the negligence of the defendant is proximate, and that of the plaintiff remote, the action may be sustained. The question then is, whether, it being conceded that the plaintiff was not without fault, the defendant might, by the exercise of reasonable care and prudence, at the time of the injury, have avoided it.

In the case now before us, the jury, instead of being instructed, in substance, that the defendants were liable unless the "negligence of the deceased directly contributed to produce the catastrophe," should have been told that, if the negligence of the deceased, at the time of the accident, in any way occurred to produce it, the plaintiff could not recover.

The verdict of the jury shows that they must have been misled by the charge. Upon the evidence before them, they could not have said that the deceased was not chargeable with negligence, amounting to utter recklessness, in placing himself in the position in which he was first discovered. If in his senses, as he must be presumed to have been, he caused his own destruction. Under these circumstances, he must be regarded as having co-operated with the defendants to produce

his death. Unless the jury could be made to believe that, after the deceased was discovered, the defendants, by reasonable care, could have avoided the fatal result, they were not liable. That they could have done this, has not been pretended. The testimony would scarcely warrant such a conclusion.

I am of opinion, therefore, that the judgment should be reversed, and that a new trial should be awarded, with costs to abide event.

The St. Lawrence and the United States.

(From *Le Journal de Quebec*.)

England gives nearly a million sterling to steamship lines. She gives nearly £60,000 to the company that plies between Dover and Calais, where the passengers increase in fabulous numbers. The subsidy given to that line and to the Galway one has attracted so much public attention, that the Government has appointed a Committee of Inquiry in the House of Commons, of which Mr. Cobden is President. The Committee before the prorogation of the House could but examine the question of the subsidy granted to the Dover and Calais line by the Derby Government, to pronounce it fraudulent, and to demand its annulment. After such a grave verdict, two witnesses were examined on behalf of Canada, complaining of undue favors granted to the Galway and Cunard lines—the Commissioner of Public Works in Canada, the Honorable John Rose, and Mr. Wilson, ex-Vice President of the Board of Trade, London, who is about to leave for the East Indies charged with the almost superhuman task of doing away with the deficit which is yearly produced between the Revenue and the Expenditure of that vast country.

We cannot cite from the official documents, because the testimony of which we have just spoken is secret, even to the House of Commons, and is known only to the members of the Committee of Inquiry; but as diplomatic secrets always leak out, questions like this, which interest in such a degree an Empire and its Dependencies, cannot long remain enclosed in the four walls of a Committee room, without quietly oozing out, and allowing people to form a complete idea of what they consist. Such are the reasons which give us confidence to assert that what we are about to say is substantially correct.

If we are well informed, Mr. Rose has represented to the Committee of the House of Commons:—

"1. That when the Cunard contract was made in 1839, it was with the avowed intention of facilitating communication with the mother country and its American dependencies, that the contract made it obligatory on the steamers to call at Halifax, and stipulated for a branch steamer between Halifax and Quebec during the season of navigation on the St. Lawrence, but that branch service was soon abandoned with the consent of the Imperial Government, and the Canadian mails were obliged to pass over American territory.

"2. That in 1846, the Cunard line became a weekly one, with the promise that the intermediate steamers should proceed to New York without calling at Halifax.

"3. That if the Canadian Government did not object to this arrangement, it was that then Canada had no national railway line, nor seaport open the year through, and further it did not desire to place any obstacles in the way of a desirable enterprise, which was then considered as an essay.

"4. That the postal question, despite its importance—since Canada has furnished a fourth of all the letters carried by the Cunard line—is not the only one that should be considered, and that it is still a question of the future commercial prosperity of Canada and the great British interests which have relation to the country.

"5. Canada, to develop the commerce of the St. Lawrence, has within the last few years expended its labor and revenue on the construction

of canals, uniting the great lakes and permitting sea-going vessels to penetrate as far as Chicago and other lakes of the West. Numbers of light-houses shine over our waters from the extreme west of the Provinces to Labrador and the Atlantic, a distance of 1,600 miles, without charge to commerce, but pressing heavily upon the revenues of the Province.

"6. That Canada maintains, at considerable expense, a powerful line of steamers on the St. Lawrence, who tow at almost nominal charges the vessels that frequent the river.

"7. That for all these objects has been contracted nearly all our direct debt, which amounts to about £7,000,000.

"8. That as soon as the Victoria Bridge is completed, Canada will possess a line of railway eleven hundred miles long without a single break of gauge, apart from a multitude of other roads which turrer it in all directions, and place it in immediate communication with the great West, New Orleans, and all parts of America, and make it the shortest and most direct route between Europe and all parts of the Western and Southern States of the neighboring Union.

"9. That the Province has given several millions to these enterprises, and the capitalists of England have disbursed on their part about twenty millions sterling; but the heavy subsidies granted to the Cunard line have hitherto had the effect of making all these efforts and these sacrifices useless, by lowering the price of freight in American ports, and in attracting to the American railways, canals and ports, to the detriment of our own canals and railways, to such an extent, that in 1856 more than six million tons of merchandise passed by American channels, while five hundred thousand tons only passed through our canals and over our railways.

"10. That this state of things forced the Canadian Government to establish a direct postal service, semi-monthly, between the St. Lawrence and Liverpool in summer, and monthly between Portland and the latter place in winter.

"11. That this communication, incomplete as it was, so fully demonstrated the advantages of the St. Lawrence route, that the Government has established a weekly line, by paying an annual subsidy of £55,000 currency.

"12. That our line is composed of eight steamships, collectively costing £650,000, and making shorter passages than the Cunard.

"13. That the Cunard line is principally devoted to the commerce of Boston and New York, to the prejudice of the Canadian postal service, and this Province should have been consulted when the question of renewing the Cunard contract arose and taken part in the negotiations, that consequently it was with surprise and regret that it indirectly learned that the Cunard contract had been renewed until the year 1868, at a subsidy of £176,000 per annum, without counting certain contingent allowances which will probably amount to £40,000 sterling, and this at the moment when the Canadian Government was organizing a like service.

"14. That we further learnt with greater pain, that the Imperial Government had also granted a subsidy to the Galway line, solely to the profit of American commerce.

"15. That it is very doubtful whether the Canadian line can long sustain the contest against such advantages furnished by the Imperial Government to the American ports, and that we, Canadians, still nourish the hope that we may yet obtain efficient aid from the Government of the empire.

"16. That a chartered company has but lately offered to carry the mails to British Columbia across the North American Provinces, and that the Canadian Government has offered the use of its steamships and railways, for a sum scarcely proportioned to the service required, but still useful to the Canadian line of steamships.

"17. That Canada is evidently not so well-treated as the other colonies, as regards postal relations to Great Britain, since the latter gives heavy subsidies to the lines of Australia, South America,

the West Indies, and the Mediterranean, and that the Canadian mails are first carried through a foreign country, and thence into the Provinces, at an expense which presses heavily upon the revenue, whilst it could be easy to prove that the St. Lawrence is the best and quickest route between Liverpool and Boston, and New York in summer, and Portland in winter."

As we have already said, the committee could not conclude its inquiry, and consequently place its opinion before the House of Commons; but by virtue of a rule of that house, the same committee will continue inquiry next session, and a great deal may be expected from its good will, because, if we are rightly informed, the manner in which all the questions were proposed to the witnesses, indicated the tendencies of the committee, and a desire to render justice to Canada.

There are some who believe that the Cunard contract and the Lever contract will be declared fraudulent by the committee, and be consequently annulled. In that case, the question will arise, whether the favors of the Imperial Government will be divided amongst these two lines and the Canadian one, or whether the third are to be left to their own resources. In the adverse case, we have reason to hope that the Imperial Government will come to our assistance in one form or other.

The *London Times* has made its powerful voice heard, and gives us its powerful support against monopolies to the profit of the stranger.

It appears that Mr. Rose has incontestably established before the committee the superiority of the St. Lawrence route over that of the United States, and that the committee were perfectly convinced; however, Mr. Colden had just arrived from Canada and the United States, and knew that the Commissioner of Public Works was not exaggerating in anything.

The Imperial Government will be all the more disposed to come to the assistance of Canada, as its word has been clandestinely violated by the renewal of the Cunard contract, the Colonial Secretary having, in a despatch to the Governor General in 1856, all but promised that as soon as the Cunard contract expired, pecuniary aid would be given to the Colony.

We may say that success has crowned the labors of our Minister of Public Works in England, as much as he could desire, and as much as the actual condition of things and the advanced state of the session of the Imperial Parliament would allow him. There was not enough time for action, but there was enough for an expression of good will, and this was manifested in all quarters, in the regions of power, as much as in the interior of the Legislative Committee rooms, as well as in the great and powerful press of London. We may therefore look upon the cause as won, and the *Globe* should once, at the least, compliment the Ministry for having well acted and succeeded. But justice does not sail in those waters, because we remember, that once he was surprised into saying, it was in 1857, that if the Commissioner of Crown Lands did a certain thing he would merit the gratitude of the country, but when it was demonstrated that he had done it, the *Globe* became humiliated, for having had in a fatal moment, a generous sentiment, and spoken the language of justice.

Taxation in New York City.

The taxes assessed on property in the City of New York are equal to the whole amount levied in the great State of Ohio. The figures are as follows:

	City of New York.	State of Ohio.
Real Estate.....	\$370,954,930	\$590,285,947
Personal Property ...	172,968,192	250,514,084
Total.....	\$543,923,122	\$840,800,031
Taxes assessed	\$9,860,926	\$9,766,659

Cincinnati, with one-third the population of New York, is taxed only \$1,079,412; and Philadelphia, with two-thirds the population, \$2,549,598.

Of the tax in New York \$1,328,006 is for the State, \$1,986,885 for the County, and \$6,546,034 for the City proper. This does not include the immense amounts raised for improvements, etc.

Trade of the United States with Canada.* (An abstract from the U. S. Treasury Reports on Commerce and Navigation.)

I.

EXPORTS OF DOMESTIC PRODUCTS.

Year ending 30th June.	In American vessels.	In Foreign vessels.	Total Domestic.
1849.....	\$1,254,145	\$1,066,178	\$2,320,323
1850.....	2,944,608	1,696,843	4,641,451
1851.....	3,585,571	2,250,263	5,835,834
1852.....	2,083,918	1,921,045	4,004,963
1853.....	1,789,512	2,216,000	4,005,512
1854.....	5,998,708	4,511,665	10,570,373
1855.....	3,449,118	6,501,646	9,950,764
1856.....	5,044,645	10,150,143	15,194,788
1857.....	4,539,086	8,485,622	13,024,708
1858.....	5,980,631	7,682,834	13,663,464
10 years ..	\$36,669,942	\$46,482,239	\$83,152,181
Average...	3,666,994	4,648,223	8,315,218

II.

EXPORTS OF FOREIGN PRODUCTS.

Year ending 30th June.	In American vessels.	In Foreign vessels.	Total Foreign.
1849.....	\$979,492	\$934,906	\$1,914,401
1850.....	700,936	588,434	1,289,370
1851.....	945,163	1,148,143	2,093,306
1852.....	1,753,631	958,466	2,712,097
1853.....	2,300,547	1,523,040	3,823,587
1854.....	3,926,390	2,863,943	6,790,333
1855.....	5,656,302	3,113,278	8,769,580
1856.....	3,811,291	1,877,162	5,688,453
1857.....	2,826,816	723,371	3,550,187
1858.....	2,675,819	689,970	3,365,789
10 years ..	\$25,576,387	\$14,420,716	\$39,997,103
Average...	2,557,638	1,442,071	3,999,710

III.

EXPORTS OF AMERICAN AND FOREIGN PRODUCTS.

Year ending 30th June.	In American vessels.	In Foreign vessels.	Grand Total.
1849.....	\$2,233,637	\$2,001,087	\$4,234,724
1850.....	3,645,544	2,285,277	5,930,821
1851.....	4,530,734	3,398,406	7,929,140
1852.....	3,837,549	2,879,511	6,717,060
1853.....	4,090,059	3,739,040	7,829,099
1854.....	9,925,098	7,375,608	17,300,706
1855.....	9,105,420	9,614,924	18,720,344
1856.....	8,855,936	12,027,305	20,883,241
1857.....	7,365,902	9,208,993	16,574,895
1858.....	8,656,450	8,372,804	17,029,254
10 years ..	\$62,246,329	\$60,902,955	\$123,149,284
Average...	6,224,632	6,090,295	12,314,928

IV.

TOTAL IMPORTS FROM CANADA.

Year ending 30th June.	In American vessels.	In Foreign vessels.	Grand Total.
1849.....	\$659,237	\$821,845	\$1,481,082
1850.....	2,027,569	2,257,901	4,285,470
1851.....	2,360,174	2,596,297	4,956,471
1852.....	2,278,603	2,311,366	4,589,969
1853.....	2,714,256	2,663,860	5,278,116
1854.....	2,378,934	4,342,605	6,721,539
1855.....	4,777,774	7,404,540	12,182,314
1856.....	7,198,749	10,289,448	17,488,197
1857.....	9,422,726	8,269,108	18,291,834
1858.....	6,622,502	4,959,069	11,581,571
10 years ..	\$40,440,524	\$46,416,039	\$86,856,563
Average...	4,044,052	4,641,603	8,685,656

* An abstract of the Canadian Reports for the same years, will be found in the JOURNAL of the 30th July last. Together, these tables fully illustrate the operations of the Reciprocity Act of 1854.

V.

SHIPPING ENTERED—TONS.

Year ending 30th June.	American.	Foreign.	Total.
1849.....	906,813	537,697	1,444,510
1850.....	889,755	447,372	1,337,127
1851.....	1,013,275	514,383	1,527,658
1852.....	774,878	591,569	1,366,447
1853.....	1,376,927	748,034	2,124,961
1854.....	857,480	674,188	1,531,677
1855.....	897,133	870,597	1,767,730
1856.....	1,191,716	1,217,712	2,409,428
1857.....	1,210,159	1,105,356	2,315,515
1858.....	1,344,717	922,920	2,267,637
10 years ..	10,492,862	7,629,828	18,122,690
Average ..	1,049,286	762,982	1,812,269

VI.

SHIPPING CLEARED—TONS.

Year ending 30th June.	American.	Foreign.	Total.
1849.....	870,204	563,910	1,434,114
1850.....	919,515	456,527	1,376,042
1851.....	927,013	516,883	1,443,896
1852.....	765,945	589,345	1,355,290
1853.....	1,062,086	734,029	1,796,115
1854.....	880,941	648,239	1,529,180
1855.....	890,017	903,602	1,793,619
1856.....	1,113,734	1,212,698	2,326,432
1857.....	1,133,584	1,104,850	2,238,434
1858.....	1,364,680	1,012,358	2,376,938
10 years ..	9,947,619	7,742,141	17,689,760
Average ..	994,761	774,214	1,768,976

Grand Trunk Railway.

We learn from the *Detroit Tribune* that this company have recently purchased grounds in that city for the erection of extensive buildings. The tract bought is on Michigan Avenue, north of the Toledo track and east of the Central, and adjoins both. It was selected for the convenience of transshipping freight to and from both the Central and Southern roads. There is to be a brick engine house and machine shop 185 feet in length, with rear projections and extensions of an average width of 100 feet. This will be for the storing and repair of engines, and other machinery of the road. There will also be in it a turn-table. Then there are to be two transshipment sheds or warehouses, each 500 feet long and 15 feet wide. These will have roofs projecting on each side 10 feet, so that a train of cars can run directly under them, and goods be protected from any storm while being unloaded into the warehouse. A passenger depot 108 feet long and 30 feet wide, of brick, and finished off complete, is also to be put up for the accommodation of passengers. Four baggage sheds, 60 feet long by 40 wide, and 800 feet of platform, comprise the list of contemplated improvements at this point, but it is no small list. The roofs of all the buildings are to be of slate. The work is already begun, and in two months more, these buildings will stand complete!

North-Eastern Railroad.

We are pleased to notice the condition of this road. Judging from appearances it must be doing a good business. We see a considerable quantity of cotton going to the depot, and we understand that the receipts so far show a larger increase of bales over last year up to this time. Much of the travel and freight that in former days went to Charleston on the South Carolina Railroad from Clarendon, Sumter and Darlington Districts, is now carried on this road, it being the cheapest and most expeditious route.

The North eastern Railroad must eventually become one of great importance. When the Charleston and Savannah road is added on at one end and the Cheraw and Coal-Fields road at the other, making an inseparable link through North Carolina, South Carolina and Georgia, with the other

roads that intersect it, the importance of our road and the business accruing to it, will render the road very profitable to the stockholders.--*Kings-tree Star.*

Pittsburg, Fort Wayne and Chicago R. R.

The following statement will show the movement of freight during the six months ending June 30, 1859, compared with the corresponding period of the previous year:—

	EASTWARD.			
	Tons moved.		Tons moved one mile.	
	Local.	Through.	Local.	Through.
1859.....	32,996	36,514	2,587,489	7,020,834
1858.....	25,505	38,259	2,344,173	5,586,406
Increase...	7,491	.....	243,316	1,434,428
Decrease ..	.....	1,745	.....	.....

	WESTWARD.			
	Tons moved.		Tons moved one mile.	
	Local.	Through.	Local.	Through.
1859.....	37,493	37,868	2,767,930	7,293,956
1858.....	15,740	28,257	1,397,596	4,282,972
Increase...	21,753	9,611	1,370,334	3,010,984

	EASTWARD AND WESTWARD.			
	Tons moved.		Tons moved one mile.	
	Local.	Through.	Local.	Through.
1859.....	70,489	74,382	5,355,419	14,314,790
1858.....	41,245	66,516	3,741,769	9,869,378
Increase...	29,244	7,866	1,613,650	4,445,412

From the above it will be perceived that the increase in the local tonnage has been about 70.9 per cent., and in the through tonnage a trifle more than 10.8 per cent.; in the aggregate of 37,110 tons, or at the rate of 34.4 per cent.

The following will show the movement of passengers during the past half year, compared with the same period last year, viz:—

	EASTWARD.			
	Number of passengers.		Number carried one mile.	
	Local.	Through.	Local.	Through.
1859.....	82,219	19,093	3,144,842	4,249,450
1858.....	74,773	18,854	2,460,729	3,613,690
Increase..	7,446	239	694,113	605,760

	WESTWARD.			
	Number of passengers.		Number carried one mile.	
	Local.	Through.	Local.	Through.
1859.....	85,716	20,025	3,462,697	4,368,076
1858.....	75,354	25,421	2,638,692	5,163,686
Increase..	10,362	.....	824,005	.....
Decrease..	.....	5,396	.....	795,616

	EASTWARD AND WESTWARD.			
	Number of passengers.		Number carried one mile.	
	Local.	Through.	Local.	Through.
1859.....	167,935	39,118	6,607,539	8,617,250
1858.....	150,127	44,275	5,089,421	8,807,376
Increase..	17,808	.....	1,518,118	.....
Decrease ..	.....	5,157	.....	189,856

The increase in the number of local passengers was 11.8 per cent., and the decrease in the number of through passengers, 11.7 per cent.; in the aggregate an increase of 12,651 passengers, or at the rate of 6.5 per cent.

The following will show the result of an analysis of the freight and passenger traffic of the first half of the present year, viz:—

	Number of miles averaged by each ton of freight.		Number of miles averaged by each passenger.	
	Local.	Through.	Local.	Through.
1859.....	76.0	192.4	39.3	220.0
1858.....	91.0	148.4	33.9	199.0
Increase ..	.....	44.0	5.4	21.0
Decrease ..	15.0	.....	.....	.....
	Revenue per ton per mile.		Revenue per passenger per mile.	
	Local.	Through.	Local.	Through.
1859.....	02.4	01.5	03.0	02.1
1858.....	02.4	02.0	03.0	02.3
Decrease..	.....	00.5	.....	00.2

Years.	Total receipts p. mile run.	Tot. expenses p. mile run.	Total net receipts p. mile run.	Ratio of expenditures to tot. rec'pts.	Repairs of road, etc.	Repairs of roll'g stock.	Cost of operat'g.	Miscellaneous expenses.
1849.....	183.92	80.54	103.38	43.79	21.25	17.94	22.96	34.84
1850.....	178.14	79.03	99.11	44.01	21.68	18.96	23.42	36.11
1851.....	174.78	77.17	97.61	44.16	21.54	18.90	23.34	34.18
1852.....	158.00	77.44	80.56	49.01	22.24	18.67	23.69	31.39
1853.....	160.99	82.17	78.82	51.04	22.96	21.84	23.75	31.43
1854.....	178.28	86.64	91.64	56.35	27.74	21.49	23.82	32.74
1855.....	183.00	121.04	61.96	66.14	32.15	20.29	22.88	21.96
1856.....	206.92	119.58	86.64	67.38	30.96	22.93	21.04	25.06
1857.....	201.06	114.10	86.96	66.74	32.10	21.36	21.49	24.06
1858.....	179.93	94.98	85.65	52.39	30.16	18.71	21.98	29.15
Average.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1859.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1858.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1857.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1856.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1855.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1854.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1853.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1852.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1851.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1850.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
1849.....	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
10 years ..	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92
Average ..	180.43	96.09	85.33	52.45	27.07	20.09	22.88	29.92

4. TABLE showing the receipts, etc., per mile run, and the ratio of specific expenses.

5. TABLE showing the cost, capital, receipts, expenditures, etc., per mile of road.

Western Railroad of Massachusetts.
Statement showing the operations of the Western Railroad for the 10 years ending November 30, 1858.

Years.	Cost of r'd and equip-ment.	Length of road.		Paid-up capital.	Liabilities of Company.		Miles of r'd op'r'd, in-clus. road leased.	Total miles run by lo-com. with trains.	Number of pass-engers.	Tons of freight.	Gross earnings.		Repairs & operating expenses.	Net earn'gs or rec'pts over ex-pendit's.	Dividends on stock.
		Main.	2d track & sid'gs.		Funded debt.	Floating debt.					Pass'ger traffic.	Freight traffic.			
1849.....	\$9,926,951	155.4	59.7	215.1	\$5,150,000	\$5,819,520	155.4	780,491	21,006,521	25,317,146	\$561,575	\$745,393	\$588,322	\$755,487	\$412,000
1850.....	9,963,708	155.4	59.7	215.1	5,150,000	5,819,520	155.4	780,491	21,006,521	25,317,146	590,743	747,520	607,549	701,964	412,000
1851.....	9,953,758	155.4	60.3	215.7	5,150,000	5,819,520	155.4	774,609	22,582,614	28,304,050	603,207	715,363	597,756	756,138	412,000
1852.....	9,953,758	155.4	61.6	217.0	5,150,000	5,819,520	155.4	848,002	23,187,053	28,734,070	615,480	766,062	656,678	834,750	412,000
1853.....	9,953,758	155.4	61.6	217.0	5,150,000	5,819,520	155.4	947,382	27,488,944	32,284,823	668,290	824,973	778,487	746,786	360,500
1854.....	9,953,758	155.4	61.6	217.0	5,150,000	5,819,520	155.4	989,432	28,684,552	32,284,823	756,503	924,973	783,037	718,703	360,500
1855.....	10,495,505	173.2	61.6	234.8	5,150,000	5,479,020	173.2	1,021,630	29,012,447	35,651,725	812,880	1,007,788	1,228,219	883,763	360,500
1856.....	10,495,505	173.2	61.6	234.8	5,150,000	5,479,020	173.2	1,027,018	29,719,425	38,606,615	808,977	1,007,185	1,084,118	826,223	412,000
1857.....	10,776,281	173.2	95.1	258.3	5,150,000	6,032,520	173.2	950,103	29,939,200	38,606,615	637,642	968,516	800,930	809,363	412,000
1858.....	10,881,281	173.2	95.1	258.3	5,150,000	6,032,520	173.2	944,951	24,634,700	38,048,106	684,273	879,580	871,396	758,058	379,294
Average..	10,235,626	162.2	66.2	228.7	5,150,000	5,488,691	162.5	900,238	25,819,685	29,646,691	684,273	879,580	871,396	758,058	379,294

2. TABLE showing the cost of repairing and operating the road, rolling stock, etc.

Years.	Repairs of road, bridges, fences, etc.	Renewal of iron.	Repairs of stations, aqueducts, etc.	Removing snow & ice.	Total cost includ. incidentals.	Engines & tenders.	Passenger cars.	Freight cars.	Total, incl. gravel cars.	Coal and wood.	Oil.	Waste, etc.	Total cost of operating.	Wages to employees.	Salaries & office expenses.	Taxes, insurance, gra-tuit's, damages, &c.	Tot. cost & charges.	Grand total cost of repairs and operating.
1849.....	\$77,082	\$48,537	\$14,405	\$2,730	\$142,765	\$47,554	\$16,191	\$41,806	\$105,552	\$114,285	\$19,023	\$1,734	\$135,042	\$159,301	\$26,356	\$19,364	\$205,921	\$588,322
1850.....	80,254	38,814	9,491	2,657	131,146	42,949	17,419	50,108	113,651	123,351	16,381	1,745	142,272	175,327	25,156	18,990	219,473	607,549
1851.....	87,507	32,800	12,118	2,911	134,886	42,949	17,419	50,108	113,651	123,351	16,381	1,745	142,272	175,327	25,156	18,990	219,473	607,549
1852.....	108,714	47,425	13,355	2,848	172,343	48,208	16,729	57,652	122,597	131,255	21,787	2,962	156,921	147,366	24,933	83,817	204,701	778,487
1853.....	90,352	65,149	13,071	1,196	178,769	63,041	35,774	71,268	170,083	161,560	20,492	2,962	184,935	177,061	23,003	44,637	244,701	778,487
1854.....	157,411	121,209	9,480	1,910	290,011	101,120	25,225	98,897	224,742	214,255	20,978	3,512	246,875	221,181	22,717	60,777	283,612	1,046,240
1855.....	162,652	216,906	16,604	1,372	397,535	111,603	36,244	103,083	250,831	243,713	30,360	3,523	279,135	225,438	48,053	24,285	307,776	1,236,659
1856.....	150,908	194,039	19,039	16,250	380,238	129,450	30,548	121,663	281,661	224,650	30,360	3,523	258,542	218,650	23,358	33,720	270,628	1,084,118
1857.....	150,908	194,039	19,039	16,250	380,238	129,450	30,548	121,663	281,661	224,650	30,360	3,523	258,542	218,650	23,358	33,720	270,628	1,084,118
1858.....	136,061	140,410	16,073	7,205	268,750	71,616	17,638	77,506	166,760	171,311	20,587	3,722	195,620	203,574	19,975	36,249	259,798	890,930
Average..	121,251	103,801	13,969	6,501	244,525	76,082	24,100	77,962	171,332	171,332	23,813	3,009	197,655	189,282	26,863	34,920	251,066	871,395

3. TABLE showing the cost (in cents) per mile run by locomotives with trains, reduced from Table No. 2.

Years.	1849.....	1850.....	1851.....	1852.....	1853.....	1854.....	1855.....	1856.....	1857.....	1858.....	Average..
Cost of r'd and equip-ment.	10.54	10.44	11.29	12.82	10.48	15.91	15.92	14.69	14.39	13.25	13.25
Main.	6.63	6.06	4.17	6.59	6.88	1.38	0.96	1.85	1.79	1.58	1.58
2d track & sid'gs.	1.97	1.23	1.56	1.57	1.38	0.12	0.19	1.58	1.79	1.58	1.58
Equiv. in single track.	0.37	0.33	0.37	0.33	0.12	0.19	0.14	1.58	1.79	1.58	1.58
Paid-up capital.	19.53	17.06	17.40	20.32	18.87	29.31	38.91	37.02	36.44	26.85	26.85
Liabilities of Company.	6.51	6.13	5.55	6.65	6.65	10.22	10.91	12.60	10.34	8.21	8.21
Funded debt.	2.21	2.26	2.22	1.97	2.55	9.93	10.09	2.97	2.94	2.63	2.63
Floating debt.	5.72	6.52	6.82	6.80	7.52	22.71	24.55	11.84	11.09	8.46	8.46
Miles of r'd op'r'd, in-clus. road leased.	14.45	14.91	14.59	14.46	17.95	22.71	24.55	27.42	24.37	19.30	19.30
Total miles run by lo-com. with trains.	15.64	16.04	16.28	16.47	17.00	21.66	23.85	21.86	21.83	18.73	18.73
Number of pass-engers.	2.60	2.21	2.15	2.17	2.17	3.08	3.08	2.81	2.18	2.56	2.56
Tons of freight.	0.24	0.25	0.35	0.31	0.32	0.35	0.35	0.35	0.38	0.32	0.32
Total cost of operating.	18.49	18.51	18.79	18.35	21.95	27.32	26.17	24.52	20.70	21.68	21.68
Wages to employees.	21.80	28.54	18.65	17.38	18.58	21.65	22.92	22.47	21.58	20.95	20.95
Salaries & office expenses.	3.61	3.27	3.59	2.94	2.53	2.29	2.66	4.47	2.45	3.01	3.01
Taxes, insurance, gra-tuit's, damages, &c.	2.65	2.47	3.99	4.71	4.58	30.26	29.97	3.55	3.84	3.82	3.82
Tot. cost & charges.	28.06	28.54	26.88	24.31	26.83	80.64	78.48	38.48	27.49	27.79	27.79
Grand total cost of repairs and operating.	80.54	79.02	77.44	77.44	82.17	121.04	119.58	114.10	94.28	95.09	95.09

Cincinnati Stock Sales.
 By KIRK & CHEEVER.

For the week ending October 4, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6s....85	
Covington and Lexington, 2d Mortgage	7s....60	
Ohio & Miss., E. D., Construction	7s....25	
Cinc., Ham. and Dayton, 2d Mortgage	7s....84	
Indianap. & Cincinnati, do. do.	7s....82½	
Do. do. Dividend	.....65	
STOCKS.		
Cincinnati, Hamilton & Dayton	.....70	
Columbus and Xenia	.....84	
Indianapolis & Cincinnati	.....50	
Little Miami	.....86½	

Railroad Earnings.

The following is a statement of the earnings of the Buffalo, New York and Erie Railroad (Buffalo to Corring), for the month of September, 1859, compared with the same month of last year:

	1858.	1859.
Passengers	\$19,051 81	\$16,503 10
Freight	38,379 80	37,177 28
Other sources	1,540 78	1,540 17

Total	\$58,977 17	\$55,218 55
Decrease		\$3,759 23

The earnings of the Hudson River Railroad, for September, 1859, were \$156,972 18. Do. 1858 140,871 92

Increase	\$16,100 26
For the fiscal y. end'g Sept. 30, 1859.	\$1,849,658 34
Do. do. 1858.	1,640,882 66

Increase \$208,775 68

The receipts of the New York and New Haven Railroad for September, 1859, were:—

From Passengers	\$100,901 58
From Freight	15,500 00

Total	\$116,491 58
Less dues on other roads	25,937 55

Net receipts	\$90,554 03
Receipts for Sept., 1858	70,344 71

Increase (equal to 22 per cent.) \$20,209 31

The earnings of the Chicago and Rock Island Railroad for September, 1859, were \$114,788. September, 1858 89,111

Increase \$25,677

The receipts of the Virginia Central Railroad for August, 1858 and 1859, were—

	1859.	1858.
Passengers	\$50,334 47	50,052 89
Freight	41,027 24	34,037 54
Express	986 88	557 88
Mails	1,967 50	1,967 30

	\$94,316 09	\$86,615 81
Increase		\$7,700 28

The traffic of the Great Western Railway of Canada for the week ending Sept. 23, 1859, was as follows:

Passengers	\$27,054 19
Freight and live stock	14,917 44
Mails and sundries	1,453 50

Total	\$43,425 13
Corresponding week of last year	47,863 64

Decrease \$4,438 51

The receipts of the Grand Trunk Railway of Canada for the week ending Sept. 24, were \$51,685 50

Week ending Sept. 25, 1858. 43,058 63

Increase	\$8,526 86
Total traffic from July 1st	\$535,716 71
Same period last year	492,928 90

Increase \$42,787 81

The receipts of the Cleveland and Toledo Railroad for September were—

	Sept. 1858.	Sept. 1859.
Freight	\$29,703	\$24,058
Passengers	43,292	59,325

Total \$62,955 \$83,383

The September earnings of the Illinois Central road were:

1859	\$242,000
1858	218,000

Increase \$24,000

The receipts at the Land office were \$55,400.

American Railroad Journal.

Saturday, October 8, 1859.

Western Railroad.

We give on the preceding pages a statement showing the results of the operations of this road for a period of 10 years.

The general result is an unusually favorable one. The earnings have been very nearly divided between net earnings and expenses—the road in the meantime having been fully maintained. The cost of iron used in repairs has, however, been very large, exceeding, very nearly, twice the average of other leading roads. The cost of renewals for iron on the Reading Railroad for the past 10 years has equalled only five cents per ton per mile—a tonnage six times greater than on the Western road. The cost of iron used in repairs of track on the Boston and Worcester road, with a much larger tonnage than the Western, has averaged six and a-half cents per ton per mile. We hope the Western Railroad Company will furnish some explanation of the extraordinary excess in this particular.

The increased mileage has been due to the purchase of the Hudson and Berkshire Railroad, and the increase in the construction account to the addition to the double track, and large additions to the equipment.

Street Railroads of New York and Brooklyn.

In the RAILROAD JOURNAL of 23d of April last, we printed an article on the *Street Railroads* of New York and Brooklyn, showing the result of their operations for 1857; and in view thereof, urging the importance of a comprehensive system, with reduced rates of fare, in opposition to the numerous *five* per cent. schemes which speculators are now seeking to fasten upon the public. The statement published showed, conclusively, that the railroads of New York City earned for the year named more than 33 per cent. on their *actual* cost, and that at a fare of four cents per passenger they would yield at least 15 per cent. net on such cost. We consequently argued that before any further grants were made, to be used, really, for the purpose of public plunder, that an adequate system for the whole city should be first planned, and then disposed of to parties who would offer the most favorable terms. The danger that then threatened was removed, for a time, by the adjournment of the legislation. On the re-assembling of this body, a large number of isolated schemes will be certain to be pressed upon it, with all the pertinacity which unscrupulous speculators, instigated with the hope of making a large sum of money, always display. For the purpose of keeping this subject before our citizens, and showing

them the value of the grants which are so recklessly squandered, we give the following tabular statement, the result of the operations of our city roads for 1858:

Names of roads.	Length in miles.	Total cost.	Cost per mile.	Cost of operation, 1 year.	Receipts from passengers.	Rec'pts from other sources.	Total receipts from all sources.	Net receipts.	No. of passengers carried.	Cost per pass., in cents.	No. of miles run by cars.	Cost per mile run, in cents.	Net receipts per cent. on cost of road.
Brooklyn City	20	\$1,038,839	\$52,000	\$268,771	\$385,291	\$24,705	\$409,996	\$121,225	7,705,889	3.74	1,994,185	14.48	11.67
8th Avenue	5	756,142	151,228	177,758	338,410	.....	338,410	160,667	6,768,203	2.62	1,028,148	17.29	21.35
6th	4	865,967	213,989	178,226	280,617	102,391	383,008	161,235	5,612,357	3.17	1,460,572	18.75	11.98
3rd	6	1,378,000	229,682	242,811	397,273	5,781	403,055	160,244	7,945,462	3.05	1,460,000	16.63	11.62
2nd	8	1,005,403	125,675	119,704	225,232	2,225	227,457	107,753	4,504,646	2.65	+900,000	13.30	10.72
Totals & averages.	43	\$5,034,431	\$117,000	1,007,265	1,622,823	32,711	1,659,535	652,269	32,536,506	3.10	6,336,899	15.93	13.00

The cost of 43 miles of road is represented, in the statement, to have been \$5,034,431, which is equal to \$117,000 per mile. This calculation includes the Brooklyn City railroads, which cost \$52,000 per mile, which is far below the average for the New York City roads. The nominal cost of these equals about \$174,000 per mile. The Third Avenue Railroad is put down as having cost \$230,000 per mile. One-fourth of this sum would have paid the cost of constructing the road, and all the property belonging to it of every kind, reckoning everything except the track, at the valuation placed thereon by the company. The same remarks, with some small deductions, apply to the other New York roads. The cost of graduation and masonry of the Eighth Avenue Railroad is put down at \$484,699 for 5 miles of road. The

actual cost of these 5 miles did not exceed, probably, \$24,000 per mile, which is about one-quarter the amount charged. As stock has been issued for the full amount of the nominal cost of this road, the profit of this transaction, on the track alone, is over \$400,000, on which our citizens are paying an interest at the rate of 12 per cent. for the privilege of hanging by the strap in overcrowded, dirty, and ill-ventilated cars.

There were carried the past year 32,536,506 passengers upon these roads at a cost of 3.1 cent per passenger, yielding a profit of \$619,558; to which, if we add sales of manure and receipts from other sources, we have a clear net income of \$652,269, equal to about 15 per cent., upon their enormous fictitious capital, or at least 30 per cent. upon their actual cost. Separating the 23 miles of New York roads from the Brooklyn City roads, and the fare that 25,000,000 passengers carried on the former, at a cost of 2.9 cents per passenger, yielded a profit of 2.1 cent per passenger, or a total of \$531,000—equal to 13½ per cent. on their represented cost of \$3,995,592—or about 40 per cent. on their actual cost. In the article of April 23, already referred to, it is stated that "there can be no doubt but that the reports for 1858 will exhibit a business which would pay at least 40 per cent. upon their actual cost." The result has proved the correction of this estimate.

The following is a comparison of the operations of 1857 and '58:

Comparison of Operations of the Street Railroads of New York and Brooklyn for years 1857, '58, not including Fourth Avenue Railroad.

Year.	Cost of operation.	Receipts from passengers.	Rec'ts fr'm other sources.
1857.....	\$1,051,369	\$1,587,581	.....
1858.....	1,007,265	1,626,823	\$32,711
Differences	\$44,104 Reduction.	\$39,242 Increase.	\$32,711 Increase.

Year.	Total receipts.	Net receipts.	No. of passengers carried.
1857.....	\$1,587,581	\$536,212	31,783,068
1858.....	1,659,534	622,269	32,536,506
Differences	\$71,953 Increase.	\$116,057 Increase.	753,438 Increase.

Year.	Cost of each pass. in cents.	No. of miles run by cars.	Cost per mile run pr. ct. ni cents. on cost.	Net rec'ts on cost.
1857.....	3.3	6,420,444	16.37	11.3
1858.....	3.1	6,332,889	15.93	13.0
Differences	0.2 Red'tion.	87,555 Red'tion.	0.44 Red'tion.	1.7 Inc'se.

From this it will be seen that the total cost of operating has been reduced \$44,104, while the total receipts have increased \$71,953. The net receipts have therefore increased \$116,057. The number of passengers carried has increased 753,438. The cost per passenger has been reduced 2-10 of a cent, and the cost of running a car one mile .44 of a cent. That successive improvements in the management and operation of these roads will still further reduce the expenses, as the business increases, is quite certain. The greater the travel, the less is the cost per passenger—hence this item is not the true criterion by which to judge of the economy of future management.

The real test is in the cost of running a car one mile. This, as before stated, has been reduced nearly one-half cent—a very important item, when

we consider that the total number of miles run is six and a third millions.

But without anticipating or making allowances for any further reductions of cost of operation, and basing our calculations upon the business of 1858, the following is the result:

At a 4 cent rate, the profit per passenger would be 1.1 cent, which, on 25,000,000 passengers, would give a total of \$275,000—equal to 20 per cent. on \$1,375,000, which is all that the 23 miles of railroad actually cost. Can any demonstration be clearer that the public of New York are giving away yearly over \$300,000 to these corporations, for the privilege of hanging up by straps in their badly constructed vehicles? Shall we permit such a system to be not only perpetuated, but extended? That Street Railroads are a public necessity, no one who reads the figures in the tables can for a moment doubt. Incredible as it may appear, it is no less true that the business upon these roads, not including the 4th Avenue, is equivalent to carrying every man, woman and child, in these two cities, 32 times each year in the cars. With such facts staring us in the face, it would be preposterous to say that they are not required. The extent to which they are used proves conclusively that, with all their impositions, they could not be dispensed with, and that their adoption must be universal.

The growth of the city and its business is such that within the next five years, twice or three times the number of miles of railway that we now have will be necessary. We believe that many miles of additional roads could now be profitably employed; but when the privilege of constructing them is granted, we hope to see them put up at auction and allotted to such parties as, under good and sufficient guarantees, will agree to carry passengers comfortably and safely at the lowest rate of fare.

Richmond and Danville Railroad Extension.

A meeting of gentlemen residing upon the line of, and interested in, the proposed extension of this road to the State line, was held in Wentworth, Rockingham Co., N. C., on the 29th ult. The Board of Trade, of Richmond, was also represented by delegates sent for that purpose. It is proposed to connect at the State Line with the Coal Fields Railroad, for which a charter has been obtained to run through the counties of Rockingham, Stokes and Forsythe, in North Carolina. Much enthusiasm was evinced by those in attendance. Numerous addresses were made, all tending to show the importance of the proposed extension, and its bearing on the trade of that section of country. It was shown that Richmond was the best tobacco market in the country, and that it was for the interest of that portion of North Carolina to be in direct communication with that city. A charter for a more direct road had been asked, but the legislature of North Carolina had refused it, upon the ground that it would divert trade into Virginia. A charter for a more circuitous route had however been obtained, and they intended building the road, even though it should benefit another State. \$250,000 of the stock had been subscribed, and 5 per cent. of the amount paid in, besides a guaranty from the citizens of Stokes Co. to grade the road through their county. The representative of the State's interest in the R. & D. road pledged the full co-operation of the directors

in that road, and urged the importance of united action in the matter. The company is to be organized on the 5th of November.

Hartford and New Haven Railroad.

The income of this company for the year ending August 31, 1859, was as follows:

From Passengers.....	\$397,567 76
" Freight.....	283,713 09
" Rents, mails and express.....	42,179 44
	\$723,460 29

And the expenses were:

Repairs of road & bridges, \$82,726 14	
Wood, coal and oil.....	68,059 73
Materials and labor on engines and cars.....	54,068 82
General expenses, taxes, insurance, etc.....	40,503 89
Salaries, labor and transportation expenses.....	91,660 20
Station repairs, etc.....	3,115 57
Lost and damaged goods..	2,059 10
	342,193 45

Net earnings.....	\$381,266 84
Less interest.....	\$57,198 16
Charged to depreciation ..	10,000 00
	67,198 16

Surplus.....\$314,068 68

The receipts of the company from all sources during the year were \$844,772 10; and the disbursements \$687,579 63. The dividends paid amounted to \$232,902. The cash on hand at the commencement of the year was \$121,031 81. At the close of the year the balance was \$157,192 47.

The whole number of passengers transported over the road during the year, was 469,772.

The number of miles run by passenger trains was 209,500; by freight trains, 92,563; by wood and gravel trains 12,700—total 314,763.

The gross income of the road exceeds that of the preceding year \$95,215 04.

The road and equipment have been kept in good repair; and the trains have been run with regularity, and entire freedom from accident to passengers. A new passenger depot has been built at Windsor Locks; and a new passenger and freight depot at New Haven is under contract to be completed during the fall. Some of the bridges have been rebuilt, while others have received thorough repairs.

The suit commenced against the New York and New Haven railroad company has not yet come to trial. The sum in dispute \$71,000 is included in the contingent fund.

The following is a general view of the affairs of the company, September 1, 1859:—

Capital stock.....	\$2,350,000 00
964 bonds issued.....	964,000 00
Reserved fund.....	150,000 00
Contingent fund.....	245,400 21
Profit and loss.....	206,568 68
Dividend declared unpaid.....	5,382 00
Credit to Tomlinson Bridge Co.....	8,864 56
Debts due by the company.....	2,217 04

	\$3,982,432 49
Construction.....	\$3,108,018 77
Real estate.....	62,727 68
Tomlinson bridge stock.....	102,888 67
Equipment.....	254,000 00
Materials on hand.....	132,502 73
Debts due the company.....	115,102 17
Cash on hand.....	157,192 47
	\$3,982,432 49

Locomotive Department of the Illinois Central Railroad.

The cost of maintaining and operating the locomotive department of the Illinois Central railroad for the month of August was as follows:

Miles run by passenger trains	79,002
Do. freight do.	62,477
Do. construction do.	13,372
Do. wood do.	3,389
Do. switching do.	20,629

Total miles.....178,869

Pounds of waste used	1,944
Gallons of oil do.	1,431
Cords of wood do.	2,968
Tons of coal do.	894

Wages of engine-men and firemen	\$6,800
Repairs of engines	9,708
Value of oil and waste	1,291
Do. wood and coal	14,404
Cleaning engines	1,131

Total cost.....\$33,336

Cost of oil and waste per mile run, in cents.	.72
Do. wood and coal do.	8.05
Wages of engine-men and firemen	do. 3.80
Cost of repairs	do. 5.42
Cleaning engines	do. .63

Total cost in cents per mile run...18.62

Average number of cars per train	9
Do. miles to pint of oil	15.61
Do. do. cord of wood	48.94
Do. do. ton of coal	39.75

The value of wood on tender is rated at \$4.31 per cord; of coal \$1.80 per ton.

Re-building, superintending, teaming and other expenditures appertaining to repairs are included in the above aggregates.

The cost of the different items for July and for the six months ending June 30, is as follows:—

	For July.	For the half-year.
Cost of oil and waste	.77	.81
Do. wood and coal	8.19	8.93
Wages of engine-men and firemen	3.98	3.88
Cost of repairs	4.98	5.57
Clearing engines	.63	.66
Total	18.55	19.85

New York and Erie Railroad.*1st Report of the Receiver.*

Received, Aug. 16, from company	\$3,006
Gross receipts to Sept. 1	\$181,598
Gross receipts in Sept.	419,206
	600,621
Miscellaneous arrearages	20,411

Total	\$624,038
Paid operating expenses, current and in arrear, to Oct. 1	\$352,488
Bills for back supplies	51,453
Other bills and rents in arrear	81,973
Instalment on old judgments	10,000
Bills for iron in arrears	19,210
Bills for supplies	69,197
	584,321

Cash balance on hand.....\$39,717

We learn from the counsel of the Receiver that he is likely to make his first payments on the over-due mortgage coupons—the May coupon on the 1st mortgage having precedence—as early as November, or in the course of that month, which is a month earlier than expected when he took charge of the property.

Taunton Locomotive Company.

This company are now prepared with increased means and facilities to take advantage of the improved condition of railroads, to supply, at short notice, engines of the character which have given this establishment a first rate reputation. The locomotives turned out by it have, in all cases, as far as we can learn, given not only entire satisfaction, but have elicited high commendation for their performances, on all roads where they have been used. Among these may be named, the Eastern and Western in Massachusetts; the Androscoggin and Kennebec in Maine; the Hudson River, the Erie, the Central, Watertown and Rome, in New York; the New Jersey Central; the Providence and Worcester, and the Providence and Stonington; the Cincinnati, Hamilton and Dayton, Lake Shore, and the Cleveland, Columbus and Cincinnati in Ohio; the Louisville and Nashville, and the Lexington and Big Sandy in Kentucky; the Mississippi and Tennessee, and the Memphis and Ohio in Tennessee; the Seaboard and Roanoke in Virginia; the New Orleans, Opelousas and Great Western in Louisiana; the Pacific Railroad in Missouri; the Detroit and Milwaukee in Michigan; the La Crosse and Milwaukee in Wisconsin; the Montreal and Champlain in Canada; and many other roads of more or less importance.

Everywhere these locomotives have abundantly sustained the reputation of the manufacturers, and given entire satisfaction by their trial and service. Their works remain under the direction of Mr. W. W. Fairbanks, as agent, with Mr. P. I. Perrin as draughtsman, both of whom have been connected with the establishment from the start.

Kennebec and Portland Railroad.

The receipts of this road for the year ending Sept. 30, were	\$164,516 13
Expenditures	142,965 26

Excess of earnings over expenses	\$21,550 87
Add excess of earnings 1857-8	8,019 07

Total excess two years.....\$29,569 94

ASSETS.	
Cash on hand	\$7,431 90
Due from Washington Bank	274 00
" Post office department	3,423 52
" Sundry accounts	593 47
" Wood on hand	17,095 05
" Machine shop and stock	1,625 27
	\$30,442 94

LIABILITIES.	
Due on city and town coupons, not yet presented for payment	873 00

Do. 1857 8	\$29,569 94
Do. 1857 8	165,074 75
Receipts for 1858-9	164,516 13

Loss on receipts last year	\$558 62
Saving of expenses on preceding year	\$11,507 25

The debt due at the commencement of the year was, in round numbers, \$17,000. This debt has been cancelled, leaving the Trustees liable only for uncalled for coupons to the amount of \$873 00, and there is a surplus of nearly \$30,000 on hand. The falling off in the receipts this year is only \$558.64.

In the current expenditures are embraced the interest on town and city bonds, amounting to \$48,000, and payments to a sinking fund of \$12,000. Deducting these sums, the net earnings would be \$81,550.

South Carolina.

Subscription of the State to internal improvements:

Shares in the South Carolina R. R. Co.	\$30,000
" " North-eastern R. R. Co.	220,000
" " Spartanburg & Union R. R.	250,000
" " Charlotte & So. Ca. R. R. Co.	31,700
" " Greenville & Columbia R. R.	348,000
" " Blue Ridge Railroad Co.	800,000
" " Cheraw & Darlington R. R.	100,000
" " Pendleton Railroad Co.	35,000
" " Laurens Railroad Company	50,000
" " Charleston & Savannah R. R.	270,000

\$2,134,700

Stationery.

Engineers, merchants, manufacturers, etc., will find at the establishment of PORTER FITCH, No. 6 Beekman Street, a general assortment of envelopes, note, letter and cap papers. Account books made to order, and engraving of every description executed in the best manner. Also Printer, Lithographer, etc. Railroad Companies and others are invited to give him a call before purchasing elsewhere. Address PORTER FITCH, No. 6 Beekman Street, New York.

How Railroads Influence the Value of Property.

In 1851 the total value of real estate in Indiana was returned at.....\$176,894,981
Value returned in 1858.....318,430,965

Increase.....\$141,535,984

This increase of real estate is to be attributed largely to railroads constructed in the mean time, directly and indirectly. *Directly*, by opening remunerative markets for agricultural productions, and *indirectly* by the incentive to increased industry and enterprise, which resulted from the remuneration.

The increase that may be attributed *directly* to the influence of railroads is estimated at \$70,000,000. The cost of these railroads have been about \$30,000,000; so if they were never to pay anything more than their repairs and running expenses, the investment would show a profit of 133 per cent. in the advance of real estate along their lines. The total taxables of the State are put down as follows:

Real Estate	\$318,430,965
Personal Property	141,037,977
Total Taxables	\$459,468,942

Ericsson Engines.

A Philadelphia letter says:—"There is a New York novelty to be seen in one of our Chestnut street windows, which draws bigger crowds than any organ grinder, without making a quarter of the noise. It is an Ericsson hot-air engine, about as large as a candle-box, driven by the flame of two gas-burners, and propelling a sewing machine. Ericsson's engines, by the way, for all purposes where less than ten horse power is required, are coming into high favor with machinists here. They cost as much as the steam engine, but they run with safety, cleanliness and economy."

Toledo, Peoria and Burlington Railroad.

We learn from the *Lafayette Journal* that the grading upon this road is nearly finished. The track is laid and in running order, seventeen miles west of Monticello. The track laying from Logansport west is going forward with great alacrity, and it is expected that regular trains will be running over the road in less than three months. The payment of \$250,000 of stock subscribed along the line is, by a special agreement made conditional upon the completion and full equipment of the road, before the 1st of January.

Steam Fire Engines.

One of the most interesting features of the Exhibition of the Maryland "State Agricultural Fair," recently held at Powelton, was the trial of Steam Fire Engines: the trial to be final, and to decide which engine should carry off the palm. The principal contending engines were the "Washington," made by Messrs. POORE & HUNT, Baltimore, and the "Hibernia," made by REANEY, KEAFIE & Co., of Philadelphia. The Washington got up steam in 18 minutes, 30 seconds, and with a maximum pressure of 90 pounds, threw a horizontal stream 249 feet, and vertically 173 feet. Length of hose, 205 feet, 10 inches; nozzle, 1 1/4 inches. The Hibernia got up steam in 14 min., 21 sec., and with a maximum of 105 pounds of steam, threw a horizontal stream 254 feet; vertically, 178 feet. Length of hose, 203 feet 6 inches; nozzle, 1 5/16. Both the Hibernia and Washington threw their streams over the pole, which is 173 feet. The judges made no decision upon the merits of any of the engines, but will meet again to decide the matter.

Maryland Institute Fair.

The annual exhibition of the Maryland (Baltimore) Institute was opened to the public on the 4th inst. We learn that the increase of new members and renewal of membership has been greater than on any preceding occasion, and there is every indication that the success of this flourishing institution is established on the firmest foundation.

**THE
TAUNTON LOCOMOTIVE
MANUFACTURING COMPANY,
TAUNTON, MASS.,**

HAVING large facilities, and having had a long experience in the business, are prepared to furnish

**LOCOMOTIVES,
EITHER FOR BURNING WOOD OR COAL,
OF THE MOST APPROVED CONSTRUCTION.**

ALSO ALL KINDS OF
**RAILROAD MACHINERY,
STATIONARY ENGINES AND BOILERS,
SUGAR MILLS, SHAFTING, ETC.**
W. W. FAIRBANKS, Agent.
HARRISON TWEED, Treas.

Notice to Contractors.

PROPOSALS will be received at the office of J. I. SHIPMAN, in the village of Jamaica, Long Island, until the twentieth day of October at noon, for the graduation, masonry and superstructure of the Glen Cove and Roslyn Branch Railroad. This road will be about eleven miles long and presents very desirable work for a contractor. Bids will be received for the whole or any part of the work. Specifications and every necessary information may be obtained at the office. October 1, 1859.

STEPHEN TABER, } Committee.
GEO. J. PROCK, }
H. W. EASTMAN, }
J. I. SHIPMAN, Chief Engr.

31*41

**DR. A. MERRIMAN,
DENTIST,**

1 Waverley Place, opposite New York Hotel,
NEW YORK.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH PORT.

**C. CONGREVE & SON,
13 Cliff st., N. Y.**

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

**WAINWRIGHT & TAPPAN,
Boston, June, 1851. 29 Central Wharf.**

**PORTER FITCH,
BLANK BOOK MANUFACTURER,
STATIONER, PRINTER AND LITHOGRAPHER,
No. 6 BEEKMAN STREET,
NEW YORK.**

FIRST CLASS ACCOUNT BOOKS made to order, and ENGRAVING of every description for RAILROAD CORPORATIONS, BANKS and INSURANCE COMPANIES, executed in the best manner on short notice.

Also—
**ENVELOPES,
NOTE, LETTER and CAP PAPERS,
FOR SALE AT LOW PRICES.**

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. Co.
Van Buren, Ark. Sept. 10, 1859.

SEALED PROPOSALS for the Graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until THURSDAY NOON, DECEMBER 1st, 1859. The work is divided into twenty sections of about one m. each, and proposals for either a part or the whole of this Division may be made; but no bid for less than one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly as the above terms are not positive settled.

The Company having a large amount of the best lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications, may be seen, and all desired information obtained, on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, Pre ident.

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. Co.
Van Buren, Ark. Sept. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until THURSDAY NOON, DECEMBER 1st, 1859. No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, President.

**FULTON FOUNDRY AND MACHINE WORKS,
P. F. GEISSE,
WELLSVILLE, OHIO.**

STEAM ENGINES of every variety built to order. STEAM BOATS and STEAM FERRY BOATS contracted for in whole.

PURMAN'S PATENT Turn-Tables (a very superior and simple table) of all sizes built to order at very reasonable rates.

Car Wheels of a quality superior to any ever yet made. I am now manufacturing from the best material, and annealed by a process patented by me in February, 1859, which renders them almost equal to wrought iron. Car Wheels, Steam Engines and all kinds of machinery furnished at as low, if not lower rates than can be found elsewhere.

Rights to manufacture Car Wheels under P. F. GEISSE'S annealing process may be obtained from the Patentee at Wellsville, O., or from T. Cubbertson, No. 8 Fourth Avenue, N. Y. Testimonials from the Superintendents and Master Mechanics of the Cleveland and Pittsburgh, Little Miami, and Steubenville and Indiana Railroads, as to the superior quality and durability of these Wheels will be furnished on application.

**ROUND OAK IRON WORKS,
STAFFORDSHIRE.**

LORD WARD, Proprietor.
MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS of every variety.
Address RICHARD SMITH, Esq., Dudley.

UNITED STATES OFFICES.

NEW YORK, No. 17 Nassau St.
BALTIMORE, over Farmers' & Mer. Bank.
NORRIS & BROTHER, Agents.

**RAILROAD IRON
AND COMMON BARS.**

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.
B. & J. MAKIN, 70 Broad st.

**WINDOW, PICTURE AND CAR
GLASS.**

**F. HOPKINS & BROTHER,
IMPORTERS,
193 Pearl St., NEW YORK.**

**LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.**

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address **J. H. SCRANTON, President,**
Scranton, Pa.
or **DAVID S. DODGE, Treasurer,**
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

**THEODORE DEHON,
10 Wall st., near Broadway, N. Y.**
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or exship at ports in the United States.

**M. K. JESUP & COMPANY,
44 Exchange Place.**
New York, 1st June, 1859.

A GENTLEMAN who has upwards of 26 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation.

Satisfactory evidence of business capacity and integrity will be furnished.
Address S. box 952 Baltimore Post Office. 3m32

METALS for RAILROAD COMPANIES.

**LUCIUS HART,
IMPORTER AND DEALER IN METALS,
4 and 6 Burling Slip, NEW YORK.**
BLOCK TIN. SELLER. RABBIT METAL.
ANTIMONY. PIG LEAD. INGOT COPPER.

**RAILROAD IRON.
WOOD, MORRELL & CO.,**

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JONESTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

**PHILADELPHIA, NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.**

**MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.**

**IRON AND STEEL
IN ALL THEIR VARIETIES.**
ROILER PLATE. CAR AXLES.
BOILER RIVETS. RAILROAD IRON,
CUT NAILS and SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

**JAMES TINKER,
54 Exchange Place,
NEW YORK.**

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,
MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

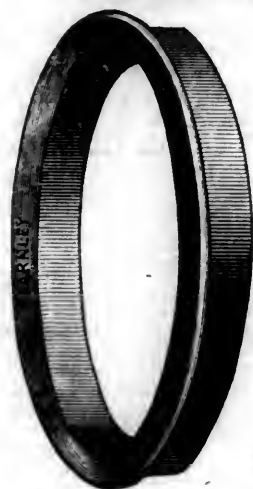
A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of **LOW MOOR and BOWLING**, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,
44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.



RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCROW & VAUGHAN, proprietors of the **ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG.,** are prepared to contract for the sale of **RAILROAD IRON** of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Sec'y,
817 WHEELING, VA.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY,** and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.

NEW YORK, Aug. 1, 1858.

RAILROAD IRON.

THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:
RUSSING, CROCKER & DODGE,
33 Cliff St.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.

Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.

ORDERS FILLED PROMPTLY AND AT LOW PRICES.
SALTUS & CO.,
45 Cliff st., New York.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 3 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

RAILROAD IRON.

THE subscribers are prepared to contract for **RAILS** delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

FAY, WOOD & CO.,

214 Pearl st., NEW YORK,

MANUFACTURERS OF

WHITE LEAD, ZINC,
COPAL VARNISHES AND
JAPANS.

Also, PUTTY, PAINTS and COLORS.

THE

RAILROAD IRON MILL COMPANY,
CLEVELAND, OHIO,

MANUFACTURERS EXCLUSIVELY OF

RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads at this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation

February, 1858.

G. B. GORDON,

IMPORTER AND JOBBER OF
HOUSE-FURNISHING HARDWARE,
MANUFACTURER OF THE

"OLD EMPIRE"
COFFEE POT,
WATER COOLERS, BATHS,
PLAIN JAPANNED AND STAMPED
TINWARE.

DEALER IN

Tinman's Tools,
Copper Bottoms,
Brass Kettles, etc.

258 PEARL STREET,
ADJOINING U. S. HOTEL,
NEW YORK.

GUTTA PERCHA	
<p>THE Cheapest and most DURABLE ROOFING IN USE.</p> <p>Sent to any part of the country with directions for application.</p>	<p>CEMENT ROOFING.</p> <p>SPECIMENS and references can be seen, and any desired information obtained on application, by letter or in person, at our office, 510 BROADWAY, N. Y. (Opposite the St. Nicholas Hotel). JOHNS & CROSLY.</p>

THE LAWRENCEVILLE MANUF'G
CEMENT COMPANY,
OFFICE 96 WALL ST.,
NEW YORK.

THIS Company manufacture **ROSENDALE HYDRAULIC CEMENT** of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings.

For sale upon favorable terms by addressing,
WM. N. BEACH, President.
CHAS. E. LAWRENCE, Sec'y.

CEMENT, PLASTER, ETC.
THE HUDSON RIVER CEMENT CO.

HAVE commenced manufacturing for the season, and can now furnish a very superior article of fresh Rosendale Cement, Calcined Plaster, Farmers' Plaster and Marble Dust. Address

HUDSON RIVER CEMENT COMPANY,
12 Jersey City, N. J.

Rosendale Hydraulic Cement.

THE NEWARK and ROSENDALE CEMENT COMPANY are now receiving fresh from the Mills their approved **ROSENDALE CEMENT**, warranted pure and free from quick lime, and which has given such general satisfaction in the various government and other public works in which it has been used. Purchasers and shippers should be careful to get the genuine **ROSENDALE CEMENT**, branded "NEWARK and ROSENDALE," "H. WILDE." This Cement does not set or burst the hoops when stored in warm climates. It is packed in tight kiln dried barrels, and is specially adapted for safe shipping on long voyages. Terms reasonable, which may be known by addressing,

JOHN H. STEPHENS, President, Newark, N. J., or
HENRY WILDE, Secretary, 90 Wall st., N. Y.

DELAFIELD & BAXTER'S,
Late OGDEN & DELAFIELD,
ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our CEMENT for public works, or other purposes. We warrant it equal in every respect to any manufactured in this country. It attains a great degree of hardness, sets immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength. For sale in tight barrels, well packed, on application at their office, by **DELAFIELD & BAXTER, 104 Wall st.**

The above CEMENT is used in most of the fortifications building by government.

THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY
J. C. HULL & SONS,

(Formerly W. HULL & SON,)

Nos. 108, 110, 112, 114, 116 & 118 Cliff St.,

NEW YORK,

**For Railroads,
Machine Shops,
Steamships,
Mills, etc.**

THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is much less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

6th. It will remain limpid at as low a temperature as sperm.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

TAW & BEERS,

DEALERS IN

Sperm, Whale and Elephant Oils,

Adamantine Car and other Candles,

AND MANUFACTURERS OF

TAW'S LUBRICATING GREASE

FOR RAILROAD CARS
AND HEAVY MACHINERY.

THIS celebrated GREASE has been in use upwards of Ten years, and is in the opinion of FORTY RAILROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or description of machinery.

TAW & BEERS,
18 SOUTH WATER ST.,
Philadelphia.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

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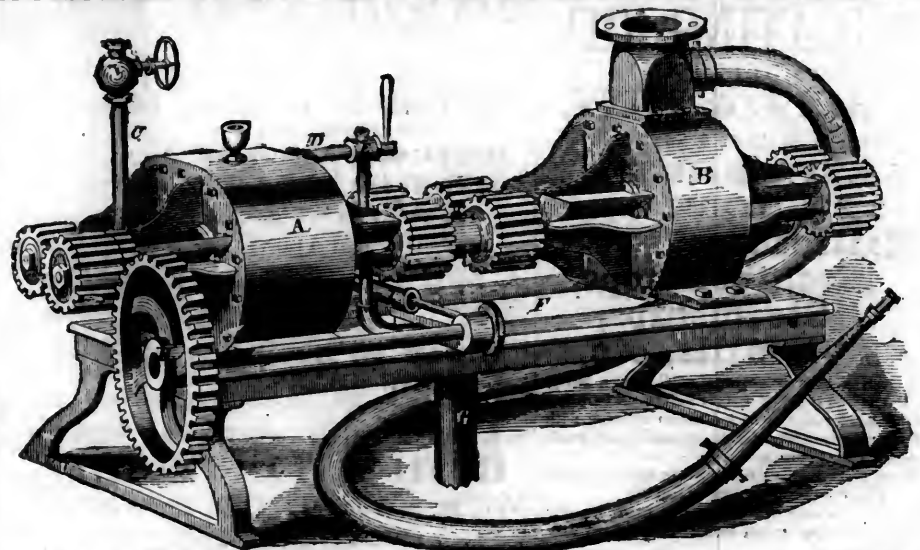
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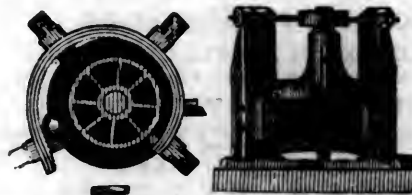
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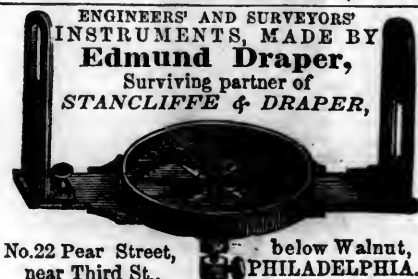
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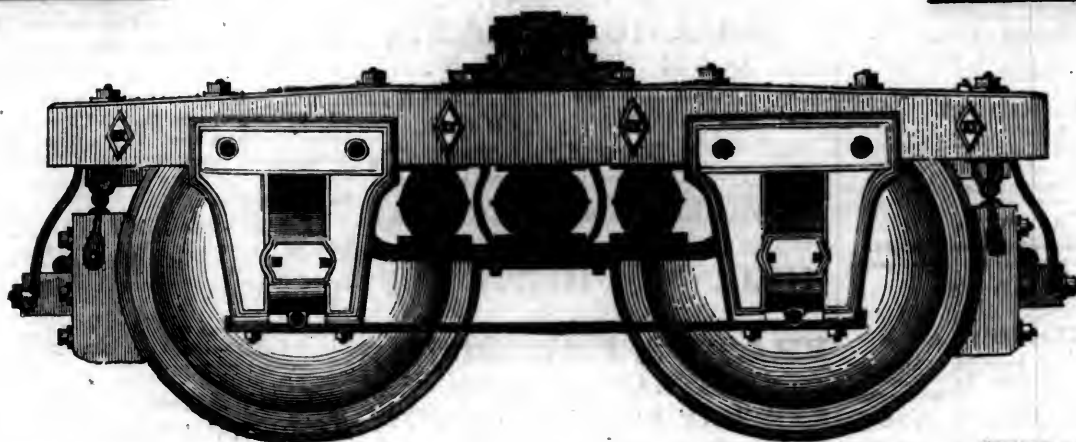
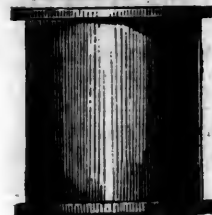


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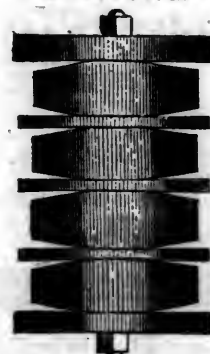


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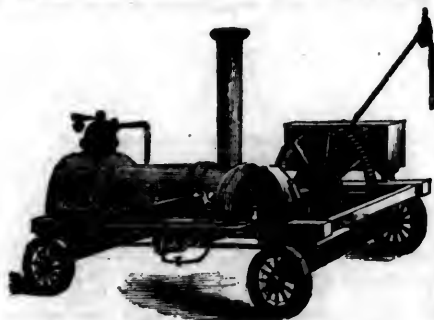


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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, October 15, 1859.

New York and Erie Railroad.

To the Editor of the AM. RAILROAD JOURNAL.

I have no doubt you would, as you state, be content to let the matter of your oft-repeated charges against my administration of the New York and Erie Railroad Company, rest with your last attack in your editorial of the 1st inst. Most advocates of a weak cause would prefer to have the jury give a verdict without listening to the refutation of their arguments—but justice to myself and to the different superintendents of the road, require some answer to your remarks.

You say—"Now for Mr. Moran to call on us to show that any portion of this vast sum of \$838,347 was not properly expended, is a pretty decided piece of impertinence. He had the vouchers, and could have told us how the money was expended, had he chosen to do so. We cannot. Mr. Moran tells us next to nothing, and we have no access to the books and papers of the company. We see, however, that the amount expended upon the track is excessive, and far beyond the average cost of maintaining other roads. The conclusion we come to therefore, is a logical and necessary one—that a portion of the immense sum charged to repairs of track, was thrown away."

Did you ever, sir, during my administration, apply at the office of the New York and Erie Railroad Company for any information in regard to

the company, and fail to obtain it? Did I not, on the contrary, long since, on two different occasions, once in your own office, and another time at the office of the company, offer to furnish you at any time, any and every information you might desire in regard to the company, the road, and its administration; leaving you free to make whatever use of, or comments on, such information, as you might think proper; my only request being, that before publishing attacks on the company or on myself, based on rumors or charges emanating from interested parties, you would first take the trouble to examine into the facts of the case, and hear both sides? Do not the reports of the New York and Erie Railroad Company for 1857 and 1858, furnish all the details of expenditures usually furnished by the best managed roads of the United States?

You call the expenditures on the track of the Erie Railroad "excessive and far beyond the average of roads,"—"enormous," "immense," "vast,"—and you assert that "the wear and tear of the rails" was not made good—"that, as to the ties, this part of the track was only maintained," and that "the number of chairs and spikes stated to have been used could not have exceeded their annual wear,"—"that it is quite certain that, as far as the superstructure of the road is concerned, it was barely maintained the past year." If all this be so, how do you account for the greatly improved condition of the road-bed and track on the day it was transferred to the Receiver, as compared with its condition when I took the management in 1857? Or do you mean to assert that the road is now in the same, or in a worse condition than when it was placed under my charge?

To prove your charge of extravagance in the expenditures, you compare the cost of maintaining track, per mile run, on the New York and Erie Railroad in 1857, '58, with the same cost on the New York Central, Boston and Worcester, Western of Mass., and Boston and Maine Railroads. To those who understand how statistics are used every day to prove the correctness of most erroneous conclusions, it would be needless to answer such an argument; for they know well that correct statistics do not prove the correctness of the conclusions deduced from them; but for the information of the many who will read your remarks without

perceiving the injustice of your conclusions, I will ask whether in your opinion, it is just to compare the cost of maintaining the track of the New York and Erie Railroad with the cost of maintaining the track on four of the oldest and best conditioned roads in the United States, when it is notorious that the New York and Erie Railroad was in so dilapidated a condition that, had not large extraordinary expenditures been made to restore it to a better condition, it would have been unsafe to run trains over it?

One of these four roads, the New York Central, as you well know, has been almost entirely re-laid with new rails and ties since the consolidation in 1853, and all of them are located in districts abounding with good gravel, with which these roads have been thoroughly ballasted, whereas on the New York and Erie road there is no good gravel either on the Delaware or Western Divisions, and but a very limited supply on the Susquehanna Division, all of which are only partially and imperfectly ballasted, and very expensive and difficult to maintain in good condition, as the least rain not only transforms the road bed into liquid mud, but also causes land-slides, the soil being a mixture of clay, shale and quicksand, which even solid stone embankments will hardly sustain.

Neither in your comparison with other roads, nor in your comments or conclusions on the expenditures, do you take the least notice of, or make the slightest allowance for—

1st. That, as stated in the annual report, transportation on all materials for the company's use, had been charged to the several accounts to which they belonged, thus swelling the expenditures by charges not made by the companies with which you compare the expenditures of the New York and Erie Company. The amount thus charged for transportation to repairs of track and road-bed, in the fiscal year 1857-8, is \$67,500.

2d. The expense of taking up, repairing, and re-laying the large quantity of old rails repaired in the fiscal year 1857-8.

3d. The expense of taking up old, and re-laying new rails and ties.

Some idea of the importance of the 2d item may be formed by the fact that the chairs and spikes used in the fiscal year, amounted to 812,856 lbs. and not 333,894 lbs. as estimated by you.

If all these expenditures were deducted from the amount you state to have been expended for adjustment of track, it would very greatly reduce this item.

But when you assert that the repairs of track of the New York and Erie Railroad have been extravagant, you condemn neither myself nor Mr. Headley, the Assistant President; neither of us were responsible for these expenditures, which were left, as they should be, to the control of the Division Superintendents, Hugh Riddle, Esq., on the Eastern and Delaware Divisions; H. B. Smith, Esq., on the Susquehanna Division; and Chas. L. Robinson, Esq., on the Western Division; all men who have spent most of their lives in railroad management, having gone through various departments, and been promoted entirely and solely for their capacity and experience. I do not believe these gentlemen perfect in all things, but I think they will compare favorably with the officers of other roads, and that with the means at their command, they achieved as much as would have been done by other railroad managers under similar circumstances. They all went over every portion of their respective divisions, at least once a week, and my letter book will prove that they were constantly urged to economize, by every possible means consistent with placing and maintaining the road in that high condition indispensable to true economy.

The men in the employ of the company, notwithstanding my constant efforts and my great desire to pay them promptly, were constantly one or two months in arrears in their pay, which undoubtedly prevented the company from obtaining from them the same activity and exertions as if the wages had been promptly paid when due. With this single exception, I think the expenditures on the track of the New York and Erie Railroad produced as great results as those of the other roads of the country.

The report of the Assistant President, which you condemn so strongly, was not penned by him. The data for the report were furnished by the Division Superintendents, and the report itself was written by the chief clerk of the Superintendent's office, John Hilton, Esq., a man respected by all who know him, for his capacity and experience in railroad management, as well as for his long tried and never-faltering probity. Mr. Headley's name was appended to it with his consent, simply because he appeared to be the most proper person to sign the report.

You say—"The road was both inadequately and badly officered. It is here that Mr. Moran comes in for censure. He ought to have had a more competent and efficient staff. It was his fault that he did not."

In answer to this, I assert that the road was as ably and efficiently officered as most of the other roads of the country. But if I am wrong in regard to this, where was I to seek for, where could I obtain, that "competent and efficient staff?" Not certainly among the officers of other roads, most of whom, by a resort to temporary expedients on every emergency, and by the introduction of the various erroneous principles now prevalent in railroad management, have aided in destroying the value of nearly all the roads of the country?

Men, who when reasoned with as to the fatal effects of the erroneous principles introduced into railroad management, invariably answer—"Oh!

your principles are right in theory, but in practice they won't do!" Thus maintaining that railroads *must* be managed on the erroneous principles which have ruined them! How could I look to these men to aid me in carrying out those reforms which I felt were indispensable to the prosperity of any road, not placed in exceptionally favorable circumstances? In selecting Mr. Headley as my assistant, I confess, I was greatly influenced by the fact that he was not a professional railroad man, although his experience on the Morris and Essex Railroad, joined to that acquired in the management of Iron Works in Pennsylvania, and in contracts on public works, led me to believe him fully capable to attend to those matters which would come under his management, and which were of that multifarious nature which is so peculiar to railroad management. On the Division Superintendents I relied for the repairs of track and road-bed, as well as for running the trains, which I believe is now and always has been, the custom on all the great roads of the country.

Great publicity has been given to my views and principles of railroad management, and I have yet to find the first person who will attack the soundness of any of them. The only thing said against them is, that they are unpopular and impracticable. Those principles, I have attempted to carry out in the management of the New York and Erie Railroad, I am convinced with profit to the company, notwithstanding all that has been asserted to the contrary; and I now assert, without fear that Time will prove me a false prophet, that unless these principles are generally introduced into railroad management, there is no hope of restoring value to the railroad property of the United States.

In answer to your charge of impertinence, because I called for the facts on which you based your charges against my administration of the New York and Erie Railroad Company, I might express my opinion of him who publicly condemns another unheard, and without a full and impartial examination into the facts of the case; but as personalities are not arguments, I prefer to allow the public to judge between us from the facts now before them.

Your publication of this communication in your JOURNAL, will be an act of justice, and will be considered a favor by

Your ob't serv't,

CHAS. MORAN.

New York, 11th Oct., 1859.

To Mr. Moran's communication we reply.—

1st. We do not doubt Mr. Moran's willingness to supply such information as we might have applied for; but what we contend for, and always have contended for, is, that the chief executive of a railroad should, of his own motion, lay before the stockholders all the information necessary to the formation of a correct opinion of the value of their property. We are not stockholders, nor do we represent stockholders. Are we to make up the reports of railroad companies? Every railroad company might profess the same willingness, but how are we to obtain statements of the 500 railroads in the United States in their silence? Fifty thousand dollars a year would not do this work. But many companies never make reports of any kind, and will answer no question whatever to an outsider. If there was any enquiry pertinent for us to make, Mr. Moran, in his report, should have

anticipated it. In conversation with him, and in our comments upon his administration, we have asked, "Why don't you make reports similar to those made by the Penn., and Baltimore and Ohio Railroads?" This is all we demanded in this matter. These are the standards we placed before him. They contain nothing that should be omitted. They certainly place the affairs and operations of their respective companies in a much clearer light than do the reports made by Mr. Moran, those of the New York and Erie. In so far as his reports fall short in this particular, he is properly censurable.

But Mr. Moran seems to think it the duty of an editor of a public journal to chase around after all the railroads in the United States to find out what they are doing. We think it is the function of an editor to set at his desk and comment upon such matters as is placed before him, and enforce the discharge of these duties by the managers of our railroads. They are the persons to make clean breasts of their affairs, not to dole out here and there a little isolated information in answer to questions put to them. It was Mr. Moran's duty to come to us, not our duty to go to him. He forgot both his duty and his interest in these matters, and brought himself, unfortunately, into collision with the entire press of the city. It is easy to see how, with his temperament, this was done. Most of our newspapers he, no doubt, held in hearty contempt, and asked no favors of any of them. He would not let their reporters go over any portion of the road to report an accident, without paying fare. The result was, they were all down upon him, and their influence contributed greatly to lessen the business of the road. We think other men would have taken a different course, and that Mr. Moran is justly responsible for the losses which resulted from his own.

2d. Mr. Moran asks—"Do not the reports of the New York and Erie Railroad furnish all details of expenditures usually furnished by the best managed roads in the United States?"

No. Most of the companies furnish detailed statements by the heads of the different departments, showing fully and in great detail how their several departments are conducted. See the reports of the roads already named.—The reports of the Philadelphia, Wilmington and Baltimore, the Pittsburg, Fort Wayne and Chicago, the Wilmington and Weldon, the South Carolina; and in fact nearly every road that undertakes to report at all. Mr. Moran's reports present only general results in a most meagre form. This neglect to make proper reports is the cause of the present controversy. In the present communication he is supplying the omissions in his report for 1858, as we shall soon show.

Mr. Moran complains that we compare the cost of maintaining the Erie Railroad, under his administration, with the New York Central, the Boston and Worcester, and the Western, which he describes as the "oldest and best conditioned roads in the United States." But he seemed to forget that the cost of rails, per mile run, placed upon these roads for the two years past has been twice as great as upon the Erie, as will be seen by the following statement:

New York Central	14.65
Boston and Worcester	16.45
Western	28.85
New York and Erie	9.81

This statement goes to prove that, at least, his road in this particular has been barely maintained. A fair estimate for depreciation of rails for such a road as the Erie, is five cents per mile run. The mileage of the trains upon it for the two years has been 6,000,000, and the depreciation consequently has been equal to 300,000. The total sum expended for the two years was \$291,129 which was \$8,871 less than the actual wear and tear. So with the new ties placed upon the road. These hardly made good the annual decay.

We take it that when Mr. Moran took charge of the road, no portion of it was in so bad a condition as the superstructure. Now, if the sums expended by him upon it did not come up to the average cost of other roads, what reason have we for supposing that he expended for adjustment *twice* the sum annually expended for the same object on other roads. We cannot reconcile such a discrepancy, and in the absence of any sufficient explanation, we cannot resist the conclusion that the expenditure for this object by Mr. Moran was excessive.

We do not doubt that Mr. Moran left the track of the road in better condition than he found it; but it must be remembered that in the two years he expended more than \$1,500,000 upon it, exclusive of rails, leaving it, at the same time, to be inferred that a very large expenditure, equal probably to the amount already expended, was yet required to complete it.

4th. He also tells us that 812,856 lbs. of chairs and spikes were used upon the road the past year, instead of 333,894 lbs. as estimated by us. If such was the case, why did he not state this fact in his report. We gave him the benefit of all he gave. He is now publishing his report for 1858.

In fact Mr. Moran made no report at all for months after the close of the fiscal year, and not then, till repeatedly called upon for one. When we complained of his neglect in this particular, he stated as a reason for not publishing one, the needless expense it would put the stockholders to.

5th. Mr. Moran tells that if an excessive sum was expended upon the track, neither he, nor his assistant were responsible, but the *Division Superintendents*. Mr. Moran claims to have introduced a new system of policy into the management of railroads; but that a principal is not responsible for the acts and competency of his subordinates is certainly the most extraordinary feature of his extraordinary system. It is nothing to him whether they spend \$100,000 or \$1,000,000! What were Mr. Moran's functions? We suppose they were to see that his subordinates, of whom he had the power of instant removal, did their duty. But quite the contrary is the fact. He had nothing to do with their qualifications. If sufficient, well; if not, well, as far as he was concerned.

This mortifying confession opens to us the whole secret of Mr. Moran's administration and failure. There was, as we have always affirmed, no competent head of this concern. Mr. Moran exacted no accountability, because he was ignorant of the duties to be performed. Every man worked on his own hook, and owed responsibility to no person above him. The road was like a ship at sea, in which each officer acknowledged no higher authority than his own will or caprice. It would not be difficult to foretell the fate of such a craft.

6th. Mr. Moran affirms that the road was well officered during his administration. We know extraordinary sums were expended upon it without any adequate visible results; that strikes were of common occurrence; that dissatisfaction generally prevailed. Such was the aspect presented to the public. Were the road properly officered, such a state of affairs, it appears to us, could not have existed. We have no reports from any of the officers, save Mr. Moran, and we are compelled to depend upon negative evidence—adding that the public conviction fully sustains our own.

7th. With regard to Mr. Headly we have nothing to say, except that public opinion was universally against his fitness for the place he held, of which Mr. Moran was often notified. It seems he did not write the report to which his name was attached, but Mr. John Hilton. If so, Mr. John Hilton ought to be heartily ashamed of his performance. The report is a most incoherent, rambling affair, and bears full evidence that the person who wrote it knew nothing of the facts it pretended to tell about.

Mr. Moran tells he selected Mr. Headly because he was not a railroad man. The wisdom of such a rule is inscrutable to us. We presume all of Mr. Moran's selections were made upon the same principles.

8th. Mr. Moran tells us that all our railroads are going to destruction, because *his* policy of management is not adopted, and "that he has yet to find the first person who will attack the soundness of his principles." We have been laboring under the delusion for a long time, that we had been attacking them. It seems that we do not yet understand them. Two of them, it would appear, consists of appointing men without experience to office, and denying all responsibility for their conduct. If he will give us a statement of his principles, we shall be glad to find a place for them, both for our enlightenment and the public welfare.

The Michigan Central Cars at the U. S. Fair.

We copy the following notice of the superior rolling stock exhibited at the U. S. Fair at Chicago, by the Michigan Central road, from the *Times* of that city:

The Michigan Central Company exhibits two locomotive engines, one saloon passenger car, one passenger sleeping car, one drover's sleeping car, and one combination freight car, all of their own construction and build. The saloon passenger car is one of the most elegant arrangements we have seen, and is kept generally for state occasions. It obtains its name from one end of the car being fitted up as a private saloon, with sofas, couches, mirrors, side windows, and all other paraphernalia of a private room. The panels are handsomely veneered with white maple, edged with red beading and highly polished. The other portion of the car is arranged for regular passenger business, except that it is more than ordinarily finished, and presents a rich, luxurious appearance.

The ordinary sleeping car is one taken from its daily work on the road, and is a fine specimen of the excellent and substantial work usually turned out of the hands of Mr. Case, the able supervisor of the construction department of this company. The car is strongly built, well arranged mechanically, and finely furnished. The seats can be changed to couches much quicker than Woodruff's patent, and present the advantages of spring stuffing on the obverse side. This is by no means the smallest item in their superiority. The car is rendered more comfortable by being set on the celebrated six-wheel trucks, one of the latest and best improvements in locomotion.

THE DROVERS' SLEEPING CAR is an entirely new feature with cattle drovers', and must commend this line, as a convenient stock route, very strongly to their patronage. The car is stoutly built and arranged with plush couches, pillows, and other bed-gear for the accommodation of sixteen persons. It has a mirror and wash-stand, and altogether is as comfortable a bedroom as can be met with on a long journey.

THE COMBINATION FREIGHT CAR is one of the best of the many improvements introduced by this company, and displays a close attention to the fundamental principle now sought after in the construction department, viz: economy. Freight cars have for a long time been constructed for distinct classes of freight, so that neither grain nor cattle cars could be used for any other purpose; hence for a considerable period of the year this portion of the rolling stock was kept idle, and large amounts of money expended on what now appears to have been a superfluous work. The Combination Freight Car obviates this classification of cars by the ingenious application of sliding panels, bars, and doors, which can be adjusted in two minutes so as to make a stock, grain or merchandise car, according to the wants of the occasion. With the panels withdrawn, it looks like a cattle car, and *vice versa*; it has the appearance of a grain or ordinary car for merchandise. Not a little of the inventive ability of Superintendent Rice has been displayed in the construction of this valuable arrangement, the results of which have so intimate a bearing upon the account of expenditures, and we most decidedly pay him the compliment of having assisted in the devising of the very best and most economical car extant.

We learn that this new freight car is one of 125 which have been built and placed on the road during the last five months. Their appearance in a full train is greatly superior to that of the ordinary lumbering looking freight cars.

Not a little of this success, however, in the matter of car building, is to be attributed to the policy and forethought of the President of the road, J. W. Brooks, Esq., who, foreseeing the difficulties and heavy expense of obtaining good rolling stock from abroad, and finding his road located in a section of the country where the best timber was at hand, conceived and executed the plan of building extensive shops, in which, since, all the cars of the road have been constructed. Under the able management of S. C. Case, Esq., Master Car Builder, the policy of Mr. Brooks has proved eminently successful. This company also exhibited two locomotives, viz: the "Hecla," a freight engine, and the "Challenge," a passenger engine.

The "Hecla" was built in the company's shops in 1856, and measures as follows: Cylinder, 16x22; diameter of drivers, 4 feet 10 inches; weight 28 tons. She is a powerful engine, and constructed with all the latest improvements.

The "Challenge" was also built in the company's shops in 1854, by S. T. Newhall, late superintendent of motive power. Her cylinder, 16x20 feet; diameter of drivers, 5 feet 6 inches; weight, 26 tons. After being first put upon the track she ran 13 months without losing a trip, making 38,988 miles; an achievement which speaks well for her builder. Both engines made their regular trips on the eastern division of the road, 284 miles to Detroit on Saturday last, taking their place in the exhibition on Monday morning. This circumstance must be borne in mind by the gentlemen making the awards in the locomotive department.

Cincinnati, Hamilton and Dayton Railroad.

The semi-annual meeting of the Board of Directors of this road took place on the 11th inst. A dividend of $3\frac{1}{2}$ per cent. was declared, payable on the 18th inst., out of the earnings of the past six months. The earnings of the road for six months to Sept. 30, 1859, from all sources, were \$263,118 48 Expenses for the same time, including

Interest and Taxes..... 187,342 14

Net earnings..... \$75,776 34

Portland, Saco and Portsmouth Railroad.

The earnings from operations of this road for the fiscal year ending May 31, 1859, were:

From Passengers	\$147,964 29
" Freight	48,607 59
" Mails, express, etc.	11,727 53

	\$208,299 41
The expenses for same time were	104,270 25

Leaving the net income	\$104,029 16
Less dividends paid	90,000 00

Surplus earnings	\$14,029 16
Surplus previous year	40,722 36

	\$54,751 52
Deduct interest due from K. & P. R.R., unavailable	15,986 11

	\$38,765 41
Balance of interest acc't... \$3,090 66	

Charged to improvement account	15,000 00
	\$18,090 66

Less allowed on freight bus- iness to K. & P. R. R. ..	4,200 81
	13,889 85

True surplus amount	\$52,655 26
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Southern Pacific Railroad.

This road was sold, some time since, under execution, and bought in for the stockholders by General Richardson. This purchase rids the enterprise of the previously existing impediments to its success, which have so long retarded the progress of the work. The *Marshall (Texas) Republican*, of the 10th ult., says:

The adjustment of the difficulties between what is known as the "Old Company," represented by Dr. Fowlkes as President, and the "New Company," represented by L. P. Grant as President, are progressing satisfactorily to all parties. Entire unanimity of feeling and understanding exists, and in good faith the whole arrangements will be consummated within the next day or so.

Dr. Fowlkes has made his payment as called for under the compromise of the 6th of April last, and has deposited sufficient means to cover and extinguish the entire indebtedness of the Old Company in Texas. He is actively engaged in settling all and every transaction, open, unliquidated, or due, not only under the compromise, but outside of it. He seeks to free the company, and has abundant means to do so; and our people, the creditors and claimants, are giving him every assistance in their power.

The State suit will be dismissed, and the fullest sanction given to the efforts of Dr. Fowlkes for the freedom of the enterprise and the protection of stockholders of the road, which can be imparted by the laws of the State. Stockholders, therefore, who have contributed their means to aid in the freedom of the enterprise may rely upon full protection.

A final settlement of matters in Texas accomplished, to the satisfaction of all parties, a union between this company and the El Paso Company will be made. The interest of all parties demand such a union, and therefore insure the result.

It is intended, under a re-organization following a final settlement, to elect J. Edgar Thomson President before Dr. Fowlkes leaves Texas; but he does not accept until the settlements are finally completed. This can be speedily done. Dr. Fowlkes believes that within thirty days from the time he can leave Texas he can meet the terms required by Mr. Thomson, and secure his acceptance of the Presidency. This will present a new era in this enterprise. Mr. Thomson has the reputation of being the first railroad man in the Union. He brings to the company an enlarged experience, integrity, vigilance, and the confidence of financial men. Texas will present to him a

heartly and cordial welcome, and facilitate him by all reasonable and proper legislation. If possible, Mr. Thomson will visit Texas, and present to the ensuing Legislature such suggestions of what modifications he deems essential to this railroad improvement.

Dr. Fowlkes, before he leaves here, will resume the work upon the road, and complete at an early day the next section of twenty-five miles. We learn that he has already purchased the iron, locomotive, &c., for this portion of the road.

With the dead weight cut off, the company free from debt, and its property, at a fair cash valuation, greater than the stock issued, it will present a field for capital and enterprise such as cannot be found in any railroad enterprise in the world, and for the reason that there is no other public work possessed of such a munificent franchise and fair prospects for future endowments.

Dr. Fowlkes will shortly issue, we understand, an address to the stockholders and the public, presenting in detail the facts connected with the condition of the enterprise, its prospects, and what he designs to accomplish.

Camden and Atlantic Railroad.

The following is a statement of the business of this road for the first eight months of the years 1858-9:

	1858.	1859.
Gross rec'pts..	\$102,221	\$121,759
Expenses	52,103	53,078
	\$50,118	\$68,681

—showing an increase in the net receipts for 8 months of this year, over the same months of last year, of \$18,563, or 35 per cent.—and showing, also, that the expenses of the road this year are less than 44 per cent. of the earnings. The passenger business of the road during the bathing season for the past four years, is as follows:

	1856.	1857.	1858.	1859.
July	\$22,904	\$20,971	\$27,177	\$32,743
August	21,052	27,657	29,301	37,479
	\$16,956	\$48,628	\$56,478	\$70,222

Wabash Valley Railroad.

At a meeting of the stockholders of this company, held at Toledo, on the 5th inst., the following named Directors were elected for the ensuing year, viz:

A. Boody, John Ross, Isaac H. Knox, B. Wilson, J. B. Varnum, U. A. Murdock, Geo. D. Morgan, and G. F. Taulman, of New York; H. Pumpelly, Albany; W. Colburn and W. Baker, Toledo; R. Brackenridge, Fort Wayne; Geo. Cecil, Logansport; James Spears, Lafayette; W. Kent, Williamsport.

The new Board afterwards met at the same place and elected the following officers of the company for the current year, viz:

A. Boody, President; W. Colburn, Vice President; J. R. Osborn, Treasurer; J. W. Drummond, Secretary and Auditor; G. H. Burrows, Superintendent.

Pacific Railroad.

We are informed from a reliable quarter, that the Pacific Railroad Company have concluded a negotiation with Kirkwood, Porter & Co., by which the latter agree to finish up the work to Otterville—a very difficult and expensive part of their route—and then to surrender their contract to the company. This negotiation secures several very important objects. It provides for the completion of the road across the Lamine—the most difficult part of the line—and it leaves the company a fine country for many miles, over which they can open the road as fast as the iron can be laid. It takes them into the rich agricultural country—where the people can subscribe money enough, if they choose, to finish the road in their borders. Work can be commenced at Kansas City, and pushed to the

east, and in this enterprise they will be greeted half way.

The abrogation of the contract relieves the company from the embarrassment which was too apparent last winter, during the session of the Legislature, and leaves the opponents of the road without a pretext for refusing aid which, otherwise, they professed a willingness to grant. At the same time, we have to say, that the surrender of the contract has been made in a good spirit, and upon very liberal terms, and we hope that no further opposition will be made to the completion of the road.—*St. Louis Republican*, Oct. 5.

Mobile and Ohio Railroad.

We are much gratified to announce to our readers that Hon. Milton Brown, President of the Mobile and Ohio Railroad, who is now here, has, with the concurrence of the Directors, closed a contract for the completion of the road to the Tennessee line, on the most favorable terms.

The contractors are Messrs. Eli Abbott, J. O. Abbott and L. J. Whitfield, backed by strong guarantees. The known energy and enterprise of the contractors give every assurance of the completion of the work by the 31st of December, 1860, as required by the contract, and as the work is to be finished in Tennessee, will be, if anything, in advance of this, we may hail it as a fixed fact that the Mobile and Ohio Railroad will be completed and the cars running through to the mouth of the Ohio by the 1st of January, 1861.—*Mobile Tribune*.

Journal of Railroad Law.

LAW OF BAGGAGE EXPRESSES.—HOW FAR LIABLE AS COMMON CARRIERS.

Every traveler has been made acquainted with the so called "Baggage Expresses," which have lately sprung into existence in connection with the railroad lines, in all our large cities. The baggage express man enters the train a half hour or so before its arrival at the depot in the city, and canvasses the cars for customers. He receives from them the checks for trunks, etc., which they have received at starting, from the baggage master of the company, and undertakes, at certain rates of compensation, to get the various articles which the checks represent, at the end of the journey, and to deliver them at the travelers' residence or hotel.

A case lately determined in Pennsylvania drew in question the rules of law applicable to these Baggage Expresses.

The facts of the case were as follows. The defendants were proprietors of a line of omnibuses which run to and from the various railroad depots and hotels of the two cities, carrying passengers, baggage, and the customary articles of freight for hire. In December, 1856, Henry Heidegger came from New York to Pittsburg by railroad, having in his possession two trunks belonging to the plaintiff, for which he received checks from the Pennsylvania Railroad company. As the train approached the city of Philadelphia, an agent of the defendants came in the cars soliciting checks for baggage, and received from Mr. Heidegger his checks, promising to deliver the trunks at the St. Charles Hotel. One of them was delivered, but the other was not, nor was the check returned, or any account whatever given of the lost trunk. This latter trunk contained a valuable stock of fancy dry goods, together with a few brushes and other articles, such as are usually carried by a person upon a journey.

The plaintiff brought the action to recover the value of the trunk and its contents. The defendants contended that they were not responsible for the articles of merchandise, because they were

not common carriers of freight, but only of passengers and such baggage as is necessary or convenient for persons on a journey.

The plaintiff gave evidence tending to show that the defendants were in the habit of carrying for hire all trunks, boxes and packages brought, or carried by the railroad company in their baggage car attached to the passenger train, for which checks were given to the passengers, to and from the different hotels and depots in the two cities, that their agent was requested to take care of these trunks as they were valuable, and that he promised to do so.

The defendants offered no evidence to show what had become of the trunk, or whether they had taken even the slightest care of it—whether it was lost, stolen or embezzled by their servants or employees. Their defence rested chiefly, if not entirely, on the ground that they were not responsible, because the contents were articles of merchandise.

The jury were instructed *pro forma*, that if they believed from the evidence that the trunk and its contents belonged to the plaintiff, and that the custom of the defendants was to carry for hire all trunks, boxes or packages brought by the railroad company in their baggage car attached to the passenger train, and for which checks were given to the passengers; and if their agent undertook for a certain sum to carry the trunk in question from the depot to the St. Charles Hotel—received the check therefor, and failed to deliver the trunk according to his contract, or to return the check to the holder, in order to enable him to claim the same from the railroad company, or to account for its loss, they were liable in this action. And the court reserved the question of law for the determination of the court *in bono*, whether or not the defendants were responsible for the articles of merchandise contained in the trunk.

The jury found a verdict for the plaintiff for the value of the trunk and its entire contents, subject to the opinion of the court on the question of law reserved.

The following was the opinion of the court on this question.

HAMPTON, J.—“Although the defendants are not to be regarded as common carriers of freight, the fact is established by the verdict, that they are accustomed to carry such articles as are carried in the baggage car of a passenger train, for which checks are given by the company. By this custom they constituted the railroad company their agents, *pro hac vice*, and rendered themselves responsible for all trunks, boxes or packages received from the company on checks given to the passengers, unless fraud be shown, or a limitation of their liability by special contract.

But if this were not so, here was a special contract to deliver this particular trunk at the St. Charles Hotel, for a certain sum paid at the time, which would constitute the defendants special bailees for hire, and bind them to the specific performance of their contract, or subject them to the payment of damages for its breach, unless a sufficient excuse be shown for their failure; but no excuse is shown, no reason assigned, no evidence tending to prove that they made the slightest effort to comply with their agreement. They fold up their arms and say in effect, ‘true, we received your trunk and agreed to deliver it to you at the

St. Charles Hotel, but refuse to do so because its contents are different from what we supposed.’ Such a defence, if admissible, would open the door to the grossest frauds.

A bailment, according to Blackstone, is ‘a delivery of goods in trust, upon a contract express or implied, that the trust shall be faithfully executed on the part of the bailee; or, according to Story, ‘a bailment is a delivery of a thing in trust, for some special object or purpose, and upon a contract express or implied to conform to the object or purpose of the trust.’

The case falls clearly within one of the classes of bailments recognized in the books, and the law imposes on the bailees the just responsibility of their undertaking. They were bound to perform the object of the trust, or show a sufficient reason for their non-performance; neither has been attempted; no account whatever has been given of the goods bailed. The agent who could have shown what became of the trunk, is not called, nor his absence accounted for, nor any attempt made to explain the cause of the loss. Under such circumstances, it is difficult to perceive by what rule of justice or morality the defendants should be allowed to escape from all responsibility.

We are both of opinion, therefore, that the plaintiff is entitled to judgment on the question reserved.”

The defendants took an appeal from this decision to the Supreme Court of Pennsylvania; but that court decided that the decision was correct and should be affirmed. The following were the reasons assigned for their decision.

CHURCH, J.—There are two kinds of carriers for hire recognized by law, the one designated as private, the other public or common carriers. The former are bound to use ordinary diligence, that is, such diligence as every prudent man usually takes of his own goods under the like circumstances, and are consequently only responsible for losses resulting from ordinary negligence. The latter are generally liable to answer for all losses, except those occasioned by the act of God, or of the public enemies. This responsibility, imposed by law upon common carriers, is derived principally from the public character of their employment, and is not avoided by any given degree of diligence shown on their part. The plaintiffs in error, with respect to the property in question, undoubtedly belong to one or the other of this class of bailees.

It was indicated very properly, in the case of *Harrington vs. McShane*, that the usage of trade and business, in particular localities, has much to do with fixing the liabilities in these sorts of bailments. And the same doctrine is further developed in *Gordon vs. Hutchinson*, where the principle of the case of *Gisbourn vs. Hurst*, that one who undertakes for hire, to carry for all persons indifferently, who may employ him, is a common carrier, as to the privileges, is fully recognized; and the adjudication made, that a wagoner who carries for hire, is one also as to the responsibilities, whether transportation be his chief business, or only an occasional and incidental employment. The readiness to carry for *all who will employ* gives the character to the bailment rather than the extent of his business, or the number of trips performed.

“In view of these plain deductions from the leading cases on the subject, of what constitutes a common carrier, and distinguishes his liability, we are unable to perceive any material error in the charge of the court below, in the omission to instruct the jury as requested by the defendants there, or in the opinion on the question, reserved at the trial. The language of the learned judge, in the first paragraph of the charge, is very clear and explicit, and does, in reality, substantially cover the whole case presented in the evidence. And it is as favorable to the plaintiffs in error as they had any right to demand. The very peculiar circumstances of the bailment are of recent origin, but the common law is believed to be sufficiently extensive to meet the exigency.”

“It was not essential, on the trial, to instruct the jury specially on the question, whether the plaintiffs in error were common carriers of freight generally, in the usual acceptance of the term. The Court did not do it, nor were they so requested. The question was one of law rather than of fact, and hence the omission is not a proper subject of complaint here.”

“If it was the custom of the defendants below to carry such property as this, in the manner and under the circumstances submitted by the court, and found by the jury, and if they actually did undertake so to do in this case, the law implies the liability. This implied liability, however, may be qualified by express contract or general notice. But the *onus* of proving it, is on the party setting it up. And even such qualification of liability is not absolute, but subject to exception and reasonable restriction, and it has been adjudged that proof of general notice of limitation of liability, must be such as amounts to actual notice, or shown to have been so conspicuous that the party sought to be effected by it, could not have failed to discover it without gross negligence, the affirmative of which is upon the carrier, and that emblazoning the general object on a check, ticket or notice, like the one used here, in large letters, but stating the restrictions in small ones, is insufficient.”

“But suppose this alleged notice fully brought home to the owner of the goods, or to his agent intrusting them, which is equivalent, the effect is no more than to render the bailees private carriers for hire; and in absence of all proof of the circumstances of the loss, they would be liable.”

“In the present case, we have an express contract on behalf of the carriers to deliver both trunks, after the caution given respecting their value. And the less valuable of the two being alone delivered, and no proof, or even allegation, made of a reason for the non-delivery of the other, according to the doctrine fully recognized and affirmed in the cases last cited, they are subject to the imputation, that it is either yet in their possession, or has been embezzled by their agents or servants. The fact of non-delivery, under the circumstances proved in the case, is *prima facie* evidence, at least, of want of ordinary care. And such is said by Chief Justice Savage, would be the rule, even when the bailment is gratuitous on the part of the bailee, or for the sole advantage of the bailor.”

“This case was, therefore, properly determined upon the facts, whether we consider the defendants below as private or common carriers.”

Philadelphia and Reading Railroad.
Statement showing the operations of the Philadelphia and Reading Railroad for the 10 years ending November 30, 1888.

1. TABLE showing the cost of construction and equipment, and the sources of capital.

Years.	Mileage.		Cost of property.		Sources of capital.		Cost per mile of railroad.											
	Main road and branches.	Second track.	Total trackage incl. sideings and turn-outs.	Railroad.	Locomotives, engines & cars.	Depots.	Real estate.	New works and equipm't within the year.	Total cost of property incl. telegraph.	Share capital paid-up.	Funded debt.	Bonds & mortgages on real estate.	Railroad.	Locomotives & cars.	Depots.	Real estate.	New works, etc.	Total cost of property per mile.
1849.....	95	95	224	\$18,350,521	\$2,276,576	\$305,324	\$168,664	.....	\$16,318,087	\$6,518,432	\$9,596,700	\$209,900	\$140,532	\$23,968	\$2,161	\$5,112	.....	\$171,765
1850.....	95	95	225	18,350,521	2,276,576	212,386	485,837	.....	16,326,532	6,086,532	10,078,600	210,200	140,532	23,968	2,255	5,114	.....	171,845
1851.....	95	95	226	18,350,521	2,276,576	212,386	485,837	\$324,183	16,649,613	6,105,832	10,000,809	210,100	140,532	23,968	2,255	5,114	.....	171,845
1852.....	98	98	242	18,674,705	2,276,576	212,386	485,837	432,472	17,141,987	6,656,332	10,058,800	389,000	140,532	23,968	2,255	5,114	.....	171,845
1853.....	98	98	245	18,794,705	2,432,609	226,061	688,721	763,081	17,906,018	7,472,332	9,243,000	488,808	140,763	24,821	2,306	7,028	7,786	182,704
1854.....	98	98	250	14,004,269	2,533,072	257,101	1,091,791	569,096	18,464,114	8,219,672	9,219,000	308,800	142,901	25,868	2,023	11,140	6,705	188,408
1855.....	98	98	252	14,197,978	2,791,716	282,242	1,192,176	540,065	19,004,180	10,889,997	6,934,000	504,800	144,877	28,486	2,880	12,167	6,510	193,920
1856.....	98	98	256	14,858,909	3,073,105	330,920	1,226,873	158,971	19,166,151	11,330,541	6,648,000	501,950	146,468	31,358	3,377	12,519	1,622	196,542
1857.....	98	98	259	14,423,418	3,101,542	371,064	1,246,946	99,569	19,262,720	11,375,541	6,593,000	504,450	147,178	31,648	3,786	12,724	1,016	196,558
1858.....	162	98	320	14,442,432	3,121,049	399,246	1,279,843	4,539,170	23,811,910	11,737,041	11,679,500	510,450	95,016	20,533	2,626	8,420	29,929	156,657
Average.....	102.5	97.1	250.6	138,942,470	26,161,267	2,709,186	8,669,525	7,436,577	184,046,012	86,331,952	90,060,400	4,024,450	1,378,827	257,833	26,396	84,296	60,005	1,807,568
				13,894,297	2,616,126	270,913	866,952	748,657	18,404,501	8,633,175	9,006,040	402,445	137,833	25,783	2,639	8,429	6,000	180,757

2. TABLE showing the cost of repairing and operating the road, rolling stock, etc.

Years.	Miles run by locomotives with trains.	Number of passengers.	Tons of freight and coal.	Passenger traffic.	Freight traffic.	Coal traffic.	Total, incl. mails, rents, etc.	Fuel, oil, etc., and cost of operating.	Repairing of locomotives & cars.	Repairs of roadway, etc., etc.	Dumpage.	Total, incl. superint'd'ce & other charges.	Grand total including renewal fund expenditures.	Net earnings after pay'g renewals, repairs & operating expenses.	Interest on debt.	Cash divid'ds on share capital.	Applied from net earnings.
1849.....	1,074,014	4,516,968	240,015,979	\$155,908	\$106,347	\$1,648,900	\$1,933,560	\$97,517	\$235,289	\$128,453	\$75,536	\$949,540	\$1,027,135	\$906,455	\$573,108	\$168,625	
1850.....	1,238,144	4,236,796	227,108,427	148,879	125,821	2,071,731	2,363,968	434,160	261,666	154,780	89,743	1,080,323	1,249,114	1,114,784	613,266	381,646	
1851.....	1,461,772	5,471,385	322,749,118	162,431	123,073	2,018,070	2,314,330	498,671	272,827	160,668	98,842	1,188,936	1,306,467	1,008,863	606,684	378,862	
1852.....	1,517,931	6,401,406	370,625,798	168,430	138,963	2,150,677	2,480,626	482,101	281,851	192,181	98,851	1,228,639	1,317,809	1,163,317	613,428	375,937	
1853.....	1,466,894	8,524,507	356,680,770	225,763	180,612	2,254,694	2,688,287	457,040	296,348	178,480	87,470	1,222,637	1,357,821	1,380,466	671,914	281,660	
1854.....	1,674,403	9,680,292	433,265,881	272,367	231,626	3,263,823	3,781,639	592,797	493,146	220,209	105,125	1,641,212	1,851,153	1,380,455	675,292	108,626	
1855.....	1,948,225	10,287,636	498,274,939	301,952	325,851	3,664,094	4,321,793	620,639	482,264	285,643	119,021	1,973,087	2,348,756	604,027	414,760	188,626	
1856.....	1,942,817	9,770,860	482,274,939	286,427	348,699	3,242,468	3,913,742	569,609	489,583	324,168	130,939	1,824,356	2,089,908	1,823,888	424,431	547,337	
1857.....	1,707,866	9,847,686	400,027,387	287,534	329,986	2,412,923	3,065,521	497,834	399,649	266,687	12,103	1,481,746	1,697,773	1,367,748	419,466	594,051	
1858.....	1,570,432	9,615,728	366,844,285	272,679	335,915	1,865,693	2,510,751	401,229	293,866	223,309	.....	1,199,798	1,370,006	1,140,744	739,701	108,624	
Average.....	1,599,648	7,835,214	3,775,633,920	2,273,870	2,246,893	2,468,066	2,937,433	4,928,497	3,455,488	2,144,328	817,190	13,544,964	15,238,778	14,136,157	5,641,317	8,365,028	
	1,559,654	7,835,221	3,775,633,920	2,273,870	2,246,889	2,468,066	2,937,433	4,928,497	3,455,488	2,144,328	817,190	13,544,964	15,238,778	14,136,157	5,641,317	8,365,028	

The above table reduced to the mileage performed by locomotives with trains—the products being in cents and decimals.

1849.....	14.62	9.90	153.52	180.08	36.33	21.99	11.96	7.03	88.41	95.63	84.39	53.36	15.23
1850.....	12.03	10.20	138.06	158.32	35.20	21.22	12.48	7.28	87.61	101.30	60.40	49.74	29.37
1851.....	10.43	8.42	138.06	158.32	33.77	18.66	13.98	6.77	81.33	89.31	69.01	41.50	27.97
1852.....	11.09	9.15	141.68	163.42	31.76	18.67	13.81	6.48	80.94	86.73	76.63	40.41	24.76
1853.....	15.39	12.31	153.70	183.26	31.15	20.12	12.16	6.96	83.34	92.56	90.70	37.19	19.19
1854.....	16.27	13.88	194.33	225.85	35.40	22.46	13.15	6.28	98.02	110.55	115.29	34.35	6.48
1855.....	15.49	16.72	188.07	221.83	31.85	22.19	14.66	6.11	88.68	101.27	120.55	25.87	21.29
1856.....	14.85	17.95	188.07	201.48	29.32	25.21	16.61	6.68	93.89	107.55	93.92	21.80	28.19
1857.....	16.84	14.32	141.32	179.54	29.15	23.41	15.61	0.71	86.78	99.44	80.10	24.57	34.79
1858.....	17.36	21.39	118.76	159.87	25.54	18.71	14.22	.....	76.39	87.25	72.51	47.10	6.91
Average.....	14.42	13.91	156.44	186.30	31.84	21.94	13.52	6.33	86.39	97.16	89.36	37.58	21.42

Cincinnati Stock Sales.
By KIRK & CHEEVER.

For the week ending October 11, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6s.....	85
Covington and Lexington, 2d Mortgage..	7s.....	60
Ohio & Miss. R. D., Construction ..	7s.....	25
Cinc., Ham. and Dayton, 2d Mortgage ..	7s.....	84
Indianap. & Cincinnati, do. do.	7s.....	82
Do. do. Dividend	6s.....	65
STOCKS.		
Cincinnati, Hamilton & Dayton	70	
Columbus and Xenia	84	
Indianapolis & Cincinnati	50	
Little Miami	80%	

Railroad Earnings.

The business of the Illinois Central Railroad for September, 1859, was as follows:

Land Department.

Acres Construction Lands sold	1,877.45	for	\$22,392 18
Acres Interest Fund Lands sold	160.00	"	3,483 20
Acres Free Lands sold ..	800.00	"	11,910 40

Total sales during the month	2,337 45	for	\$37,785 78
To which add Town Lot sales			50 60

Total of all

Acres sold since Jan'y 1, 1859	22,526.06	for	\$337,635 65
Acres sold prev'ly ..	1,229,835.33	"	15,637,148 95

Total

Construction Bonds canceled in Sept., 1859		\$32,000 00
Construction Bonds canceled previously		1,165,000 00

Free Land Bonds canceled in Sept., 1859

Free Land Bonds canceled previously

152,000

166,000 00

Total Bonds canceled up to Sept., 30, 1859

Cash receipts in Sept., 1859

Do. since Jan'y 1, 1859 ..

Total cash and bonds received to Sept. 30, 1859

\$3,093,400 62

Traffic Department.

Receipts from passengers	\$99,252 65
Do. freight	126,852 00
Do. mails	6,358 23
Do. rent of road	5,233 00
Do. other sources	4,339 14

Total receipts in September, 1859 ...

Do. do. 1858 ...

Do. since Jan'y 1, 1859 ...

Do. do. 1858 ...

Original land grant, 2,595,000 acres; railway,

706 miles of main track, and 87 miles of sidings;

113 engines; 2,401 cars; funded debt, \$18,683,-

000; share capital, \$60 paid on 175,000 shares—

\$10,500,000.

1856. 1857. 1858.

Traffic ... \$2,434,878.59 2,293,964.57 1,976,578.52

Work'g ex-
penses . 1,444,546.19 1,791,231.14 1,419,951.80

Balance ... \$990,332.40 \$502,733.43 \$556,623.72

The following is the statement of the September

earnings of the Hannibal and St. Joseph Railroad:

From Passengers

From Freight

Mail and express

Total

Operating expenses for the month ...

Net earnings

The earnings of the Michigan Southern Railroad company, during the month of September were as follows:—

	1859.	1858.
Passengers	\$73,638 28	\$101,298 80
Freight	93,909 69	104,937 30
Mails	4,435 56	4,485 62
Express and miscell's ..	9,149 95	14,054 25

Total

Decrease

The earnings of the Chicago, Burlington and Quincy Railroad for September were as follows:

	Galesburg & Quincy.	Chicago & Burlington.
Freight	\$13,664 54	\$105,244 13
Passengers	11,086 86	47,075 31
Mails and miscellaneous ..	858 93	2,147 43

Total

25,610 37

Total earnings, 310 miles

Total earnings for September, 1858 ..

Increase in 1859

The earnings of the Galena and Chicago Union Railroad, for the month of September, were:

	1858.	1859.
Freight	\$110,896 23	\$149,697 65
Passengers	46,008 92	58,062 63
Mails, etc.	5,044 98	4,500 00

Total

Increase

Corrected earnings for the previous month

The following is a statement of the earnings of the New York Central Railroad, for the month of September, 1859, compared with its earnings for the corresponding month of the previous year:

September, 1859

1858

Increase

The earnings of the Toledo, Wabash and Western Railroad for September, were as follows:—

	1859	1858
Passengers	\$22,149 92	49,222 51
Freight	49,222 51	3,316 66
Mail and express		

Total

The net receipts of the New York and Harlem Railroad company for September are as follows:

1859	\$97,218 62
1858	84,833 21

Net increase

The receipts for the year are as follows:—

1859

1858

Increase

The earnings of the Milwaukee and Mississippi Railroad for the month of September were:—

1858

1859

Decrease

The earnings of the Little Miami and Columbus and Xenia Railroads, for September, 1859, were about

September, 1858

Increase, 1859

The total traffic on the Grand Trunk road from July 1, to September 30, 1859, was ..

Traffic for the same period last year ..

Increase

The earnings of the Norwich and Worcester Railroad in September were as follows:—

	1859.	1858.
Passengers	\$17,084 87	\$15,352 40
Freight	19,731 52	16,481 98
Totals	\$36,816 39	\$31,837 38
Increase		4,979 10

The earnings of the Michigan Central Railroad for the month of September were:—

	1858.	1859.
Passengers	\$113,082 67	\$93,594 88
Freight	105,489 95	111,751 36
Miscellaneous	6,601 88	5,491 16
Totals	\$224,574 50	\$210,837 40
Decrease		\$13,737 10

American Railroad Journal.

Saturday, October 15, 1859.

Philadelphia and Reading Railroad.

We give on the preceding pages elaborate statements, showing the operations of this road for a period of ten years.

The results obtained are a very valuable contribution to the science of railway economy. The chief source of income to the road has been from the carriage of coal at very low rates. The amount of tonnage has been sufficiently large to allow the cost of transportation to be reduced to the lowest possible limits. There is no doubt that, on the whole, the operations of the road have been conducted with a great degree of economy. The increased cost of the main line during the period covered, has been \$2,944,659; (exclusive of the Lebanon Valley Railroad, which has cost \$4,549,170), of which \$1,091,911 has been for track; \$855,443 for machinery; \$829,179 for real estate, and \$193,922 for stations. The total ratio of increase of the construction account has been 18 per cent., while that of the gross earnings on the average has been 52 per cent.

Of the total receipts of \$29,374,237, for the 10 years, \$24,583,063 has been from coal, and \$4,520,763 from merchandise and passengers. The yearly average from the latter sources has been only \$452,007.

The annual tonnage over the road has equalled 377,563,399 tons carried one mile, while the largest movement on the Erie Railroad was 165,000,000 tons, and the New York Central 145,000,000 tons. The track of the Reading is only 98 miles, against 496 for the New York and Erie, and 556 for the New York Central. The freight traffic of the Reading consequently has been 15 times greater per mile than the Central, and 11 times greater than the Erie.

The average cost of running the road for the 10 years has been 86.53 cents per mile. Of this sum, 18.45 cents went for fuel; 2.85 for oil, tallow and waste; 10.18 for conductors, engineers and firemen; 9.14 for repairs of locomotive engines; 11.23 for repairs of freight and coal cars; 0.72 for passenger cars; 0.84 for repairs of stations; 13.80 for repairs of railway, including renewals, 1.07 for bridges and buildings; 4.85 for renewals of iron; 3.00 for station expenses; and 5.47 for office and station expenses.

The cost of repairs of track has been remarkably low, averaging about 20.94 cents as follows: repairs of track 8.80; iron 4.85; buildings and bridges 1.07; stationary machinery, etc., 1.10;

renewal fund 5.00. The total expenditure from this fund was equal to 10.62 per mile run, but a small portion of it, or about \$150,000, was expended for renewals of engines and cars. The amount expended on the track, considering the enormous tonnage of the road, has been very moderate.

The cost of repairs of engines and cost of fuel have equalled 22.59 per mile run, which is also very low for these items. The substitution of coal for wood necessarily increases the amount of repairs.

The cost of repairs and maintenance of track, and repairs of engines and cost of fuel, have equalled 43.54 per mile run, or almost exactly one half of the total cost of operating the road. The cost of these items, compared with those on several leading roads, have been as follows—

New York Central.....	55.41
New York and Erie.....	44.84
Hudson River.....	57.14
Galena and Chicago.....	48.52
Western.....	52.87
Boston and Worcester.....	50.90
Cleveland, Columbus & Cincinnati.....	36.31
Philadelphia and Reading.....	43.54

The cost of maintenance of the Reading has been considerably lower than any of the roads named, with the exception of the Cleveland, Columbus and Cincinnati; although the amount of tonnage moved per mile has been all the way from 11 to 30 times greater per mile of road. The coal trains, on an average, take 421.7 tons of 2,240 lbs. each, of useful load. The actual cost of the round trip of 190 miles for coal trains for the past year is stated as follows:

Wages of Engineers, 2 days.....	5.80
Wages of Firemen, 2 days.....	3.50
Wages of Conductor, 2 days.....	3.30
Wages of brakemen and signalmen, 2 ds.....	7.95
Cost of coal for fuel.....	18.18
Cost of oil, waste and tallow.....	6.56
Repairs of engine and tender.....	18.05
Repairs of coal cars.....	26.43
Supplying water.....	96
Wood for kindling.....	1.84
Assistant engines, etc., etc.....	5.06
Car couplers, dispatchers, turning crews.....	7.59
Contingent expenses.....	19.76

116.98

Which was equal to 27.74 cents per ton for the whole length of the road, or equal to 2.86 mills per mile, or to 1.43 mills per mile for the round trip. The average cost of transporting coal over the whole road for the 10 years, has been 36.69 cents, which is equal to 3.86 mills per ton per mile, or of 1.93 mills per mile for the round trip. The expenses the past year were slightly lower than for any previous year.

The data given possesses the greater value from the length of the period covered—10 years. The road was fully opened for business early in 1842, seven years previous to the period embraced. As a statement for the 17 years would have presented results much more favorable, it is probable that the cost of repairs and maintenance of track and machinery for the 10 years past has been fully up to the annual depreciation. There have been placed upon the road in the meantime in repairs 27,403 tons of rails, equivalent to 274 miles of track. The average length of track, excluding the Lebanon Valley, including sidings, has equalled 245 miles, showing the track to have been entirely relaid in the 10 years, and a portion of it the second time.

Chicago and Rock Island Railroad.

The earnings of this road for the fiscal year ending June 30, 1859, were as follows:

From Passengers.....	\$399,144 77
" Freight.....	450,245 95
" Mails, etc.....	39,909 32
	\$889,300 05

And the expenses for the same time were:

Salaries of ag'ts and cl'ks.....	\$64,072 87
Books, printing, stationery, &c.....	6,588 85
Station house expenses.....	16,002 09
Labor, handling freight.....	68,167 69
Conductors, baggage and brakemen.....	22,763 86
Engineers and firemen.....	32,413 41
Fuel account.....	81,459 47
Oil, tallow and waste.....	12,011 74
Contingent account.....	13,041 18
Rep'r's of eng'n's and t'd'r's.....	34,669 28
Repairs of cars.....	29,360 06
Repairs of road-way and track.....	87,129 77
Cost of iron for repairs.....	43,920 04
Repairs of fences and gates.....	1,894 84
Repairs of bridges and draws.....	7,266 88
Repairs of buildings and fixtures.....	6,571 43
Exchange, interest and discount.....	4,341 19
Loss and damage.....	5,993 28
	537,667 93

Net earnings.....	\$351,632 12
Interest on bonds.....	\$97,790 00
Rent of Peoria branch.....	125,000 00
Taxes on real estate.....	36,157 15
	258,947 15

Balance of income acc't for the year.....	\$92,684 97
Balance of income acc't July 1, 1858.....	537,453 37

Present balance at credit of income account.....	\$630,138 34
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The equipments of the road consists of 58 first class locomotives, 33 first class passenger cars, 8 second class passenger cars, 1 paymaster's car, 4 mail and express cars, 11 baggage cars, 492 box freight cars, 105 cattle cars, 100 platform (coal) cars, 205 platform cars, 48 hand (repairs) cars, 10 four-wheel gravel cars.

The number of loaded freight cars passing east during the year, was 2,696; passing west, 5,178. 7,874 cars passed over the road.

The statement of the number of boats and rafts passing the draw of the railroad bridge at Rock Island, from June 30, 1858, to June 30, 1859, represents 601 boats passing north, 606 boats passing south, 475 rafts passing south; being a total of 1,682.

The number of foot passengers passing Mississippi River Bridge, April 2 to June 30, inclusive, was 18,569 going eastward, and 19,189 going westward; total, 37,758.

The tonnage crossing the Mississippi River Bridge from June 30, 1859, was as follows:

Going West.....	72,734,295 tons.
Going East.....	33,620,448 "

Total.....106,354,748 "

The employees on the road have numbered from 978 to 1,098. When numbering 978 their wages amounted to \$27,566 49. Latterly, when numbering 1,098, their wages amounted to \$26,032 07.

The freight transported on the Chicago and Rock Island, and Peoria and Bureau Valley Railroad for the year, was 402,185,706 lbs.; whole number of

loaded cars running westward, 13,784; whole number of loaded cars running eastward, 13,527; total 27,311; average tonnage to each loaded car, 7.724 tons.

Number of first class passengers.....	231,562
Number of second class passengers.....	2,063 1/2
Number of emigrants.....	2,079 1/2
Number of passengers carried 1 mile.....	13,314,141
Number of passengers moving west.....	119,833
Number of passengers moving east.....	116,372
Number of way passengers.....	204,213 1/2
Number of through passengers.....	31,491 1/2

The arrangement with the Illinois Railroad Company is to continue in force for 20 years from Sept. 1, 1859.

The Balance-Sheet of the company for the year ending July 1, 1859, is as follows:

CREDIT BALANCES.

Capital stock account.....	\$5,603,000 00
Mortgage bonds.....	1,397,000 00
Unpaid dividends.....	492 50
Northern Indiana R. R. Co. unadjusted balance.....	5,158 00
Profit, balance of income account.....	630,138 34
Total.....	\$7,635,788 84

DEBIT BALANCES.

Cost of road and equipment.....	\$6,776,118 58
Land damages and real estate for additional station grounds, including new side track.....	53,407 26
Railroad Bridge Company.....	155,268 90
Illinois and Mississippi Telegraph.....	13,785 52
Sinking fund.....	42,000 00
Sundry small balances.....	5,231 62
1,015 shares Chicago and Rock Island Railroad Company.....	101,500 00
Stock of fuel on hand.....	117,015 95
Iron and other materials on hand.....	91,535 24
Balances due from other roads and cash in Cashier's hands, Chicago.....	161,546 47
Cash in hands of E. W. Dunham, Treasurer.....	118,379 30
Total.....	\$7,635,788 84

The income account is as follows:

July 10, 1859—To paid interest on bonds.....	\$48,896 00
Aug. 1, 1859—To paid 6 months' rent Peoria Branch.....	62,500 00
Jan. 10, 1859—To paid interest on bds.....	48,895 00
Feb. 1, 1859—To paid 6 months' rent Peoria Branch.....	62,500 00
June 30, 1859—To paid operation expenses for year.....	573,825 08
June 30, 1859—Balance.....	630,138 34

Total.....	\$1,426,753 42
July 1, 1858—By balance to credit of income account.....	\$537,453 37
June 30, 1859—By passenger earnings to date.....	399,144 77
By freight earnings.....	450,245 95
By mail earnings.....	21,200 00
By other sources.....	18,709 33

Total.....	\$1,426,753 42
July 1, 1859—By balance to credit of income account.....	\$630,138 34

Ohio and Mississippi Railroad.

The Cincinnati Enquirer thus speaks of the new bridge on this road over the mouth of Mill Creek, just completed by "The McCallum Bridge Co."

The bridge is an elegant and powerful structure, of the McCallum patent, of two spans, one of 217 feet and the other of 159 feet in length. Bristow & Co. are the builders, Boyle & Co. contractors for the stone work, and Stengle & Woodworth the engineers. The cost of the bridge was about \$50,000, J. W. Alsop, Esq., the President, furnishing the funds.

New York and Erie Railroad.

The following propositions for maintaining the mortgage securities, unsecured bonds and capital stock of the New York and Erie Railroad Company, have been suggested by the English delegation of Bond and Stockholders, after frequent and free conference with the leading friends of the property on this side:

The payment of 1st mortgage coupons to be resumed May 1, 1860. One year's arrears at that date to be paid, as per statement below. Amount of arrears.	\$210,000
The payment of 2d mortgage coupons to be resumed Sept. 1, 1860. One year's arrears at that date to be paid, as per statement. Am't of arrears.	280,000
The payment of 3d mortgage coupons to be resumed March 1, 1861. 18 month's arrears at that date to be paid, as per statement. Amount of arrears.	630,000
The payment of 4th and 5th mortgage coupons to be resumed October, 1861. Two and one-half year's arrears at that date to be paid, as per statement, and the two mortgages consolidated. Amount of arrears.	875,000

Total.....\$1,995,000

The earnings of the road to be conveyed to Trustees for the payment of the floating debt, the completion of the Long Dock property, and the liquidation of the delayed mortgage coupons, in order of priority, which, it is calculated, will all be paid in a little more than two years. The unsecured bonds, with coupons now over-due and for two years in advance, to be converted into redeemable preference 7 per cent. stock, to receive dividends after payment of mortgage interest.

STATEMENT OF OPERATION.

Year ending December, 1860:

Estimated net earnings	\$2,000,000
Payments:	
Floating debt and interest on same	\$420,000
First mortgage interest in full.	210,000
Second mortgage six months' interest.	140,000
	770,000

Leaving balance applicable to completion of Long Dock and necessary works and redemption of suspended mortgage coupons.....\$1,230,000

Year ending December, 1861:

Estimated net earnings	\$2,250,000
Payments:	
First mortgage interest in full.	\$210,000
Second do. do.	280,000
Third do. do.	420,000
Fourth and Fifth mortg. six months' interest.	175,000
	1,095,000

Balance applicable to redemption of suspended mortgage coupons.....\$1,155,000

Year ending December, 1862:

Estimated net earnings	\$2,500,000
Payments:	
First mortgage interest in full.	\$210,000
Second do. do.	280,000
Third do. do.	420,000
Fourth and Fifth mort. interest in full.	350,000
	1,260,000

Balance.....\$1,240,000

Of which there will be applicable to balance of suspended mortgage coupons and payment of interest on preferred stock, created from unsecured Bonds.....\$1,140,000
And the balance is applicable to dividends upon common stock.....100,000

NOTE.—The gross earnings of the New York & Erie Railroad for the last six years have been as follows, from which it will be seen that the above estimates are not exaggerated:

Year ending Sept. 30, 1854	\$5,359,000
Do. 1855	5,488,000
Do. 1856	6,348,000
Do. 1857	5,742,000
Do. 1858	5,151,000
Do. 1859, estimated.	4,400,000

The present floating debt, with interest, will amount to about \$410,000, for which Fourth Mortgage Bonds to the amount of about \$1,600,000 are pledged as collateral.

Death of Brunel.

By the latest arrivals we learn that this eminent English Engineer is dead.

ISAMBARD KINGDOM BRUNEL was born at Portsmouth in the year 1806, where his father, the illustrious French Engineer, who died in 1849, was engaged in constructing the manufactories of dock pulleys. While very young he was sent to France, where he was a student in the college of Caen, and on his return, from 1826, he was employed in the opening of the Thames tunnel. In the year 1833 he was appointed Engineer of the Great Western Railway, and directed all the appliances of perfect art to that line and its branches, among which the bridges of Maidenhead, Chepstow and Tamar may be named. To him also is due the suspension bridge from Hungerford, in London, one of the longest in England, as well as a part of the constructions of the Sardo-Tuscan Railway, and he took a part in that most difficult work, the establishment of the Conway and Britannia tubular bridges, for which recourse had to be had to the re-unions of the most eminent engineers of the day.

Mr. Brunel also equally applied himself to the construction of vessels and steam machines. It was he who launched the Great Western, the first colossal steamer that has traversed the Atlantic; and it was he, also, who constructed the Leviathan—the Great Eastern—the monster of the seas, which has lately been successfully launched upon the great ocean, after so much labor and expense.

During the last war with Russia he was charged with the duty of erecting the Hospital of Reakioi, situated on the Straits of the Dardanelles, and which was projected to accommodate three thousand sick persons. He was a member of the Royal Society of London since 1830, and was also connected with the Institute of Civil Engineers, with the Society of Arts, the Astronomical Societies and the Geological and Geographical Societies. He received the cross of the Legion of Honor at the hands of Louis Philippe. He was too ill to be present at the success of his last great work, the Great Eastern, on her recent trip from the Thames to Portland. He lived, however, to hear of her great triumph; but was spared the pain of witnessing the disaster to which she was subsequently exposed.

Rock River Valley Railroad.

We learn from the Milwaukee *Wisconsin* that this road is now open from Janesville to Oshkosh.

Orange and Alexandria Railroad.

The Alexandria (Va.) *Gazette* says: We have been informed that unless some unforeseen cause of delay should arise to prevent the prosecution of the work, the Lynchburg extension of the Orange and Alexandria Railroad will be completed by December, when Alexandria will be connected by rail with Memphis, Chattanooga, Mobile and New Orleans, and the great South-west.

Hoffman's Rosendale Cement.

We invite attention to the advertisement, in another column, of the "LAWRENCE CEMENT COMPANY." The cement manufactured by this company is known as "*Hoffman's Rosendale Cement*," in order to distinguish it from other brands of Rosendale Cement manufactured by other parties. The reputation of this cement has been established. We have before us certificates dated as far back as 1849, at which time it was being extensively used in the fortifications, etc., then building by Government. At Holyoke, Mass., some 30,000 barrels were used, and the contractors stated that "it has given entire satisfaction, and recommend it with confidence to those constructing hydraulic works." Upwards of 11,000 casks were used on one work at Fort Johnson, S. C., and found to be "uniformly good." Upon removing a portion of the foundation of the Custom House in this city, which had been laid in cement about three months, it was found to have acquired a degree of "hardness and tenacity nearly equal to the same mass of solid rock." Major T. S. Brown, U. S. Eng., has "made use of it in almost every variety of structure, both military and civil, and can recollect no instance in which it did not appear to possess such valuable qualities as rendered it at least equal, and in most cases superior, to the varieties with which it was tried." Col. J. G. Totten "has used it in making concrete to be exposed, both under water and in the air, for mortar to be similarly exposed, and also by mixture in the various proportions with lime and sand in common mortar, and has found it an excellent material in all these applications." Col. J. L. Mason, U. S. Eng., after using about 6,000 casks at Fort Montgomery, N. Y., and witnessed its use in large masses at Fort Adams, R. I., where very careful experiments were made to ascertain its strength, confidently recommended it as an "excellent article." The Engineer of the Brooklyn Dry Dock "used some 12,000 barrels of this cement, which proved to be of remarkable excellence—not one of the barrels having been found defective, or unable to bear the rigid tests which were applied in the inspection." The reputation of this company stands very high—their works being by far the most extensive in this State. The office of the company is at 92 Wall street.

ALBERT H. NICOLAY, Esq., has removed from his former office, at No. 4 Broad St., to his new and commodious stock salesroom and office, No. 52 William street, which have been fitted up expressly for the transaction of his Stock Auction, Brokerage and Banking Business, with increased facilities in each department.

Mr. N. gives his personal attention to sales of real estate, ships and stocks, at the Merchants' Exchange, or anywhere in the State of New York.

Regular sales of Bank, Insurance, Mining, and Railroad Stocks and Bonds, every Monday and Thursday, at 12½ o'clock, at his stock salesroom, or at the Merchants' Exchange, as desired.

A register is kept for the disposal of real estate, stock and bonds at private sale, and for the procuring of loans on bond and mortgage.

St. Joseph and Marysville Railroad.

The proposition to subscribe \$100,000 to the St. Joseph and Marysville Railroad, by the city of St. Joseph, was submitted to the people on the 26th ult., and carried by an emphatic majority.

Covington and Lexington Railroad.

This road was sold on the 5th inst., at the Fayette Court House in Lexington, Ky., under a decree of the Fayette Circuit Court, obtained by Mr. James Winslow, Trustee of the First and Second Mortgage bondholders. The purchaser was Mr. Gedge, a member of the present Directory of the road, who was reported to represent a Kentucky and Cincinnati party, of which R. B. Bowler, of Cincinnati, was one of the principal capitalists, for the sum of \$2,125,683.74. The terms of the sale, which have been complied with, required that \$20,000 in cash, or its equivalent, should be deposited with the Commissioners when the sale closed. The further conditions require the payment of \$268,000 in six, twelve and eighteen months, the balance of the total running through a period of about *twenty four years*, until 1883, including which the principal and interest of all the bonds become due. The price paid covers the 1st and 2d mortgage bonds and the preferred thirds, and about \$120,000 of the income bonds.

The road originally cost some \$1,000,000. The amount of bonds outstanding may be stated, in round sums, as follows:

First mortgage bonds.....	\$400,000
Second mortgage bonds.....	1,000,000
Third mortgage bonds.....	600,000
Income bonds.....	500,000
Bonds endorsed by Covington.....	200,000
Bonds issued by Cincinnati.....	100,000

Total\$2,800,000

The fiscal year of the road closes on the 1st of November next. During the eleven months ending on the 1st inst., the earnings have been over \$440,000—making an aggregate, with the present business, of near, or quite, \$500,000. The earnings for September were about \$54,000, being an excess over the corresponding month last year of some \$6,000. From this statement it will be seen that, with good management, the purchase of the road at the price given above, must make one of the most profitable railroad investments that has been made in the West.

We append the receipts of each month, as follows:

	1857-8.	1858-9.	Increase.
November...	\$43,966 59	\$46,778 19	\$2,811 60
December....	46,492 90	35,908 24	
January.....	26,198 12	35,978 29	9,780 17
February....	23,512 60	30,683 23	7,170 63
March.....	30,912 08	38,326 48	7,414 40
April.....	32,265 90	37,638 06	5,372 16
May.....	37,893 19	42,566 02	4,672 83
June.....	34,174 83	37,553 10	3,378 28
July.....	30,819 76	43,650 24	12,830 48
August.....	41,934 09	48,010 37	6,076 28
September..	48,165 12	52,109 95	3,944 83

Total ..\$396,336 18 \$449,202 17 \$63,451 65

HOFFMAN'S ROSENDALE CEMENT, OFFICE, 92 WALL ST., NEW YORK.

THE LAWRENCE CEMENT COMPANY are prepared to receive and execute orders for their Cement, to any extent that may be required. They would particularly call the attention of purchasers to the distinguishing brand of their manufacture, viz.: **HOFFMAN'S ROSENDALE CEMENT.** This seems to be necessary, as they have established a reputation for the superior quality of their Cement, and there are various other brands offered, as "Rosedale" Cement. It has the unqualified approbation of the most eminent Architects and Engineers, being used in almost every department of the Works under Government. It is put up in the most careful manner, each barrel being well lined with paper and will be delivered on ship board, in this city, on the most favorable terms. Particular attention given to shipping orders, and Freight obtained on the best terms.

M. W. WOODWARD, Secretary.

To Railroad Companies.

RAILROAD COMPANIES who will require rails for the coming year, and wishing to take advantage of the present low price, may hear of a favorable opportunity to negotiate for the same, through an old established House, a member of which, will sail for England early in November. Reference is offered to several important Railroads for whom purchases have been made. Address either Box 1,204 New York Post Office, or Box 258 Baltimore Post Office. 3142

**ALBERT H. NICOLAY,
STOCK AUCTIONEER,
BROKER AND BANKER,
No. 52 WILLIAM STREET,
Near WALL STREET, NEW YORK.**

REGULAR AUCTION SALES OF
**STOCKS and BONDS,
NOTES and other SECURITIES,
EVERY MONDAY AND THURSDAY,**
(Which have been the regular established days of sale for many years.)

Or **EVERY DAY** (whenever required)
AT 12 O'CLOCK P. M.
At the **STOCK SALES ROOM, No. 52 WILLIAM ST.,**
Or at the **MERCHANTS' EXCHANGE** as desired.

STOCKS and BONDS BOUGHT AND SOLD AT
Private Sale and at the Brokers' Board on Commission. Interests allowed on Deposits and Dividends collected.

SALES also made of

REAL ESTATE

AT PUBLIC OR PRIVATE SALE WHEN DESIRED.
A large variety of **CITY, BANK AND INSURANCE STOCK** constantly on hand at **PRIVATE SALE.** 3mt2

**LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.**

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the **MAGNETIC ORES** from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a **quality of iron not surpassed.** These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for **RAILROAD IRON** of any pattern and weight, **Car Axles, Spikes, and Merchant Iron.** They have on hand patterns for **T Rails** of the following weights per lineal yard, viz.: **25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.** Samples of **RAILS and MERCHANT IRON** may be seen at the office of the Company, **46 Exchange Place, N.Y.**

Address **J. H. SCRANTON, President,**
Scranton, Pa.
or **DAVID S. DODGE, Treasurer,**
**46 Exchange Place,
NEW YORK.**

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

**THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.**

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or on ship at ports in the United States.

**M. K. JESUP & COMPANY,
44 Exchange Place.
New York, 1st June, 1859.**

RAILROAD IRON.

**WOOD, MORRELL & CO.,
HAYING** leased the extensive Works of the **CAMBRIA IRON COMPANY,** situated at JONESTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for **RAILS** of any required pattern or weight, on the most liberal terms.

**PHILADELPHIA (NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.**

**WINDOW, PICTURE AND CAR
GLASS.**

**F. HOPKINS & BROTHER,
IMPORTERS,
193 Pearl St., NEW YORK.**

RAILROAD IRON.

THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

**JAMES TINKER,
54 Exchange Place,
NEW YORK.**

**Erie Rails, 57 to 58 lbs. per yard, on hand
in NEW YORK and NEW ORLEANS.**

A **GENTLEMAN** who has upwards of 26 years experience in conducting an extensive machine manufacturing business (as principal) writes a good hand and has a thorough knowledge of accounts and general business routine, wishes an engagement with some established concern where his services would command a fair compensation. Satisfactory evidence of business capacity and integrity will be furnished.

Address **S. box 962 Baltimore Post Office. 3mt2**

**THE
TAUNTON LOCOMOTIVE
MANUFACTURING COMPANY,
TAUNTON, MASS.,**

HAVING large facilities, and having had a long experience in the business, are prepared to furnish

**LOCOMOTIVES,
EITHER FOR BURNING WOOD OR COAL,
OF THE MOST APPROVED CONSTRUCTION.**

ALSO ALL KINDS OF
**RAILROAD MACHINERY,
STATIONARY ENGINES AND BOILERS,
SUGAR MILLS, SHAFTING, ETC.**

**W. W. FAIRBANKS, Agent.
HARRISON TWEED, Treas.**

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH
OF THE CAIRO AND FULTON R. R. CO.

SEALED PROPOSALS for the **Gravitation** of the First Division of twenty miles eastward from Van Buren, will be received at this office, until **THURSDAY NOON, DECEMBER 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positive yet settled.

The Company having a large amount of the finest lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, on application at the Engineer's Office in Van Buren.

2mt40 **JESSE TURNER, President.**

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH
OF THE CAIRO AND FULTON R. R. CO.

SEALED PROPOSALS for the **Masonry** of the First Division of twenty miles eastward from Van Buren, will be received at this office until **THURSDAY NOON, DECEMBER 1st, 1859.** No bids for less than the amount of masonry upon any one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office in Van Buren.

2mt40 **JESSE TURNER, President.**

Notice to Contractors.

PROPOSALS will be received at the office of J. I. SHIPMAN, in the village of Jamaica, Long Island, until the twentieth day of October at noon, for the graduation, masonry and superstructure of the **Glens Cove and Roslyn Branch Railroad.** This road will be about eleven miles long and presents very desirable work for a contractor. Bids will be received for the whole or any part of the work. Specifications and every necessary information may be obtained at the office.

October 1, 1859. **STEPHEN TABER,
GEO. J. PRICK,
H. W. EASTMAN,
J. I. SHIPMAN, Chief Engr.,** Committee.

31*41

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,
MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COM'Y,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

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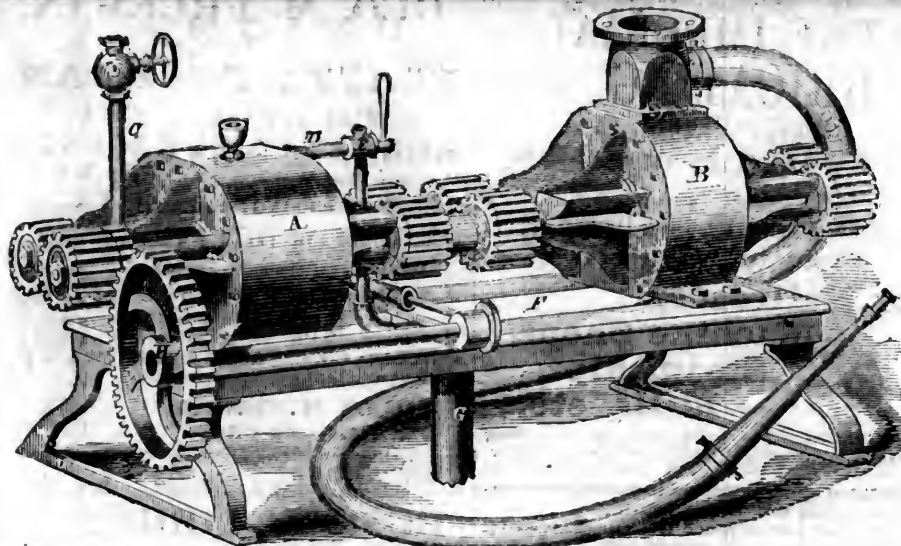
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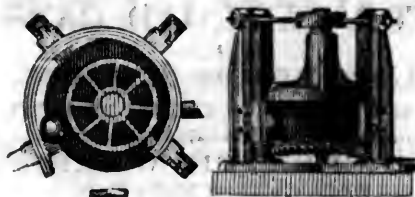
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ETC., ETC.

All inquiries in reference to the above articles will
receive immediate attention.
New York, January, 1859.

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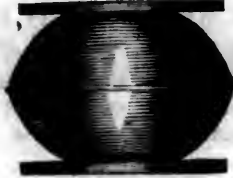
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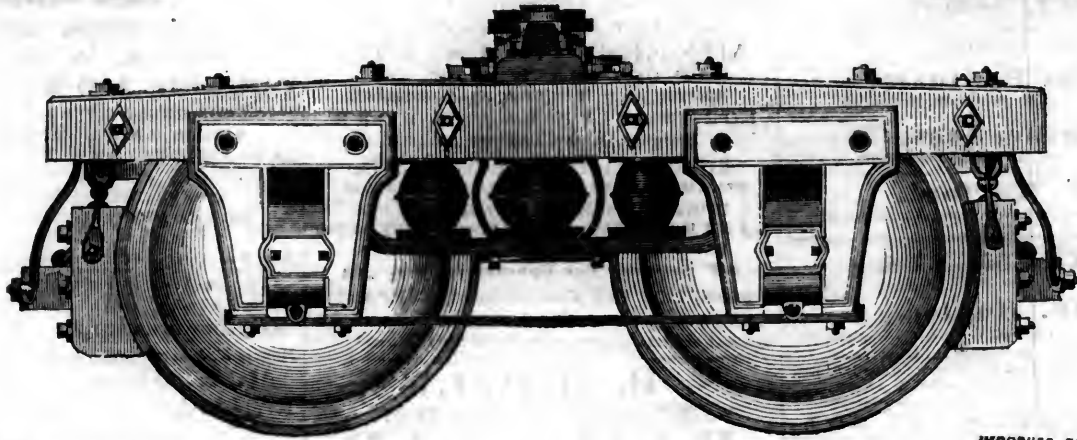
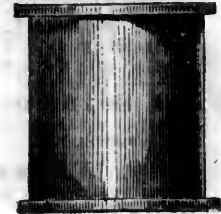


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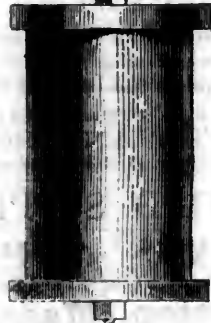
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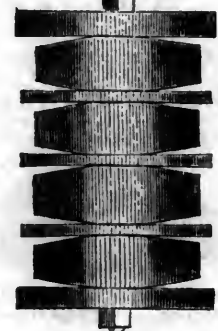


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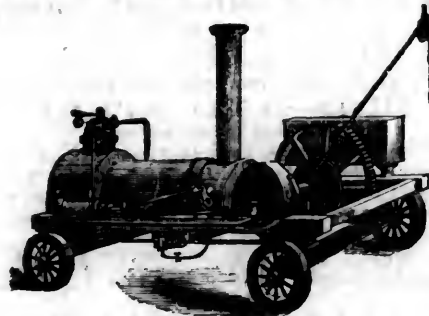
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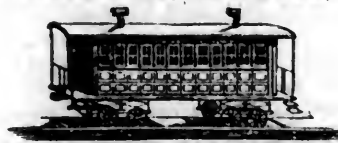


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Located in the centre of the Iron, Coal, and Lumber region of Pennsylvania, having the most improved labor saving machinery, with a large stock of well seasoned lumber on hand, and an Eastern Superintendent thoroughly experienced in every department of the passenger and freight car building business, this company can recommend their manufactures as equal to the best Eastern work. This company also cast CHILLED PLATE CAR WHEELS from the best cold blast charcoal iron in the State that are entirely free from strain, but are unsurpassed for strength and durability and which they will furnish fitted or unfitted at the lowest prices.

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Incrustation Preventer
FOR STEAM BOILERS.**

EFFECTUALLY obviates the Formation of Scale on the Plates by separating the incrusting matter from the water before it enters the boiler, at the same time condensing a large portion of the steam and supplying the purified water to the boiler at about boiling heat. The apparatus is compact, simple, and applicable to all kinds of Engines. Recent modifications render it still more efficient than heretofore.

Testimony as to its successful operation in preventing scale, and also as a HEATER AND CONDENSER, can be furnished by the subscriber.

Probably no modern improvement connected with Steam Power combines so many advantages as this. The economy of Fuel alone from its use soon repays the cost of the apparatus. Prices reduced. Terms easy.

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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 43.]

SATURDAY, OCTOBER 22, 1859.

[WHOLE No. 1,227, VOL. XXXII.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, October 22, 1859.

New York and Erie Railroad.

To the Editor of the AM. RAILROAD JOURNAL.

I beg leave to make a few remarks in answer to your comments on my communication of the 11th inst.

I fully agree with you that railroad managers should, unasked, lay before their stockholders and the public, all necessary information to enable them to understand clearly the results of each year's operations. You charge that I have not done so in the reports of the New York and Erie Railroad, but you do not state what information was withheld, necessary to the comprehension of the result of the year's operations. You state that the Pennsylvania and the Baltimore and Ohio companies give reports from the heads of the different departments, which the New York and Erie Company has not done. This is true, but I believe, the New York and Erie reports, although more concise, contain all the really useful information given in the reports of the two companies you name, though not communicated in the same form, simply because in the New York and Erie Company each department has not a General Superintendent. In the repairs of engines and cars, the master of each principal repair shop, ad-

vises with the Division Superintendent and reports to the General Superintendent or President of the Company. In regard to the track repairs, the superintendents of track report to the Division Superintendents, who report to the General Superintendent or President. All general reports from either of these departments, must, therefore, be made up in the General Superintendent's office in New York. I do not express an opinion as to which system is preferable. The system of the New York and Erie existed before I assumed the duties of President. The total expenditures as well as the amount of work done, is given in as much detail in the reports of the New York and Erie Company as in those of the two companies named by you; at least, that was my intention, and if not done, I have yet to learn what has been omitted that is really necessary to form a correct opinion of the results of the year's operations. I do not claim that the reports of the New York and Erie Company are perfect—far from it; but it must be remembered that every possible improvement in the management of a corporation of the magnitude of the New York and Erie Company, cannot be effected in two years, particularly when overwhelmed with financial embarrassments and with ruinous and reckless competition from rival companies, as was the case during the whole time of my administration.

If the generally admitted improved condition of the track of the New York and Erie road on the day it was handed over to the receiver, as compared with its condition on the day I took charge of the road, be taken into account, your comparison of the expenditures of the company for rails per mile run, with the same expenditures of other companies, is so greatly in favor of the New York and Erie Company that it establishes more than I ever claimed for my administration. You must admit that the amount expended is not a proper criterion by which to judge what has been done. The results obtained by the expenditures, must ever be kept in mind.

You state "In fact Mr. M. made no report at all for months after the date of the fiscal year, and not then, till repeatedly called upon for one. When we complained of his neglect in this particular, he stated as a reason for not publishing one,

the needless expense it would put the stockholders to."

You are entirely in error if you suppose that I did not intend to publish a report; and also in error in your statement that I gave as a reason, the needless expense to the stockholders. I never for an instant thought of omitting the publication of our annual report, and the Auditor will bear me out, that I constantly urged him to give me the result of the year's operations as soon as possible, so that I might prepare the report. Unfortunately the want of funds greatly delayed the payment of the wages of the men, and the accounts of the company are so kept, that the expenditures are only charged to the different accounts, after being liquidated, so that each year's accounts can only be made up after the liquidation of the pay rolls and of the vouchers for supplies for the year. This system has delayed the settlement of the yearly accounts since the company's financial embarrassments. If you have been led to believe, from any thing said by me in conversations, that I considered the publication of annual reports a needless expenditure, it must have arisen from misapplying words used in regard to some other expenditure. On the contrary, I entirely agree with you that annual reports are indispensable, and I am fortunately on record on this subject in my circular of 1st August, 1857, so that I cannot be accused of adopting any present views to the necessities of the case.

You say "that strikes were of common occurrence" under my administration. The only strike that occurred on the New York and Erie Railroad during my administration were two of the laborers at Piermont, and one of the mechanics in the Susquehanna shop. The first at Piermont was, ostensibly, to obtain an increase of wages, but, in reality, was no doubt caused by a change, and that a very proper one, in the agent at Piermont. As the wages paid were full as high as those paid by any other company, the strike ended without any concession on the part of the company, the men voluntarily resuming work at the same wages as before. The second strike at Piermont was to obtain payment of wages due. The delay in the payment of wages cannot be attributed to any action of mine. To pay one portion of the men em-

ployed by the company, more promptly than the other, is unjust to those more patient and lenient, but as the amount was small, and their claim perfectly just, the amount was paid at once and the strike ended. The strike at Susquehanna ceased the moment I explained to the men the causes which had led to the delay in the payment of their wages. The men returned to their work without exacting the slightest stipulation or payment from the company.

Your remark, "It is nothing to him (me) whether they (the division superintendents) spend \$100,000 or \$1,000,000," is certainly not based on any fact that can have come to your knowledge, for my whole conduct during the two years of my administration must convince every one, cognizant of the facts, that I watched the expenditures of the company, by every means in my power, as closely as if the property had been my own; and, as stated in my previous communication, my letter book will prove that I constantly urged the greatest economy on all the employees of the company. In stating that the division superintendents alone were responsible for the expenditures on the track and road bed, I wished to show that this department was left in experienced hands, and that, if the expenditures were large, it was not in consequence of any ignorance of railroad matters, as so frequently charged, nor of any hobbies of mine which I was attempting to carry out.

I accept, with thanks, your proposition to make room in your JOURNAL for the principles which I consider cardinal in railroad management. This will probably be best done by publishing the two annexed documents. The first is a circular issued on the 1st August, 1857, in which I attempted to point out to the managers, and, more particularly still, to the stockholders of the railroads of the United States, the principal causes which had destroyed the value of the investments in railroads, and the proper remedy. The second contains the rules laid down for the management of the road during my absence in Europe. They were written, at the request of the Board of Directors, about the 1st January, 1858, and subsequently printed by their order. The circular of 1st August, 1857, has already, I believe, been published in your JOURNAL, but as it has probably been forgotten by most of your readers, and not seen by many others, and as the views it contains are pertinent to-day, as they were on the day it was penned, I trust you will republish it. I hardly see anything to add to the views expressed in these two documents, as they are clear and explicit in regard to all the principal debatable points in railroad management. They do not, however, give the prominence they deserve to two principles which were never absent from my mind, and from which I never swerved in the administration of the company, viz:

1st. To strive to place and maintain the road-bed, track and equipment, in the highest possible condition, no matter what be the cost, if the means can only be obtained; for no machinery can be used advantageously and economically, when in bad or indifferent condition. The equipment of the New York and Erie Railroad Company, when I entered on the duties of President, was undoubtedly the worst in the United States, being not only in bad condition, but also constructed on wrong principles. The infinite variety of patterns in the locomotives, and the use of inside bearing jour-

nals, were the source of endless expense to the company. As fast as practicable outside bearing journals were introduced, with great advantage, but at considerable expense, to the company.

2d. To make merit and qualification the sole admissible claims to employment. The appointment of relatives and friends, or of persons at the solicitation of friends, is most injurious to corporations. It fills the most important offices with incompetent persons, and tends greatly to diminish the already too few incentives to energy, activity and intelligence, which can be brought to bear on the employees of a corporation.

If I have not dilated more on the subject of activity, energy, intelligence, honesty, and economy, on the part of all employees of a railroad, from the President down to the laborers, it is because these points are admitted, even by those who never practise them.

Respectfully your obt' serv't,
CHAS. MORAN.

We shall publish the document referred to in the next number of the JOURNAL.

New York Central Railroad.

The fiscal year of this company closed with September. In anticipation of the annual report, the Treasurer has caused to be published the following statement of the capital and funded debt of the company as it stood on the 30th ult. The company has no floating debt.

Total amount of Capital Stock and Funded Debt:
September 30th, 1856 \$38,939,411 27
September 30th, 1857 88,768,233 47
September 30th, 1858 38,587,167 98
September 30th, 1859 38,333,771 21

Since the close of 1855, when the line was completely double-tracked, and all the branch consolidations perfected, the company have paid out, in cash, from the net profits of the road, over and above its expenses for operating and maintaining the line, *over thirteen and a half millions*, distributed as follows:

To Bondholders, four years' interest... \$3,948,000
To Stockholders, four years' Dividends,
Three years, at 8 per cent. \$5,760,000
One year, at 7 per cent... 1,680,000

To increase of the property 7,440,000
2,208,000

Total four years \$13,596,000
Capital and Debt, 1855 \$38,304,000
Same 1859 38,333,771

COMPARATIVE VALUE OF ROAD AND ITS ESTATE.
1855, 1859.
Sept. 30. Sept. 30.
Roadway \$17,398,134 \$17,741,369
Stations 1,631,999 1,938,563
Real Estate 3,590,290 3,993,057
Locomotives, 188 in 1855 2,019,059
Locomotives, 218 in 1859 2,351,466
Cars, 2,425 in 1855 2,188,093
Cars, 3,477 in 1859 2,905,612
Engin'g and Agenc's... 583,166 603,528
Niagara Branches 1,163,182 1,208,922

Total \$28,523,913 \$30,742,517

The original premiums paid on the separate lines in the consolidated property, in addition to the foregoing actual outlay, amounted to \$8,991,976.

A new car, intended for the Eastern section of the city passenger railway, was received via the Northern Central Railroad yesterday from the "Union Works" of Messrs. Poole & Hunt, at Woodberry. As with the previous ones manufactured by that firm, it is substantially made and tastefully painted and furnished.—*Balt. Pat.*

Catawissa, Williamsport and Erie R. R.

The report of this company, for the fiscal year, ending August 31, 1859, gives the following statement of the gross and net earnings and expenses of the road during that period as compared with those of the preceding year:

The receipts for twelve months ending August 31, 1858, were..... \$271,664 74
Operating expenses, including repairs to machinery and track, taxes, damages and office charges 141,724 98

\$129,930 76
Less rental of connecting roads 48,468 65

Net receipts for year ending Aug. 31, 1858 \$81,471 11
1858-9.

Gross receipts for year ending August 31, 1859 \$337,257 71

Operating expenses including repairs, track, machinery, taxes, damages and office charges 187,006 78

\$150,250 93
Less rental of connecting roads 59,812 46

Net receipts for year ending Aug. 31, 1859 \$90,438 47
Net receipts for year ending Aug. 31, 1858 81,471 11

Increase about 11 per cent. \$8,967 36

It will thus be seen that the net result of the past year's business shows an increase of 11 per cent., and it is believed this ratio of increase will be exceeded during the ensuing twelve months.

Yet in the present condition of the company's affairs, it is deemed most prudent to predicate any proposed re-organization of a future net revenue of one hundred thousand dollars, which the managers feel no doubt may be safely calculated upon.

The present funded indebtedness of the company consists—

1st. Of first mortgage 7 per cent. bonds \$1,500,000 00
2nd. Of chattel 10 per cent. bonds 380,000 00
3rd. Of second mortgage 7 per cent. bonds \$500,000 00
Of which there is on hand 160,963 42
339,036 58
4th. Of unscr'd b'ds, 7 per cent. \$38,500 00
Do. 10 per cent. 14,000 00
52,500 00
\$2,271,536 58

In addition to the above there is a large floating indebtedness of the company as follows—

1st. Owing for Labor and Materials... \$69,892 72
2d. Bills payable, guaranteed by officers and managers of the company 132,845 33
3d. Loans and judgments guaranteed by officers and managers of the company 18,310 66
4th. Dues for running connecting roads 15,985 81
5th. Unsecured indebtedness, or secured by insufficient collateral.... 103,596 92
\$340,631 44

The outstanding overdue coupons and interest amount to \$95,596 61

It is manifest the present earnings of the road, will allow of the payment of no such sum as the annual interest on all this indebtedness; that the attempt to do so in the disastrous condition of the industrial interests of our State and of the country generally, the past two years has proved a failure; and that with every exertion that has been made by those having charge of the company's affairs, no other course has been found practicable than to

come to a full stand, to propose an early re-organization of this whole indebtedness, on such an equitable basis as will secure to the various interests the full share, that each is entitled to in the property and profits of the company.

The Report speaks of the various debts of the company, and says that the most are the claims for labor and material furnished for the operation of the road. These, it is stated, have usually been paid out of the earliest receipts, and through the wild regions which the road is located, it would be dangerous to attempt to move the daily trains, were injustice done to those who have faithfully served the company.

In regard to future prospects, the report says:

The property of the company consists of some 64 miles of railway, extending from the junction of the Little Schuylkill road to the Sunbury and Erie Railroad at Milton. And further, of a large and valuable tract of coal land, as yet undeveloped, situated about two miles to the eastward of the summit of the Catawissa road, and which has been proved to contain vast quantities of the best quality of Lehigh coal, the Mammoth vein passing through a portion of the tract.

For the practical development of this coal basin, large sums of money are required, and no capitalist or operator will consent to make this necessary expenditure so long as the lands are covered by a mortgage.

The arrangements already entered into by the company with highly responsible parties, have been interfered with, and in fact operations suspended, by the apprehensions of an impending foreclosure of the mortgage now on these lands, which would endanger the property of the operators. It is, therefore, indispensable on any plans for the re-organization of the company, that the coal lands should be preserved intact from any new mortgage that may be put upon the roadway or franchises by the purchasers, under an amicable foreclosure of the present mortgage as proposed.

There are other considerations which must enter into the proposed reconstruction; and the managers are now in consultation with the principal parties representing the various interests connected with the company; the result of which will be laid before the stock and bondholders as soon as the plans can be satisfactorily matured.

The Fairbanks Standard Scales.

Both in the State Fair at Freeport, and at the National Fair in this city, the Fairbanks Standard Scales maintained their prestige won in over a quarter of a century of experience, and bore away all the prizes where they were competitors. In all cases they won the blue ribbon and medals to match, and after tests, applied much more rigidly and intelligently than has become too common in these exhibitions.

There is one point in this which all manufacturers, of every grade, will do well to profit by. It is the wisdom of the Messrs. Fairbanks in "keeping up their standard." There has been with them no such thing as falling back on a reputation already made. Every scale must bear the identical accuracy of its predecessor, and not plam off seeming merits on the strength of credit previously gained. Manufacturers are prone to lower their mark when success has given them the temptation to indolence and inattention. For this reason blue ribbons and first premiums following a success of twenty-five years, mean something more than an empty formality, to wit: that the skill which won still guards a splendid reputation.

We notice by the report of premiums, Messrs. Fairbanks were awarded, for

- Best large Platform Scales, silver medal.
- Best small Platform Scales, bronze medal.
- Best Hay, Coal and Cattle Scales, silver medal.
- Best article of counter scales, silver medal.
- Best display of every variety of Scales, Society's Diploma of Honor.—*Chicago Tribune.*

New York Canals--The Saving in Repairing Them by Contract.

The following is a comparative statement of expenditures for repairs by Superintendents and Resident Engineers, including payments to Contractors of let sections on all the canals of the State for the year ending September 30th, 1858; and the cost of repairs of the same sections, under the contracts as now let, and which the Contracting Board put in operation mainly on the first of May last, and has since carried to completion, as far as practicable:—

	Cost of repairs to Sept. 30, 1858.	Cost repairs as now let.
East. Div. of Erie Canal.....	\$163,997 32	\$70,184 00
Champlain Canal.....	81,059 16	22,289 00
Black River Canal.....	18,621 75	15,984 00
Imp'v'm't of Black Riv. ....	.....	3,800 00
	\$263,678 23	\$112,257 00
Difference.....	\$151,421 23	
Middle Div. Erie Canal.	\$45,507 28	\$15,588 00
Oswego Canal.....	107,697 72	15,659 00
Cayuga and Sen'ca Canal.	21,769 49	3,574 00
Ch'mung Canal & Feed'r	150,605 39	13,475 00
Crooked Lake Canal....	9,803 46	4,473 00
Chenango Canal.....	44,113 73	25,600 00
Oneida Lake Canal and Feeder	4,103 94	3,975 00
Oneida River Imp'ment.	2,797 27	.....
Baldwinsville Canal....	2,381 62	.....
	\$388,779 90	\$82,381 00
Difference.....	\$304,395 90	
West. Div. Erie Canal....	\$146,814 91	\$39,528 00
Genesee Valley Canal ..	80,910 70	22,289 00
	\$227,725 61	\$61,817 00
Difference.....	\$165,908 61	

RECAPITULATION.

Cost of repairs by Superintendents for the year ending September 30, 1858:—

East. Div. of Canals, entire 303 miles.	\$263,678 23
M'dle " " " 311 "	388,779 90
West. " " " 272 "	227,725 61
	\$880,183 74

Cost of repairs, with all the canals under contract:—

East. Div. entire, as above.	\$112,227 00
M'dle " " " 82,384 00	
West. " " " 61,817 00	
Estimated cost of superintendence	21,000 00
	277,458 00

Saving to the tax-payers of the State. \$602,725 74

The repair contracts cover every item of expense known as ordinary repairs, or work usually done by the Superintendents of repairs. The cost of canal repairs for the fiscal years of 1858 and 1859 has exceeded \$1,000 a mile in the aggregate. Well-informed and experienced canal men have no doubt of being able to maintain and keep in good repair the State Canals, after their completion, at an aggregate of \$500 a mile, or for a less sum even. Necessary improvements in the replacement of old structures, the erection of new ones, as well as the expense of repairing breaks in the canals, when the cost exceeds a fixed sum to be paid by the repair contractor, will, no doubt, swell the charge for repairs somewhat above \$277,000 a year. But the whole annual cost of superintendence, collection and repairs, can and should be brought below half a million of dollars.—*Albany Journal.*

Mississippi and Missouri Railroad.

It is stated that this company has recently completed a negotiation for its bonds of considerable amount, about \$1,250,000, and has purchased 3,000 tons of iron to be laid west of Iowa City. The road has now one hundred and seven miles in use.

Portland and Kennebec Railroad.

The report of this company for the fiscal year ending August 31, 1859, was presented at the annual meeting held on the 28th ult. From this we learn that the receipts were:

From Passengers.....	\$85,540 13
" Freight.....	51,921 20
" Mails, express, rents, etc.....	9,688 67
" Somerset and Kennebec R. R. trains	14,366 13
	\$164,516 13

The expenses were:—

Maintenance of way	\$24,099 48
Motive power	14,987 34
Train expenses	15,238 92
Salaries	4,470 84
Fuel	9,999 37
Station expenses.....	11,045 06
Taxes and insurance.....	996 15
Interest	1,058 49
Miscellaneous	925 61
	82,821 26

Less city and town coupons.....	\$48,000 00
Yarmouth dividends.....	12,144 00
	60,144 00

Excess	\$21,550 87
Add excess for 1857-'8.....	8,019 07

Total excess.....\$29,569 94

The assets of the company consist of:—

Cash and cash items	\$11,722 62
Materials on hand	18,720 32
	\$30,442 94
Less coupons uncalled for	873 00
	\$29,569 94

The number of passengers carried during the year was 110,479; of freight, 27,639 37 tons. The whole number of miles run was 158,794.

Hamilton and Dayton Railroad.

The semi-annual meeting of the Directors of this road was held at Cincinnati on the 11th inst., at which the following report was made of the business of the road for the six months ending October 1:

Total receipts from all sources	\$263,118 48
Expenses for same period	187,342 14

Net earnings.....\$75,776 34

The comparative earnings for the same period last year, compared with this, were as follows:—

Six months of 1859.....	\$263,118 48
Do. 1858.....	252,408 75

Increase this year.....\$10,709 73

Out of the net earnings this year, the Board declared a dividend of 3½ per cent.

Dayton and Michigan Railroad.

The gross earnings of this road for September, its first month, are \$25,200, showing an increase, since its completion, of over \$10,000. As yet, there is no mail or express on the Northern Division of the road.

Since the completion of the road, the company has been re-organized as follows:

President—CLEMENT DIETRICH.

Vice President—ANDREW JACKSON.

General Superintendent—R. M. SHOEMAKER.

Secretary and Treasurer—PRESERVED SMITH.

Most of these gentlemen are large owners in the road.

Journal of Railroad Law.

ACTIONS FOR SUBSCRIPTIONS TO STOCK—APPLICATION OF THE STATUTE OF LIMITATIONS.

When parties subscribe to the stock of a railroad company, they are, of course, bound by their subscription to pay to the company the amount subscribed; and until calls are made upon them, for the first instalments of it, the statute of Limitations will not commence to run, so as to prevent the railroad company from suing for the amount of the subscription, in case the payment of it is refused by the subscriber. But while this is true, it is also true that if the railroad company do not make a demand of the instalments within six years, they lose the right to make the demand at all, and of course as the right to make the demand is lost, the right of suing upon it is also gone.

The statute in effect being applied to the right of demanding, rather than directly to the right of suing. The Courts from analogy with the statute of Limitation, hold that when so long a time as six years intervenes between the subscriptions to the stock of a company, and a demand by the company for the payment of the subscription, or of the amount of the first instalment, the delay creates a legal presumption that the project has been abandoned, and releases the subscriber from all obligation upon his subscription.

The question then in determining the rights of parties, in a case of this kind, is, has a demand been made for the subscription or an instalment of it, within six years from the date of the subscription? If the answer be in the affirmative, then the next question is, has six years elapsed from the date of such demand? If the answer be "Yes," then the claim is barred; if the answer is "No," then the claim is good. And supposing the demand of the instalments not to have been made until five years from the date of the subscription, it would take eleven years to bar the right of recovery.

A case not long since decided in the State of Pennsylvania, illustrates the application of these principles.

Matthew Byers, on the 13th of June, 1847, subscribed for three shares of the capital stock of the Connellsville Railroad Company. On the 1st of March, 1857, nearly ten years afterwards, the Connellsville Railroad Company published a notice to the subscribers to pay up their subscriptions. In the month of April following the publication of this notice, the railroad company commenced a suit to recover from Byers the amount of the subscription.

The defendant pleaded, among other things, the statute of Limitations.

On the trial, the Court reserved the point, whether the action was barred by the statute of Limitations, and directed the jury to find for the plaintiff, subject to the opinion of the Court on the point reserved. The court below afterwards entered judgment for the defendant on the reserved point, whereupon the plaintiff removed the same to the Supreme Court (Pennsylvania), and there assigned the same point for error. The opinion of the Court was as follows:

WOODWARD, J.—The defendant's subscription was made on the 13 June, 1847; the notice to pay was published March 1, 1857; and this suit was brought April 16, 1857. The question is whether the Statute of Limitations is a defence.

The subscription was an ordinary contract of indebtedness. It was a promise to pay the company fifty dollars a share for three shares of their capital stock, "in such manner and proportions, and at such time and places, as shall be determined by the Board of Directors, in pursuance of an act of Assembly, entitled," &c.

The company to whom the promise was made had three remedies, expressly given by the act of their incorporation, to enforce payment: 1st. By notice of time and place of payments; 2d. By forfeiture of stock for payment; and 3d. By action.

The 17th section of the original act, revived by the supplemental act, contemplated an early commencement and completion of the road; for it provided that, unless it were begun within five years, or if suffered to go out of use for two years after completion, the charter should be forfeited.

It is not reasonable to suppose the Legislature meant that subscribers to such a stock should be indefinitely bound. The road was to be promptly commenced and vigorously maintained, and some of the various remedies to compel payments of the stock, were to be resorted to within a reasonable time. This is the clear and necessary import of the contracts.

Now, the general principle is, that the statute of Limitations begins to run only from the time the right of actions accrues. The statute runs, not against the debt, but its remedy; and, of course, cannot begin to operate until a remedy exists. It is not quite clear to my mind that the company's right of action in this case was dependent on their notices or demands, so that it could not be said to exist before they were given. I am rather inclined to think, that the right to declare a forfeiture was dependent upon demand and notice; but that action might have been brought at any time on the subscriptions. If this view were sustainable, it is clear the statute was a full defence; but, it is not the view which prevailed in the court below, or which is most acceptable here.

Taking it for true, then, that the company could not sue until after demand and notice, were they at liberty to delay these beyond six years, and then have a right to sue within six years thereafter? We think not. It was held, in *Little vs. Blunt*, in accordance with the general rule, that when an action will not lie without making a previous demand, the statute begins to run from the time of making the demand; but in *Codman vs. Rogers*, it was held that, in such a case, the demand must be made in a reasonable time; and when no cause of delay is shown, it ought to be made within the time limited by the statute for bringing the action. But, in the latter case, there must be some limitation to the right of making a demand. What is to be considered a reasonable time for this purpose does not appear to be settled by any precise rule. It must depend on circumstances. If no cause of delay can be shown, it would seem reasonable to require the demand to be made within the time limited by the statute for bringing the action. There is the same reason for hastening the demand that there is for hastening the commencement of the action.

This case was approved and followed in *Laforge vs. Jayne*; nor is the soundness of the rule affected by what was said in *Linklers vs. The Turnpike Co.*, for there the demand was within six years from the contract, and the only question was

whether the statute barred an action within six years after the demand.

Judge Wilde's observation, that there is the same reason for hastening the demand that there is for hastening the commencement of the action, is peculiarly applicable to a case like this, where the demand is held to be part of the remedy by action. All the reasons that can be urged against enforcing any State claim will lie against such a subscription. It is only a simple contract. Many circumstances may afford a defence against it. The policy of the statute is, that all such contracts shall be enforced within six years, before witnesses are dead, papers lost, and the means of defence gone. If other parties may not sleep over their rights, to the prejudice of promissors, it is difficult to find a good reason why a railroad company, or other corporation, may do so, especially when they have received a very impressive intimation from the creative power that they are to be up and doing. In *Steele vs. Steele*, it was said a party cannot stop the running of the statute of Limitations by his own negligence.

We hold, therefore, that the company were bound to demand payment of the subscription within six years from its date—or, at least, to call for an instalment within that period. And this in strict analogy to the statute; for, whether the demand be an essential preliminary to the action or not, it is, beyond question, one of the remedies given to the company upon the contract. The statute in terms bars only the action. But, we ground a presumption on the statute, that a party who did not employ the other means afforded for enforcing the contract within the period of the statute, meant to abandon the contract. After that period, demand could not be made with effect.

If, therefore, an action would not lie without previous demand, and the time for that is gone, the action is gone. But if the action would lie without a legal and valid demand, then it is barred by the statute, so that, *quacumque videtur*, the judgment must be affirmed.

Finances of Tennessee.

BIENNIAL STATEMENT OF THE GOVERNOR.

The financial condition of this State is as follows:—

Received into the Treasury from all sources, from 1st October, 1857, to 1st October, 1859	\$1,848,094 88
Add to this the balance remaining in the Treasury on the 1st October, 1857	36,496 06

Which makes the total receipts	\$1,884,590 94
Disbursements for all purposes, from 1st October, 1857, to 1st October, 1859	1,704,287 61

Which leaves balance in the Treasury on 1st October, 1859, of.....	\$180,303 33
--	--------------

The aggregate expenditures of the two years ending Oct. 1, 1859, have been increased to the extent of \$341,609 71, by various extraordinary expenses required by law to be paid out of the Treasury within that period. Take this amount from the gross aggregate expenditures of the two years, and it leaves, as the actual expenditures for the ordinary purposes of government, including the payment of interest on actual indebtedness of the State, the sum of \$1,362,677 90.

The aggregate taxable property of the State amounts to \$377,208,641, being an increase of taxable property, since October 1, 1857, of \$76,849,-

830; and that the receipts into the Treasury for the last two fiscal years have been considerably more than sufficient to meet the expenditures of the same period.

The actual indebtedness of the State is as follows:—

Five per cent. bonds, issued for State stock in turnpike roads.....\$1,091,190 00
Five and a-half per cent. bonds, issued for same purpose..... 137,166 66

Total for stock in turnpike roads...\$1,228,356 66

Five per cent. bonds, issued for State stock in East Tennessee and Georgia Railroad.....\$650,000

Five per cent. bonds, issued for State stock in the Memphis and La Grange Railroad..... 83,250

Five and a-half per cent. bonds, issued for same .. 102,000

Total for State stock in railroads... 835,250 00

Five per cent. bonds, issued for State stock in the Union Bank, yet unpaid.....\$125,000

Six per cent. bonds, issued to raise capital of the Bank of Tennessee.....1,000,000

Total for Bank stock yet unpaid... 1,125,000 00

Six per cent. bonds, issued for construction State Capitol, yet unpaid 608,000 00

Six per cent. bonds, issued for the purchase of the Hermitage..... 48,000 00

Total actual indebtedness of the State.....\$3,814,606 66

Upon which an annual interest is paid of.....\$289,388 25

The liabilities of the State on account of bonds loaned, to Internal Improvement Companies are as follows:

Six per cent. bonds of the State, interest payable semi-annually, loaned to railroad companies.....\$10,348,000 00

Six per cent. bonds of the State, loaned to turnpike companies... 57,000 00

Six per cent. bonds of the State, loaned to Agricultural Bureau .. 80,000 00

Total amount of bonds loaned ..\$10,485,000 00

Bonds on Internal Improvement Companies, the payment of the principal and interest of which is guaranteed by the State, are as follows, to wit:

The bonds of railroad companies.....\$2,014,400

The bonds of the City of Memphis for the benefit of Memphis and Little Rock Railroad Company..... 250,000

Total amount of indorsed bonds. 2,364,000 00

Total present liabilities of the State exclusive of actual indebtedness.\$12,799,000 00

Add actual debt of the State..... 3,844,606 66

Which makes the total liabilities of the State of every character...\$16,643,606 66

The Governor says: As most of the internal improvements to which the aid of the State is pledged are completed, or far advanced towards completion, it is confidently believed that the prospective liabilities of the State in aid of these works will not far exceed \$3,000,000.

The railroad companies have paid each installment of interest upon the State bonds promptly at maturity. He recommends the passage of a

law fixing a day upon which the entire sinking fund of each year shall be paid. This will obviate the necessity of more than one settlement with each company annually, and secure the collection of sums sufficiently large for investment. If companies continue to pay their sinking fund as they have done heretofore, the present mode of investment will extinguish the entire railroad debt of the State before maturity.

It will be seen by the above that the entire liabilities of the State, of every nature, amount to \$16,643,606 66, of which only \$3,844,606 66 is on account of the direct or old public debt. The regular issues to the railroad companies of 6 per cent. bonds amount to \$10,348,000, for which the State holds a first and only lien on 1,034 miles of finished road—or at the rate of \$10,000 per mile. The total amount of bonds endorsed by the State is \$2,364,000, on 236 miles of railroad—35 miles of which being in the State of Arkansas, opposite Memphis, in the direction of Little Rock, are first aided by the city of Memphis, whose bonds for \$350,000 bear the endorsement by the State.

A Brief Review of Florida Roads.

Now that the progress of the Pensacola and Georgia Railroad, to a junction with the Central road at Lake City has been secured by the recent extensive purchases by Col. Houston of the necessary iron and equipments, a short summary of what has been done within the brief period since the inauguration of the railroad system of 1855, may not be uninteresting or unimportant.

At the commencement of the year 1855, the only road in existence within the entire limits of the State was between Tallahassee and St. Marks—a distance of twenty-one miles. Although "the best the country afforded," it was a poor affair at that. With a common flat rail, laid on string pieces, it had ceased to be anything more than an apology for a railroad; but with the passage of the act "to provide for and encourage a liberal system of internal improvements in this State," approved January 6th, 1855, new hopes were inspired and a new impetus given to the public mind. The "encouragement" afforded by that act, led to an efficient re-organization of the various railroad companies then in existence—the Pensacola and Georgia, the Gulf Central and the Florida—and the taking of such steps as might conduce to the end in view. At that time, although each of these companies had an organization, yet not a spade full of earth had been thrown from the track of either one of them, nor had there been a survey of the routes proposed to be pursued. But what has been done? In the first place, the St. Marks road has been regraded and re-ironed with heavy rail; the Pensacola and Georgia graded to the Suwannee, and is in process of rapid completion to Lake City—a distance of one hundred and six miles from Tallahassee—twenty-eight miles ironed and the remaining iron purchased for the remaining seventy-eight miles; the Central graded from Lake City to Jacksonville, sixty miles—forty miles ironed and the iron procured for the balance; the Florida graded from Fernandina to Cedar Keys, one hundred and fifty-four miles—one hundred and twenty-two miles ironed and the iron purchased for the remainder. Here, then, we have, including the St. Marks road, three hundred and forty-one miles graded and two hundred and eleven miles ironed, and the iron purchased for one hundred and thirty miles more—all accomplished since the passage of the act to which we have referred—less than five years. In addition to this, a branch road has been graded from the main line of the Pensacola and Georgia road to Monticello—a distance of three miles—for which the iron is now in the State, all of which will be laid down and the branch opened in the course of ten days. From the Florida road a branch to Ocala, in the direction of Tampa, has been given out to contractors, some considerable portion of which has also been graded.—*Floridian*.

Railways in Canada.

We learn from the report of the Board of Railway Commissioners of Canada, for 1858, which has just been published in pamphlet form, that there were in Canada in 1857, 1,402 miles of railway in operation, that length being under the control of eleven several companies. At the close of 1858, there were 1,612 miles, though only 1,573 thereof were in operation. Canada has, therefore, more miles open than either Scotland or Ireland, and has more than half as much as New York State. Of the whole length, 1,465 miles have the gauge of five feet six inches, and 147 miles the narrow gauge of four feet eight and a half inches. There are now in course of construction seven lines, of which probably 317 miles will be open for traffic in the course of the year.

The average speed of express trains, including stops, is 26 miles per hour; and in motion between stations, 30.5 miles per hour. The maximum speed is got upon the Montreal and Quebec division of the Grand Trunk Railway, which is 36 miles per hour. The average speed of accommodation trains is 22 miles per hour, including stops, or 27 miles when in motion between stations. The average speed of mixed trains is 15 miles, including stops, and 19 miles when in motion. The average rate of freight trains is 13 miles, including stops, and 19 miles when in motion. The total number of locomotive engines upon all of the roads, at the end of 1858, was 366. The following table shows the amount of rolling stock of the several classes:

	Per mile
	Number. of road.
Locomotive engines.....	366 0.23
First class passenger cars.....	213 0.14
Second class passenger cars.....	122 0.08
Box mail and express cars.....	112 0.07
Box freight and cattle cars.....	2,477 1.58
Platform cars.....	1,841 1.17
Construction cars.....	1,063 0.67

Of the locomotives, the Portland Company have furnished 52, the Amoskeag Works 48, the Schenectady Works 32, the Boston Works 23, Lowell and Manchester each 12, Philadelphia 10, and other United States works 20; Messrs. Peto & Co. 50, Fairbairn 12, Stothert & Slaughter (Eng.) 20, and other English builders 28. Canada has built 47. Of the whole number, the shops of the United States have furnished 209, England 110, and Canada 47.

Maysville and Lexington Railroad.

The City Council of Maysville, Ky., in 1857, refused to levy and collect a tax to pay the interest on the bonds of the city, issued in part for its subscription to the capital stock of the Maysville and Lexington Railroad, and a tax for that purpose has not been collected since that date.

Application was made in the Mason Circuit Court by a portion of the holders of these bonds, at the October term in that year, for a writ of mandamus to compel the Board of Councilmen to levy and collect such tax. The application of the plaintiffs was resisted by the defendants on various grounds, but in April, 1858, the Court granted the writ. An appeal was taken from this decision, and on a careful reconsideration of the whole subject, the Court of Appeals sustained the lower Court. The council have accordingly levied a tax of three per cent. on each hundred dollars worth of property in the city, assessed for State purposes, to be applied to the payment of the interest on these bonds.

Hudson River Railroad Bridge Co.

The following gentlemen have been elected directors of this company: Erastus Corning, Albany; Dean Richmond, Buffalo; Chester M. Chapin, Springfield; Samuel Sloan, New York; William H. Swift, Boston; John L. Schoolcraft, Albany; Edmund H. Miller, New York; Sidney T. Fairchild, Cazenovia; and Henry H. Martin, Albany.

Census of Iowa.

Iowa has just completed a State Census, showing a population of 633,549. She had 192,214 in 1850, and 43,111 in 1840. She has thus more than trebled her population in the last nine years, and increased it about fifteen fold in nineteen years. The following is a recapitulation of the most important results shown by the Censns:

Total population	633,549
Males	332,806
Females	300,743
Legal voters	136,457
Value of hogs sold in 1858	\$2,111,425
Do. of cattle	2,950,187
Do. of manufactures	4,444,200
Acres improved land	3,109,436
Do. unimproved	7,335,657
Miles of railroad	390
Do. partly built	310
Bushels wheat in 1858	3,293,253
Do. Indian corn	23,366,634
Do. oats	1,703,760

Holly's Rotary Engine and Pump.

Among the recent inventions for raising water both for economical uses, and the extinguishment of fires, HOLLEY'S ROTARY ENGINE AND PUMP seems to take the first place for its successful working and cheapness of construction. It dispenses entirely with the usual sources of trouble and irregularity in the action of common piston pumps. In an air-tight case made of cast iron, are placed two elliptical rotating pistons working together, and into each other, by means of a system of short and long cogs, which form their peripheries; the short cogs are simply for the purpose of giving steadiness to the motion of the piston; the long cogs, which are four in number and cam-shaped, project so far as nearly to touch the inside surface of the case, forming four chambers or buckets to take up and carry the water to the opening connected with the leading hose, into which it is forced, under a great pressure. The water itself supplies the packing to the cams, being driven, when the piston is in motion, into grooves cut in their ends, thus making the chambers or buckets water-tight.

A most important property of the Holly pump is its uniform and steady stream, due to the peculiar action of its supply chambers; these, as we have before said, are four in number, and their peculiar action consists in a division of the offices involved in the process of receiving and discharging water, securing a steady supply, and avoiding the intermittent action or dead points of the common piston pump, which occur when the plunger is going down. The chambers are by their arrangement and relations to the receiving and discharging, openings of the water case, performing in succession distinct offices at the same time. While one is being filled, the next in order is carrying water, another is discharging itself, and another, just discharged, is on its way to be replenished. Running at a high velocity, it will readily be perceived, that the air once exhausted from the case, and the buckets working in a vacuum, the suction and forcing capacities of the pump will have continuous, steady and uniform action. On one occasion, the piston made 400 revolutions per minute, throwing 1½ gallons per revolution—equal to 500 gallons per minute.

This pump is now in use not only for the extinguishment of fires, but for the purpose of raising water to tanks, etc., etc., by a large number of

railroad companies, and is highly commended by all which have used it. At railroad stations of importance it can be turned to a double use. We add the following testimonials in its favor—

N. Y. & ERIE R. R., ASSISTANT Supt's OFFICE, }
Hornellsville, N. Y., March 13th, 1859. }

C. W. COPELAND, Esq.

Sir—The Rotary Steam Pump and Engine of Holly's Patent, purchased by this company, last October, has been in constant use since that time, as the Station Pump at Elmira, for supplying the tanks which feed the engines passing that station, and gives perfect satisfaction—its great power for throwing water surprising those who have witnessed its working. We consider it the most simple, reliable and effective Pumping apparatus that has been brought to our knowledge, and will perform more work than any other pump we have used, and doing it in less time, and requiring much less fuel. I have no hesitancy in recommending these Steam Pumps as the very best in all respects that the market affords. Yours truly,

H. B. SMITH,

Supt of Susquehanna Division of N.Y. & E. R. R.

N. Y. CENTRAL R. R., ASSIST'T Supt's OFFICE, }

Syracuse, March 29, 1859. }

C. W. COPELAND, Esq.

Sir—The Rotary Steam Engine and Pump purchased by this company about three years since, for the Lyons station on this road, has been in almost constant use during that time, and has not to my knowledge cost a single shilling for repairs. We have also in use Power and Hand Pumps of the same pattern, that have given entire satisfaction in every respect. They will throw more water with the same power than any other Pump I ever met with, and from their simple construction are less liable to get out of order.

I have had several years experience with all kinds of Pumps and consider yours, of Holly's Patent, far preferable to any I have ever used.

Respectfully Yours,

D. WILLIAMS, Mast. Mech.,

Middle Division, N. Y. Central R. R.

I concur in the above.

H. W. CHITTENDEN, Asst. Supt.

The agent in this city is C. W. COPELAND, Esq., of No. 122 Broadway, New York.

Central Ohio Railroad.

We compile the following statement of the business of this road during August, from the 4th monthly report of the receiver:—

RECEIPTS.

From passengers	\$22,380 61
" freight	82,741 81
" express	727 29
" mails	2,378 70

\$58,281 41

Balance due from other roads on passengers

6,455 23

Balance due from other roads on freight

13,222 93

Balance due from local agents for do.

2,810 56

Total earnings of road for August

\$80,720 13

EXPENSES.

Transportation Department—

Passenger

\$3,010 17

Freight

6,104 64

Fuel

5,352 94

\$14,476 75

Machinery department

11,825 20

Road department

10,636 55

General expenses

2,824 37

Construction

2,341 75

Total expenses

\$42,104 62

Balance due other roads—

On passengers

\$1,205 06

On freight

27,411 34

\$70,721 02

Finances of Wisconsin.

The aggregate receipts into the Treasury of this State for the year have been as follows:

Revenue proper	\$420,921 65
Bank tax	118,806 85
Railroad tax	12,923 72
Miscellaneous	6,361 25

Total

\$559,013 47

There were outstanding claims against the Treasury at the commencement of the fiscal year, as shown by Treasurer's report of last year

\$107,607 80

Appropriations made by the Legislature for old claims

14,714 00

Add loan made to State University

10,000 00

Overpayment at commencement of the year

27,828 04

160,149 84

After paying off these old claims, and including the temporary loan to the University, which will come back into the Treasury, we have left as the available resources of the year, an aggregate of

\$398,863 63

—which is accounted for in the following manner:

Paid public institutions

\$148,795 00

Legislative expenses

37,241 75

Permanent appropriations, etc.

90,108 18

Sundries

104,258 79

380,403 63

Balance in treasury

\$18,460 00

Grand Trunk Railroad.

We learn from the Port Huron *Republican* that 129 tons of iron have been received at that Port for the bridge over Black river, at a cost to the company of \$6,398 40, including duties. The track of the road is now laid to within 6¼ miles of Port Huron, and will shortly be completed to the bridge. The prospect is that the road will be opened from Port Huron to Detroit by the 1st of November.

Missouri Finances.

The following letter from the Acting Commissioner of the Land Office, is of interest to the holders of the bonds of this State. The sum mentioned, together with the revenues of the State, will leave quite a surplus in the treasury beyond the amount required to pay the interest falling due in January next:

GENERAL LAND OFFICE, Oct. 4, 1859.

SIR:—Referring to your letter of the 14th July last on behalf of John W. Ried, Commissioner of the State of Missouri, having preference to the two per cent. fund account of the State of Missouri, I have to inform you that said account has been adjusted up to 1st January, 1859, and that there appears to be due to said State up to that date the sum of \$374,135 04. Also the 3 per cent. fund account of said State has been adjusted up to the same period, and there appears to be due to her on account of the last mentioned fund the sum of 43,376 40

Making, in the aggregate, the sum of \$417,511 44

The audited accounts will be submitted to the First Comptroller of the Treasury as soon as they shall have been properly recorded in our books, which will be before the close of the week. Very respectfully, your obedient servant,

Jos. S. WILSON, Act. Comm'r,

H. G. FANT, Esq., Washington, D. C.

Boston Horse Railroads.

The recent report to the Boston Board of Aldermen respecting Horse Railroads, has attracted considerable attention from its liberal policy towards these corporations. The report presents some facts about the passengers transported, which we think are not fully realized by the public. It says:

The number of passengers carried upon our Horse Railroads for the last year was nearly eight millions, and it must soon exceed ten millions per year. This is over 27,000 passengers per day, Sundays included. The transportation of this number through the streets by omnibuses, or any other kind of carriages, would operate as a thorough blockade.

The number of passengers carried on the Metropolitan road alone for the present year is estimated at 5,000,000, or 15,000 per day. To transport this number in omnibuses would require one to start about every thirty seconds, for 15 hours each day. But as the rush of passengers is at morning and evening, the transport of this number by omnibuses would be next to an impossibility, and yet the Metropolitan road carried, on the 4th of July, over 50,000 passengers.

For safety, this mode of conveyance is, we think, in advance of all others, and stands 36 to 1 against steam roads, the fatal accidents on the latter in 1858 being at the rate of $4\frac{1}{2}$ in 1,000,000 passengers, and on Horse roads 1 in 8,000,000.—*Boston Courier.*

The Caloric Engine.

The attempt of Capt. Ericsson to construct a caloric engine that should do the work of steam engines in the navigation of the seas, proved a failure; but the experiments that have been made with the same motor on the land, are likely to result in showing the superiority of caloric over steam as an industrial agent. Such, indeed, has been the success of Mr. Ericsson's caloric engines, that companies are engaged, both in this country and Europe, in manufacturing them on a large scale, and they are rapidly coming into use. They have already been set to work in England, the home of the steam engine.

The engines now constructed by Capt. Ericsson differ altogether from that made for the "caloric ship," and resemble, in their essential features, those elaborated and built by him in London between the years 1827 and 1833; and it is pointed out as a remarkable instance of the correctness of first conceptions, that Capt. Ericsson, after expending thirty years of intense labor, should now find himself just where he started.

The distinguishing merit of the engine is its economy, portability, simplicity, and non-liability to explosion. Added to this, is the superior advantage, in certain localities, of requiring no water. Another peculiarity is, that by means of compressed air, forced into a tank by the motive engine, power is instantaneously transmitted through long distances, impracticable to either belts or shafting. The engine may be placed in the most convenient point, however remote from the work, if simply connected by a common gas-pipe for the conveyance of air.—*Boston Journal.*

Baltimore and Ohio Railroad.

The Board of Directors of the Baltimore and Ohio Railroad have declared a dividend of 3 per cent. on the capital stock of the Main Stem, and a dividend of $4\frac{1}{2}$ per cent. on the capital stock of Washington Branch Railroad, for the fiscal half year ending on 30th September. The Washington Branch dividend is payable on and after the 25th inst., and the Main Stem dividend on and after the 9th of November, both at the Merchants' Bank of Baltimore.

American Railway Cars for Egypt.

The ship Vivid Light, about to sail from Boston for Alexandria, Egypt, will take out fourteen railway cars, manufactured at the establishment of Messrs. Watson & Co., of Springfield, for the railroad in Egypt.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending October 18, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6s.....85	
Covington and Lexington, 2d Mortgage	7s.....65	
Cinc., Ham. and Dayton, 2d Mortgage	7s.....84	
Indianap. & Cincinnati, do. do.	7s.....82	
Do. do. Dividend	.....65	
STOCKS.		
Cincinnati, Hamilton & Dayton	Ex Div. 67	
Columbus and Xenia	.....83½	
Indianapolis & Cincinnati	.....49	
Little Miami	.....86	

Railroad Earnings.

The September earnings of the Stonington road were\$24,238 27
September, 1858 20,720 58

Increase\$3,517 74

The earnings of the Central Railroad Company of New Jersey, for the month of September, 1859, were\$89,846 24
For September, 1858 72,628 74

Increase, 23 per cent.\$17,217 50

The revenue of the Baltimore and Ohio Railroad, for September, 1859, was:—

MAIN STEM.

Passengers\$73,709 41
Mails 8,668 00
Express 3,770 00
Tonnage 253,922 38
.....\$340,069 79

WASHINGTON BRANCH.

Passengers\$31,413 02
Mails 1,000 00
Express 1,300 00
Tonnage 6,767 04
.....40,480 06

N. W. VIRGINIA BRANCH.

Passengers\$3,948 09
Mails 866 67
Tonnage 14,771 93
.....19,586 69

Total\$400,136 54

Compared with the same month in 1858, the returns show the following result:

	Sept., 1859.	Sept., 1858.
Main stem	\$337,449 18	\$340,779 79
Washington branch	44,757 97	40,480 06
N. W. Virginia branch	13,582 43	19,586 69

Totals.\$395,789 58 \$400,136 54
Increase for Sept., 1859\$4,346 69

The fiscal year of the Company closed on the 30th of September. The comparison of the earnings of the year 1858-'59, with those of 1857-'58, shows the following results:

	1858.	1857.
October	\$392,503 02	\$396,191 85
November	383,159 22	361,443 38
December	336,861 01	379,259 02
1859.		
January	327,176 63	217,518 73
February	321,391 10	277,035 49
March	410,061 21	439,256 23
April	369,067 33	483,558 45
May	397,959 53	397,770 07
June	359,029 01	400,730 00
July	310,934 42	358,604 65
August	376,940 92	370,511 36
September	400,136 54	395,789 58

Earnings of 1858-'59 \$1,385,219 75 \$1,580,663 81
Do. 1857-'58. 1,580,663 81

Decrease present y'r, \$195,444 06

The receipts of the Worcester and Nashua Railroad for September, 1859, were\$22,015
September, 1858 18,969

Increase\$3,046

The earnings of the Ohio and Mississippi Railroad Company from the transportation of passengers, freight and mails during the month of September, were:—

Eastern Division\$103,587 86
Western do. 74,992 94

Total\$178,580 80

The receipts of the Grand Trunk Railway of Canada for the week ending October 1, were\$70,903 84
Week ending Oct. 2, 1858. 57,491 47

Increase\$13,412 36

Total traffic from July 1st\$606,620 55
Same period last year 550,420 37

Increase\$56,200 18

The traffic of the Great Western Railway of Canada for the week ending Oct. 7, 1859, was as follows:

Passengers\$29,518 95
Freight and live stock 19,716 00
Mails and sundries 1,574 77

Total\$50,809 73
Corresponding week of last year 47,695 48

Increase\$3,114 25

The earnings of the Great Western Railway of Canada, for the week ending October 14, were:—

Passengers\$27,526 43
Freight and live stock 18,998 55
Mails 1,803 00

Total\$48,327 98
Corresponding week of last year.. 49,070 27

The earnings of the Troy and Boston Railroad for the six months, ending Sept. 30, were:

1859, from 47 miles\$115,817
1858 " 32 " 75,932

Increase\$39,885

The following is a comparative statement of the business of the North Pennsylvania Railroad Company, for the month of September, 1858 and 1859:

Earnings in September, 1859\$32,774 07
Do. do. 1858 28,376 83
Increase\$4,397 24
Earnings in 10 months, ending Sept. 30, 1859\$280,844 07
For same time last year 239,136 14

Increase\$41,707 93

The earnings of the Erie Railroad, for September, 1859, were\$455,235 03
Earnings, September, 1858 463,589 09

Decrease\$8,154 06

Ohio and Mississippi Railroad.

Cincinnati papers mention the fact that a most desirable improvement has been made upon the line of the Ohio and Mississippi Railroad, near that city. The stream called Mill Creek, which puts into the Ohio a few miles west of the depot of this road has heretofore been crossed upon trestles only, and in times of very high water a portion of the work was subjected to overflow, by which passengers were compelled to stop at an inconvenient distance from the depot and go into the city by steamboats or omnibuses. This trestle work has been removed and a permanent roadway substituted, formed by an expensive and broad gravel embankment. Across the creek, too, a bridge has been erected by the McCallum Bridge Co., which rests upon huge stone piers, and comprises two spans—one of 118 and the other of 208 feet reach. It is said to be a model for its substantial masonry and the completeness of the plan and execution of the superstructure. Heavily

loaded trains now pass over the bridge daily, with no perceptible vibration at any point.

American Railroad Journal.

Saturday, October 22, 1859.

How Cheaply Can Freight be Carried on Railroads?

We gave last week elaborate statements showing the operations of the Philadelphia and Reading Railroad for a period of years. Assuming the statements made give correctly the cost of carrying property and persons on this road, the result may be regarded of very great value in showing at how small a cost they can be moved.

The total number of tons carried one mile on this road for 10 years, was 3,775,633,920. This embraced the *dead-weight* carried, with the exception of engines and tenders. The total amount received from all sources during the same period, was \$29,373,237. This sum is equal to 7.99, or, say, 8 mills per ton carried one mile.

The current expenditures for the same period were \$15,238,778, or 4.03 mills per ton per mile.

The total tons of useful freight carried for the 10 years was 22,278,321 tons, of which 16,875,086 tons have been *coal*, viz:—

	Tons of coal carried.	Total tons of freight carried.
1849	1,097,762	1,429,561
1850	1,351,507	1,743,680
1851	1,650,270	2,145,132
1852	1,650,912	2,122,171
1853	1,582,248	2,076,197
1854	1,987,854	2,582,563
1855	2,213,292	2,909,667
1856	2,088,903	2,815,760
1857	1,709,692	2,326,706
1858	1,542,646	2,126,861
Totals	16,875,086	22,278,321

The average weight for the past year of the coal trains *down*, exclusive of engine and tender, was 728 tons; empty train *up* 255.7 tons. Weight of passenger trains, 61 tons. The useful load of freight trains has averaged 473 tons per train, while the dead weight has averaged 510.4 tons per train for the round trip.

Taking the Reading as a standard, the cost of moving a ton either of useful or dead weight, is 4.03 mills per ton per mile. According to this standard the cost of movement of empty passenger trains on other roads can easily be estimated. Allowance should of course be made for the immense traffic of the Reading which reduces the ratio of current expenditures to earnings.

The results reached on the Reading railroad have especial interest for our great New York lines coming in competition with the canals and the Hudson river. There is no doubt that the tonnage over the route occupied by the Erie canal and Central railroad greatly exceeds that passing over the Reading road. In respect to quantity of freight offering, the Central road is in equally favorable position with the Reading.

At the rate at which freight is carried on the latter, the cost of transporting a ton of flour from Buffalo to Albany would be \$1.20, or 12 cents per barrel; but the cars on the Reading return empty, while those on the Central, on the average, take half a load, thus reducing the ratio of expenses far below that of the Reading. Flour can be handled with great ease and facility. A full load for the

engine can always be taken. Still, we admit there are advantages on the side of the Reading, of its route, in the character of its freight, and the low charges of every kind connected with it. We will, therefore, estimate the cost of carrying a ton of flour on the Central to be greater by one-half, than a ton of coal on the Reading, or six mills, per ton per mile, or including dead-weight, 8 mills per ton per mile, or 23.8 cents per barrel for the whole length of the road. At a cent and a quarter per mile, the cost would be \$3.52 per ton; and the profit, \$1.14 per ton, or 11.4 cents per barrel. Adding one-half of this sum for the profits on the *return* freight, the net gain would be 17.1 cents per barrel, or \$1.71 per ton, equal very nearly to one-half the cost. At the rate estimated, the road will take all the more valuable merchandise and agricultural products, exceeding in value \$50 per ton, and embracing wheat and flour.

We do not pretend that our estimate is entirely correct, but it is approximately so. The data we have given will enable every one to work out his own conclusion. They indicate however that the canal, even with the enlargement, may have a difficult task to retain its present, or regain the traffic it has lost. The cost of transporting a barrel of flour over it, with the enlargement, cannot be estimated at much less than 30 cents. We suppose that the railroad is secure of this kind of freight at 10 cents advance over that charged on the canal. *Speed* is a great desideratum with the forwarder. This is rendered necessary by ideas and habits and modes of doing business that railroads have brought about.

It seems probable, therefore, that the railroads of New York may become competitors to our canals in the carriage of all the more valuable kinds of merchandise, as well as of agricultural products. The results obtained on the Reading Railroad prove that heavy freight can be moved at rates vastly lower than has been the usual estimates. All that is wanting on other roads to a similar result, is an adequate business and competent management. With these two conditions, results may be obtained that will astonish the public, in showing how greatly the cost of transportation by railroad has been over-estimated.

We would state by way of correction, that in comparing, in the JOURNAL of last week, the amount of tonnage on the Reading with the New York and Erie and Central, we included the *dead*, as well as the *useful* freight on the former, which is *not* included in the statements of the latter companies. The dead-weight carried on the Reading just about equals the paying freight.

Chicago, Iowa and Nebraska Railroad.

The cost of this road, 81 miles long, has been \$1,742,500; or at the rate of \$21,500 per mile. This is represented by \$625,000 of share capital, \$810,000 of mortgage bonds and \$307,500 of floating debt. Its Mississippi terminus is at Clinton, opposite the western terminus of the Galena and Chicago Railroad. At this point a bridge has been constructed over one of the channels of the Mississippi river, leaving only 700 feet of the main channel to be crossed by ferry boats. The road has not been in operation a sufficient length of time to form a correct idea of the amount of the future earnings of the road. They are estimated, however, at 240,000 per annum,

New York and Erie Railroad.

The affairs of this road have assumed no new phase for the past two weeks, with the exception of the election of directors. What this signifies we are as yet hardly able to say. The Receiver controlled the election by voting, as Secretary of the Company, old proxies, lodged with it, some of which were executed many years ago. He formed the new ticket, was very active at the polls the whole day, engineering its success. Every person calculated in any way to thwart his plans was turned out, and a board entirely pliant to his wishes, elected. He, therefore, holds both ends of the bag, and we must now wait till he unfolds his plans. His interference in the election appeared to us to be an indecorous and improper one. He is an officer of the court, in a proceeding hostile to the directors. We should just as soon have expected to have seen the Judge that appointed him, electioneering at the polls for a ticket made by him, as one of his officers, which the Receiver is. It appears to us that he had but one duty, and should have had but one object, that of executing with fidelity and simple-mindedness his trust—the proper care of the property confided to him, instead of mixing himself up in the strife for election of Directors, to which he certainly could not have been prompted by any such motive. The thing has a bad start in the outset. It looks like, and is a successful attempt to get control of the road. Mr. Marsh can now consult his own interests. If he chooses to remain in his seat one, two, or three years, he can do so. As it is one of very great power and emolument, it is not to be supposed that he will be in haste to abandon it, especially after it was sought with so much avidity. He would be more than a man, almost, did he not soon come to regard his road, as many of the Directors of our roads do, as the mere instrument for the promotion of his own advantage.

On the whole, though we have been one of the most hopeful for the Erie in all its disasters, we have about given up all expectation that it has any other fate than of a wreck which has become the subject of the common scramble. Every day weakens the prospect of an amicable solution of its difficulties and embarrassments. Suits are multiplying. All the parties in interest are becoming more and more estranged. The course taken by the Receiver, has been a new element of discord. Like a ship on a rock, every day punches a new hole in its sides.

We have heard it stated that the proceedings under which the Receiver was appointed—we mean those in behalf of Mr. Drew, are entirely premature, no cause of action existing for default on coupons on bonds held by him for six months from the time they fell due, which had not elapsed. The proceedings in this case form a very curious, and not a very creditable, history. But, perhaps, there is no use to be raking-up old sores. The ship is on shore, and the problem is, how to get it off.

We learn from the Cincinnati *Enquirer* that the proposed consolidation of interests between the Little Miami and Columbus and Xenia, and the Cincinnati, Hamilton and Dayton Railroad Companies, alluded to in the JOURNAL of 10th ult, was submitted for ratification to the Board of Directors of the latter company at their semi-annual meeting held on the 11th inst., and rejected by a very decided majority.

Sale of Railroad Lands.

The Board of Directors of the Little Rock and Fort Smith Branch of the Cairo and Fulton Railroad Company will offer for sale by public auction, on the 14th of November next, at the office of the Company, in Van Buren, Crawford Co., Ark., 40,000 acres of land, being about one-half of the lands attached to the first division of the road. These lands are advantageously situated upon and near the line of the road, which is now being placed in course of construction, and for the graduation and masonry of which proposals are invited, to be received until the 1st of December. The lands are situated in the counties of Crawford, Sebastian and Franklin, within 20 miles of Van Buren, and 25 miles of Fort Smith, and comprise some of the most valuable bottom and uplands in the State of Arkansas. These lands were selected and confirmed years ago, and are now brought into market for the first time, affording rare opportunities for safe and remunerative investments of capital. The better portion of the Government lands have already been absorbed. The country is well watered and timbered; the soil productive, and the climate unequalled by any portion of the West for salubrity and health. The title is perfect. The terms are: one-third cash, one-third in 6 months, and one-third in 12 months; notes to bear 10 per cent. interest. For full lists of these lands, and all desirable information concerning them, address J. B. OGDEN, Esq., Secretary, Van Buren, Ark.

To Contractors Having Capital.**MARYLAND AND DELAWARE RAILROAD COMPANY.**

Attention is invited to the advertisement of this company, which will be found in its appropriate place in our advertising columns, requesting proposals for the construction, including the materials, of 53 miles of their road, commencing at its junction with the Delaware Railroad, at Smyrna, Del., about 38 miles below Wilmington, and extending to Oxford, Maryland. The entire line is located and secured, and 20 miles of it already graded. This road, when completed, will form a short and direct connection between Philadelphia and the Chesapeake Bay, near the mouth of the Great Choptank river, a point seldom, if ever, obstructed by ice. For further particulars, see the advertisement; and for a circular, soon to be issued, giving a description of the character, position and resources of the road, with map and profiles, address J. C. W. POWELL, Esq., Secretary, Easton, Md.

Dividends.

Coupon No. 8 (Feb., 1855) on Rutland and Burlington 1st mortgage bonds will be paid Oct. 19, at No. 6 Devonshire street, Boston.

The Panama Company advertise to pay off their first mortgage sterling loan due 1st December, on presentation of the bonds either at their office here or to Messrs. Cavan, Brothers, & Co. London.

The Nashville and Chattanooga Railroad Company have declared a dividend of 3 per cent. for six months.

At the recent meeting of the Board of Managers of the Cumberland Valley Railroad Company, a dividend of four per cent., for the last six months, was declared upon the preferred stock of the Company, and a dividend of three per cent. on the unpreferred stock, payable on demand.

Railroad from Charlotte to Statesville, N. C.

A meeting of the citizens of Charlotte, N. C., was held in the Court House in that city on the 8th inst., to hear the report of the delegates sent to attend the railroad meeting, held at Statesville, for the purpose of considering the practicability of constructing a railroad to connect these two points. Addresses were made adverting to the kindly feeling manifested towards this project on the part of the Western, N. C., Wilmington, Charlotte and Rutherford, and Charlotte and S. Carolina Railroads; also to the great benefits which would accrue to Charlotte, to Statesville, and the counties west and north of them both; the absolute necessity for the road, the great saving in expense and time it would prove to the farming, and every other interest, in the shorter route and cheaper rates of carriage to the Atlantic cities, Wilmington and Charleston; the increased value it would give to the lands along or near it, the increase of trade to Charlotte and Statesville, and the closer business and social relations it would be the means of cultivating between the people of Charlotte and that beautiful and fertile section of the State now far removed from them. The importance of obtaining sufficient subscriptions to place the road under contract before February next was urged, as at that time the charter would be forfeited if work upon the road was not commenced.

Rutland and Burlington Railroad.

The gross earnings of this road for the year ending August 31, 1859, were.....\$354,288
And the expenditures 272,727

Leaving net income.....\$81,561—against \$41,787 the previous year. The receipts have increased \$21,973, and the expenses diminished \$17,801, as compared with 1858. Sept. 1st, the Trustees had \$119,104 on hand in cash and cash assets. From this they are to pay coupons of \$63,000. The trustees state that the road has a good supply of material, and that the track and rolling stock are greatly enhanced in value, and are in better condition than when they came into the hands of the trustees. One hundred tons of new rails have been charged to expenses this year, besides the re-rolling of 455 tons, the repairing of 2,111 tons, and the cost of 11,049 cross-ties. In addition to the usual repairs of rolling stock, 3 locomotives, 2 passenger cars, 5 platform cars, and 42 box and cattle cars, have been added to the equipment and charged to current expenditures. Many repairs and renewals of a permanent character have been made in the buildings, bridges and masonry. The trustees say the property 'is now nearly free from the incumbrance of legal claims,' in stating the necessity of large past outlay for litigation.

Griffin and Oxford Railroad.

At a meeting of the stockholders of this road, held recently at Newnan, Coweta Co., Ga., Judge Dobbins, of Griffin, was elected President, and Judges Read and Roberts, of Spalding, J. M. Thomas and T. A. Grace, of Coweta, and Meador and Wootten, of Carroll, the Board of Directors of the road. The Newnan Blade says that "all are gentlemen of energy and unexceptionable characters. With this favorable beginning, the road may now be considered a fixed fact. It will be built, and no mistake, and that, too, in short order."

American Iron Bridges for South America.

We find in "El Ferrocarril," of Santiago, Chile, a notice of an iron bridge, constructed by Messrs. M. M. WHITE & Co., of the Globe Iron Works, in this city, for the Southern Railroad of Chile, extending from Santiago to Talca. This bridge is known as the MAIRU Bridge, is 1,200 feet in length, equally divided into 11 spans, and was built in the spring of 1857. Previous to its shipment to South America, and when but 9 spans were completed, one of them, measuring in length about 108 feet, was tested by loading it with 153 tons of paving stones, which produced a deflection hardly perceptible. Upon the completion of the bridge, it was further tested by a railroad train, which, with its load, weighed 224 tons, with an equally favorable result. The bridge gives entire satisfaction, and has done much to commend American engineers and manufacturers to the people of Chile. Messrs. White & Co. have had numerous orders from that State, as well as from other quarters. In hot climates, which are destructive to wood, bridges are, and should be, constructed entirely of iron.

Low & Burgess Railway Directory.

This firm has issued from their well known establishment, No. 55 Liberty street, in this city, for the supply to railroad companies, locomotive and car builders, and machinists generally, of materials and articles used by them, a new volume of some 200 pages, giving the names of all the important railroads in the United States and Canada; with a brief description of each road; a statement of its financial condition; date of annual meeting; with a full list of officers and directors, and the places of their residence. The volume is well got up, and it is an almost indispensable companion of every business man, as every such person is more or less connected with railroads. It can be had of Messrs. L. & B., at their establishment, and will be forwarded on application by mail. Messrs. L. & Burgess are not publishers, but use the Railway Directory as a very efficient means of placing themselves favorably before our railroad companies and the public.

Sandusky, Dayton and Cincinnati Railroad.

The following gentlemen have been chosen directors of this road for the ensuing year: David A. Neal, Salem, Massachusetts; John P. Yelverton, New York; Elisba C. Litchfield, New York; Elijah P. Williams, Buffalo, N. Y.; N. P. Stewart, Detroit, Mich.; O. Follett, Sandusky, Ohio; W. S. Pierson, Sandusky, Ohio; I. S. Gardner, Bellefontaine, Ohio; R. E. Runkle, West Liberty, Ohio; S. A. Winslow, Urbana, Ohio; Jona Harshman, Dayton, Ohio; J. W. Patterson, Cincinnati, Ohio; Ralph M. Pomeroy, Cincinnati, Ohio.

President—ORAN FOLLETT.

Superintendent—JOHN H. HUDSON.

Treasurer and Secretary—LESTER H. LATHAM.

Finances of Virginia.

From the annual report of the Virginia State Treasurer, showing the operations of the fiscal year ending September 30, 1859, it appears that the balance of money on hand at that date was \$222,888, of which \$104,103 is to the credit of the commonwealth, \$42,519 to the credit of the Literary Fund, \$9,217 to the Board of Public Works, and \$67,137 to the Sinking Fund. The actual receipts for the fiscal year were \$6,571,711, and the actual disbursements for the same were \$6,002,831.

The Iron Mountain Railroad Convention.

This convention adjourned at a late hour of Thursday night, after listening to exceedingly well digested speeches from Mr. Stevenson of Nashville, Col. Tate, President of the Memphis and Charleston Railroad, and others. Three sessions, it is proper to say, were held during the day, and in the discussions of these sessions Mr. Barnett, Col. Swayne and Mr. Trezevant, of Memphis; Gen. Watkins, Mr. Herr and Mr. H. Moore, of Cape Girardeau; Mr. Darnes, of Scott; Mr. Lawson, of Ripley; Col. Bogy, of St. Louis, and Col. Stevenson and J. S. Rains, of Nashville, participated.

The debate in the opening, we are told, was a most interesting and able one—the leaders in it being both railroad men in Tennessee, where, and in all Southern States, railroads are built for less money, and are managed in a better way, and pay better dividends, than any other roads in the United States. The gentlemen were all prepared with their facts and figures—they had the data to go upon; and the only regret about the whole matter is, that not a man who might be supposed to have any interest in St. Louis—not a millionaire, nor a half millionaire, nor any number of our citizens outside of those who had a duty assigned to them, were present to hear this discussion. We confess it with much mortification, but it is the fact that, while men have left their homes and their business, in Kentucky, and Tennessee, and Arkansas, and South-eastern Missouri, to come here and confer with us about a matter in which we have, after all, the greatest interest, our own citizens, millionaires and all, were so much engaged that they could not give them two or three hours' attention—not even to hear what they had to say in a matter in which all of us are so deeply interested. It does not look well, to say the least of it.

To-day we observe that two intelligent and well informed gentlemen—Col. Tate, of Memphis, and Mr. Stevenson, of Nashville—are to address the Chamber of Commerce on matters pertinent to this subject, at the Exchange, at 12 o'clock, and we shall note the courtesy extended to them by our merchants and business men.

The resolutions finally adopted, and which were offered by Mr. Rains, of Nashville, after some amendment, took the following shape—

Resolved, That it is the sense of this convention that it is of the highest importance to the best interests of the city of St. Louis, and of the State of Missouri generally, the St. Louis and Iron Mountain Railroad should be extended as early as practicable to such point or points on the Mississippi river, or to such point or points on the State line, dividing the State of Missouri from the State of Arkansas, as may hereafter be found most proper and advantageous to said State of Missouri.

Resolved, That the President and Directors of the said Iron Mountain Railroad Company be requested by this convention to prepare and lay before the Legislature of the State, at its next annual session, a written statement of the advantages that will result from the extension of said road from some point or points on said Missouri State line.

Resolved, That each delegation representing the various points which have been proposed for the extension of said road, be requested by the convention to select two of their own number, who shall prepare and report to the President and Directors of the Iron Mountain Railroad Company, as early as convenient, a written statement of the advantages that will result to the State of Missouri and the city of St. Louis by the respective routes which they propose.

Resolved, That the President and Directors of said railroad company be requested to publish a pamphlet from their own report, accompanied by the various reports of the committees selected to represent their respective routes, and lay the same before the next Legislature.

These resolutions, if the several committees will do their duty at an early day, will have an excellent effect. They will present of course, every

possible argument in favor of the respective routes, and the reports from these sources will enable the Iron Mountain Company to go before the Legislature with a detailed statement of facts in regard to each of the routes, founded on data presented by their respective advocates. In this way, the Legislature can act understandingly and for the best interests of the State.—*St. Louis Republican*, Oct. 1.

The Lykens Valley Coal Trade--The Susquehanna Canal.

The *Farmers' and Miners' Journal* of the 13th inst. says:

A boat cleared from Millersburg last week with 91½ tons of coal. It is expected that boats carrying one hundred tons will be able to navigate these canals next year. Indeed, we are told, that active operations for the improvement of the navigation by the addition of thirty feet in length to the lock chambers, will probably be commenced this winter. When this change shall have been effected throughout the canals from Millersburg to Columbia, boats carrying from 120 to 140 tons will be used, and the consequent cheapness of freight will largely increase the business of this region eastward and southward.

The coal shipments from this place, are, up to last week, only 1,600 tons behind the corresponding time last year, which, taking into consideration the fact of the strike several months ago, as well as the two months lost on account of the railroad repairs last winter, would indicate a greater activity in the shipping business during the summer than ever before.

The iron has been purchased for relaying the Lykens Valley Railroad, and the work will probably be commenced as soon as the canals close, and we may look forward to a larger business next year, consequent on increased facilities.

Debt of Wheeling, Va.

The following is the debt of this city as it now stands:

Issued for Municipal purposes.....	\$391,689
" to Baltimore and Ohio Railroad..	500,000
" to Marietta and Cincinnati R. R..	250,000
" to Cleveland and Pittsburg R. R..	50,000
" to Hempfield Railroad.....	238,000
" to Hempfield R. R. (subscription)	171,429
Arrears of interest.....	216,093

Total \$1,817,211

A pamphlet has been issued by the city authorities, who are seeking a compromise with her creditors, proposing "to issue new bonds for fifty per cent. of the old debt—to levy a tax for the payment of interest and sinking fund—to hypothecate all the property of the city not subject to prior liens, together with the railroad stock issued to the city in exchange for her bonds, and to create a trusteeship for the application of such to the benefit of those creditors who shall accept the arrangement. The city also engages to not, in any event, present more advantageous terms to those creditors who shall stand aloof. The present arrangement not to be consummated until three-fourths of the creditors shall acquiesce."

Covington and Ohio Railroad.

A convention of the friends of the Covington and Ohio Railroad was recently held in Putnam County, Virginia. Kanawha, Cabell, Mason, Putnam, Logan, and Wayne Counties, were represented. Col. Joab Early, of Putnam, was elected President. In the preamble adopted is set forth the importance of finishing the road. The resolutions adopted assert it to be the true policy of the State that such an appropriation should be made to the road at the coming Legislature, as will be sufficient to complete it, and that at least \$2,000,000 of such appropriation should be annually expended upon it, until it is completed to the Ohio river. A committee was appointed to lay before the Legislature, at its next session, a memorial embodying the proceedings of the convention.

Taxation in New York City.

STATEMENT SHOWING THE RATES, ETC., OF TAXES FROM 1841 TO 1859.

Year.	Total valuation of taxable property.	Amount of tax raised.	Rate of tax on \$100.
1841.....	\$251,194,920	\$1,394,136 75	\$0 56
1842.....	237,805,651	2,031,383 66	0 86
1843.....	229,229,079	1,747,516 59	0 79
1844.....	236,727,143	1,983,818 56	0 89
1845.....	239,994,517	2,096,191 18	0 86
1846.....	244,952,004	2,526,146 71	1 05
1847.....	247,153,299	2,581,776 30	1 05
1848.....	254,163,523	2,715,510 25	1 07
1849.....	256,197,143	3,005,762 52	1 18
1850.....	286,061,816	3,230,085 02	1 13
1851.....	320,210,857	2,924,455 94	0 91
1852.....	351,768,426	3,380,511 05	0 96
1853.....	413,631,382	5,066,698 74	1 23
1854.....	462,021,734	4,845,386 07	1 05
1855.....	486,998,278	5,843,822 89	1 20
1856.....	511,740,492	7,075,425 72	1 38
1857.....	520,545,282	8,066,566 52	1 55
1858.....	531,194,290	8,621,091 31	1 63
1859.....	551,923,122	9,860,926 09	1 79

Completion of Louisville and Nashville R. R.

Within two weeks the Louisville and Nashville Railroad will be finished. We do not exaggerate when we say that no more important event than its completion has occurred in the history of the city of Louisville. From it our city will receive a new impulse in its career of greatness and prosperity; the avenues of trade and commerce with the Southwest will be opened up to our manufacturers and merchants; the products of the South will be poured into the lap of our city, travel will be increased, an impetus will be given to every department of business, and Louisville will at once become the great commercial emporium of the Southwest.

But our city will not alone reap the advantages resulting from the building of the Nashville road: the farmers all along the line of the road will receive from it far greater benefits in the facilities it affords for the transportation of their productions, and the increased value of their lands. The advantages will be reciprocal—Louisville will be benefited; so also will the people along its route.—*Louisville Courier*.

North-East and South-West Alabama R. R.

At a meeting of the stockholders of this company held at Eutaw, Ala., on the 12th inst., the Directors were authorized to issue first-class bonds for \$4,300,000, in addition to those authorized last fall, to bear 8 per cent. interest. The shortest time for any of the bonds to run is seven years, and the longest, thirty. The company pledging its lands and the entire property of the road for the payment of the bonds. This action was unanimous. The bonds will be immediately issued and placed in the hands of an agent, who will proceed to the most inviting market to negotiate their sale.—*Eutaw Observer*.

Eric Railroad Directors.

The following are the Directors of the New York and Erie Railroad just elected: Samuel Marsh, Daniel Drew, Dudley S. Gregory, John Arnot, Elmira; Wm. B. Skidmore, Hermann Gelpcke, Ralph Mead, D. A. Cushman, William Evans, England; George T. Cobb, Robert H. Berdell, William F. Splatt, England; Nathaniel Marsh, J. C. B. Davis, Henry Sheldon, Henry L. Pierson, Ambrose S. Murray, Goshen.

Mississippi Central Railroad.

We are pleased to learn that the gap in this road is being finished rapidly. There is now about twenty-five miles of staging, and by or before the 1st of January the last nail will be driven, and the iron horse will not be stopped in his rapid movements, between New Orleans and Holly Springs. This event will be a proud era in the history of Holly Springs, and we earnestly wish to see the hour arrive when we can leave Holly Springs one morning, and find ourselves snugly roomed in the St. Charles the next.—*Holly Springs Herald*.

Finances of the U. S.

The accounts of the General Government for the fiscal year ending 30th June last, illustrate the progress which the country is making toward recovery, and the prospects which exist of the speedy redemption of the floating debt now represented by notes.

The balance in the Treasury on 1st July, 1858, was \$6,398,316
Actual receipts from all sources, including treasury notes and loan during quarter ending September 30, 1858. 25,230,879
Actual receipts during the three remaining quarters of the fiscal year 1858-9 38,579,391

Ordinary means for the year \$70,208,587

The expenses, on the other hand, have been less than the estimate made at the Treasury Department:—

The expenditure of the first quarter, ending 30th September, 1858, was \$21,708,198
Actual expenditure during the three remaining quarters of the fiscal year 1858-9 48,326,283

Total expenditure during the year. \$70,034,482
Total income, as above. 70,208,587

Excess of income over expenditure .. \$174,105

The balance in the Treasury on July 1st, 1859, was \$11,174,105, being \$4,110,806 more than Mr. Cobb expected, last December, that he would have on 1st July. The following brief statement shows the various heads of the public expenditure, with the exception of the interest on public debt and redemption of Treasury notes:—

Expenditure for 1858-9.

Civil, foreign intercourse and miscellaneous \$23,635,820
Interior 4,753,972
War 23,243,822
Navy 14,712,610

Total \$66,346,226

The government income and expenditure for the past ten years have been as follows:—

Years.	Income.	Expenditure.
1848-9	\$59,796,000	\$56,386,000
1849-50	47,649,000	44,604,000
1850-1	52,762,000	48,476,000
1851-2	49,893,000	46,712,000
1852-3	61,500,000	64,577,000
1853-4	73,802,000	75,473,000
1854-5	65,351,000	66,164,000
1855-6	74,056,000	72,726,000
1856-7	68,969,000	71,274,000
1857-8	70,372,000	81,585,000
1858-9	63,809,000	70,034,000

Ontario, Simcoe and Huron Railway.

We understand that Mr. Brassey has taken the contract for repairing the Northern Railway. The rates are to be fixed by arbitration. It is intended to fill up the trestle work at one part of the road which is not very safe now, and to erect iron girder bridges throughout the whole line. The road is now doing a splendid business. The Collingwood boats go and come loaded down to the guards, and more vessels could be employed if they were to be had. Next season there will be no difficulty on that score, for we learn that several parties are in correspondence with the company for supplying vessels for the route of a greatly improved class. The present line has paid very well this year, considering that the business of the summer was so small. The low prices of grain have been very favorable to this, as to all other routes which are mainly composed of water. The railway can carry grain only when prices are high. We believe the profits of the railway for the year will suffice to pay the interests on the

bonds; and next year we may look forward to a great increase. The Grand Trunk finds in the Northern its chief feeder. Forty freight cars a day, on an average, are transferred here from one line to the other.—*Toronto Globe.*

SUBMARINE BLASTING.

PATENT Electric Submarine Safety Fuse Train for military and civil purposes. Also.
A substitute for the Galvanic Battery for sale by
E. GOMEZ,
165 Broadway, N. Y.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz. —25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. Y.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON. WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA, North Penna. R. R. BUILDING,
OFFICE, No. 407 Walnut st.

NATHANIEL LANE, PATERSON, N. J.,

COPPERSMITH AND BRASS PLANISHER,
MANUFACTURER OF

ORNAMENTAL, SHEET BRASS AND COPPER WORK
FOR LOCOMOTIVE ENGINES,

Brass Domes, Escape Pipes, Steam-Chest Covers,
Cylinder Heads, Jackets, Raised Bands for Boilers, etc., etc.

Also, Smoke Stacks and Russia Iron Jackets.
Also, COPPER FLUES OF SUPERIOR QUALITY, and
All other Copper Work for Locomotive and Stationary Engines.

Brass and German Silver Name and Number Signs
FOR LOCOMOTIVE ENGINES,

Furnished at unusual short notice.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH PORT.

C. CONGREVE & SON.
13 Cliff st., N. Y.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand
in NEW YORK and NEW ORLEANS.

TO CONTRACTORS.**HAVING CAPITAL.**

THE MARYLAND AND DELAWARE R. R. CO., will receive sealed proposals until the 1st of December for the work and material of fifty-three miles of road; extending from its junction with the Delaware R. R. at Smyrna, Del., to Oxford, Md., forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt) consist of individual stock, State appropriations, and work already done; but they propose to make payment for the work now offered, principally in first mortgage bonds, which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the road are already graded, the entire line located and secured, and the nature of the work very favorable for contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst, and sent by mail on application to J. C. W. Powell, Sec. Md. and Del. R. R. Co., Easton, Md.; to whom proposals will also be addressed.

TENCH TILGHMAN,
President.

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Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH
OF THE CAIRO AND FELTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859.

SEALED PROPOSALS for the Graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office, until THURSDAY NOON, DECEMBER 1st, 1859. The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bids for less than one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the finest lands in Western Arkansas, will give reference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, on application at the Engineer's Office in Van Buren.

2m40 JESSE TURNER, Pres. Ident.

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH
OF THE CAIRO AND FELTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until THURSDAY NOON, DECEMBER 1st, 1859. No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payment, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office in Van Buren.

2m40 JESSE TURNER, President.

Notice to Contractors.

PROPOSALS will be received at the office of J. I. SHIPMAN, in the village of Jamaica, Long Island, until the twentieth day of October at noon, for the graduation, masonry and superstructure of the Glen Cove and Roslyn Branch Railroad. This road will be about eleven miles long and presents very desirable work for a contractor. Bids will be received for the whole or any part of the work. Specifications and every necessary information may be obtained at the office.

October 1, 1859. STEPHEN TABER,
GEO. J. PRICE, Committee.
H. W. EASTMAN,
J. I. SHIPMAN, Chief Eng'r.

31*41

DISSOLUTION OF COPARTNERSHIP.—The Copartnership heretofore existing under the firm of HOLT, GILSON & CO., in Boston, and GILSON & CO., in New York, is this day dissolved by mutual consent. The affairs of the late firm of Holt, Gilson & Co., in Boston, will be settled by B. Wood Foster, at his office, No. 17 Old State House, who is alone authorized to settle the business of Holt, Gilson & Co.

W. H. HOLT,
WALTER H. GILSON,
N. HOWARD,
GARRET P. BERGEN.

Boston, Sept. 1859.

To Railroad Companies.

RAILROAD COMPANIES who will require rails for the coming year, and wishing to take advantage of the present low price, may hear of a favorable opportunity to negotiate for the same, through an old established House, a member of which, will sail for England early in November.

Reference is offered to several important Roads for whom purchases have been made. Address either Box 1,204, New York Post Office, or Box 258 Baltimore Post Office.

3142

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

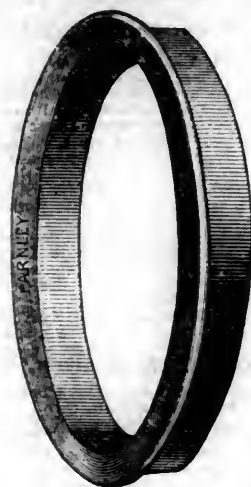
The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPANY,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.



RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or ex ship at ports in the United States.

M. K. JESUP & COMPANY,
44 Exchange Place.

New York, 1st June, 1856.

HOFFMAN'S ROSENDALE CEMENT,

OFFICE, 92 WALL ST., NEW YORK.

THE LAWRENCE CEMENT COMPANY are prepared to receive and execute orders for their Cement, to any extent that may be required. They would particularly call the attention of purchasers to the distinguishing brand of their manufacture, viz.: **HOFFMAN'S ROSENDALE CEMENT**. This seems to be necessary, as they have established a reputation for the superior quality of their Cement, and there are various other brands offered, as "Rosendale" Cement. It has the unqualified approbation of the most eminent Architects and Engineers, being used in almost every department of the Works under Government. It is put up in the most careful manner, each barrel being well lined with paper, and will be delivered on ship-board, in this city, on the most favorable terms. Particular attention given to shipping orders, and Freight obtained on the best terms.

M. W. WOODWARD, Secretary.

DELAFIELD & BAXTER'S, ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our CEMENT for public works, or other purposes. We warrant it equal in every respect to any manufactured in this country. It attains a great degree of hardness, sets immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength. For sale in tight barrels, well papered, on application at their office, by **DELAFIELD & BAXTER, 104 Wall st.** The above CEMENT is used in most of the fortifications building by government.

GUTTA PERCHA

**THE
Cheapest
and most
DURABLE
ROOFING
IN USE.**

Sent to any part of the country with directions for application.

CEMENT ROOFING.

SPECIMENS and references can be seen, and any desired information obtained on application, by letter or in person, at our office, 510 BROADWAY, N. Y. (Opposite the St. Nicholas Hotel).
JOHNS & CROSBY.

THE LAWRENCEVILLE MANUF'G CEMENT COMPANY, OFFICE 96 WALL ST, NEW YORK.

THIS Company manufacture **ROSENDALE HYDRAULIC CEMENT** of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings. For sale upon favorable terms by addressing.

WM. N. BEACH, President.

CHAS. E. LAWRENCE, Sec'y.

CEMENT, PLASTER, ETC.

THE HUDSON RIVER CEMENT CO.

HAVE commenced manufacturing for the season, and can now furnish a very superior article of fresh **Rosendale Cement**, Calcin'd Plaster, Farmers' Plaster and Marble Dust. Address

HUDSON RIVER CEMENT COMPANY,
12 Jersey City, N. J.

Rosendale Hydraulic Cement.

THE NEWARK AND ROSENDALE CEMENT COMPANY are now receiving fresh from the Mills their approved **ROSENDALE CEMENT**, warranted pure and free from quick lime, and which has given such general satisfaction in the various government and other public works in which it has been used. Purchasers and shippers should be careful to get the genuine **ROSENDALE CEMENT**, branded "Newark and Rosendale," "H. WILDE." This Cement does not swell and burst the hoops when stored in warm climates. It is packed in tight kiln dried barrels, and is specially adapted for safe shipping on long voyages. Terms reasonable, which may be known by addressing.

JOHN H. STEPHENS, President, Newark, N. J., or
HENRY WILDE, Secretary, 90 Wall st., N. Y.

DR. A. MERRIMAN, DENTIST.

1 Waverley Place, opposite New York Hotel,
NEW YORK.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the **ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG.,** are prepared to contract for the sale of **RAILROAD IRON** of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Sec'y
WHEELING, VA.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY**, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.

New York, Aug. 1, 1858.

RAILROAD IRON.

THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER RAILS of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

BUSSING, CROCKER & DODGE,
32 CHURCH ST.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.

CAR SPRING STEEL.

Far superior to the ordinary kind.

FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.

ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,

45 Cliff st., New York.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections.

T's L's Stops. Valves. Flanges, etc. etc.

MANUFACTURED AND FOR SALE BY

MORRIS, TASKER & CO.,
PASCAL IRON WORKS:

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN F. M. TASKER.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,

Boston, June, 1851. 29 Central Wharf.

ROUND OAK IRON WORKS, STAFFORDSHIRE.

LORD WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS of every variety.
Address RICHARD SMITH, Esq., Dudley.

UNITED STATES OFFICES.

NEW YORK, No. 17 Nassau St.

BALTIMORE, over Farmers' & Mer. Bank.

NORRIS & BROTHER, Agents.

MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE. CAR AXLES.
BOILER RIVETS. RAILROAD IRON.
CUT NAILS and SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of **IRON** can be executed.
August 16, 1854.

RAILROAD IRON.

THE subscribers are prepared to contract for **RAILS** delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,

No. 41 Exchange Place, NEW YORK.

THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. Hull & Son.)

Nos. 108, 110, 112, 114, 116 & 118 Cliff St.,

NEW YORK,

**For Railroads,
Machine Shops,
Steamships,
Mills, etc.**

THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is much less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

6th. It will remain limpid at as low a temperature as sperm.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

TAW & BEERS,

DEALERS IN

Sperm, Whale and Elephant Oils,
Adamantine Car and other Candles,

AND MANUFACTURERS OF

TAW'S LUBRICATING GREASE

FOR RAILROAD CARS
AND HEAVY MACHINERY.

THIS celebrated GREASE has been in use upwards of Ten years; and is in the opinion of FORTY RAILROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or description of machinery.

TAW & BEERS,
18 SOUTH WATER ST.,
Philadelphia.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Sperm Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer. The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.
Reliable orders filled for any part of the United States or Europe.

UNION

CAR WHEEL & TIRE
WORKS,

JERSEY CITY, N. J.

MOORE & ADAMS,

MANUFACTURERS OF

DOUBLE and SINGLE PLATE

CAR, ENGINE AND TRUCK WHEELS,

MANUFACTURERS AND PROPRIETORS OF

MOORE'S PATENT

TRIPLE PLATE CAR WHEEL.

CHILLED LOCOMOTIVE TIRES,
Made from the best Charcoal Cold Blast Iron.

**HIRAM W. MOORE,
GEORGE ADAMS.**

G. C. LOBDELL. H. S. McCOMBS. D. P. BUSH.

BUSH & LOBDELL,

WILMINGTON, DELAWARE,

MANUFACTURERS OF

CHILLED WHEELS

AND

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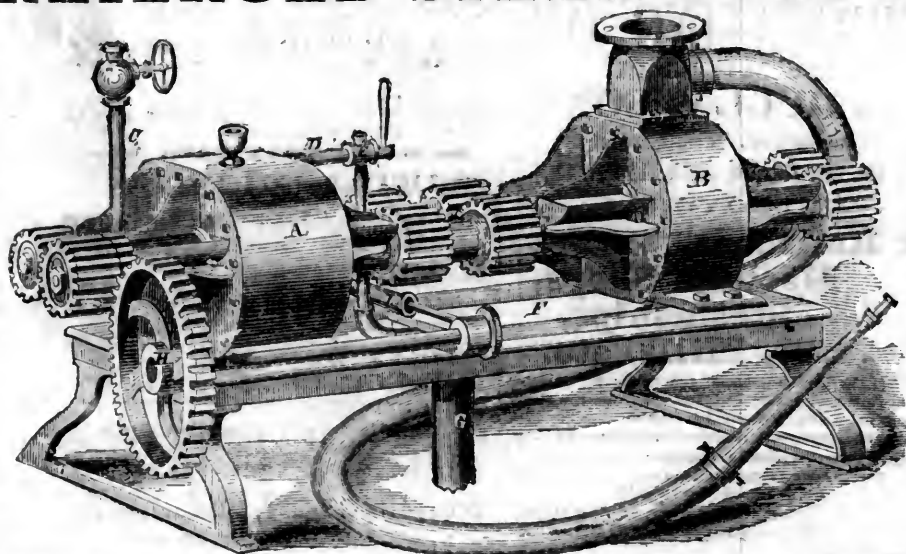
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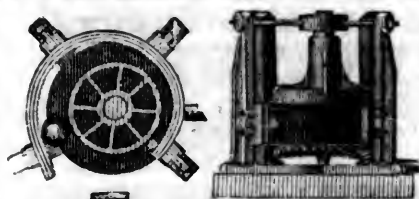
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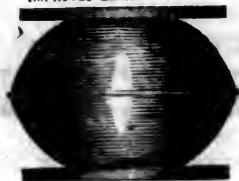
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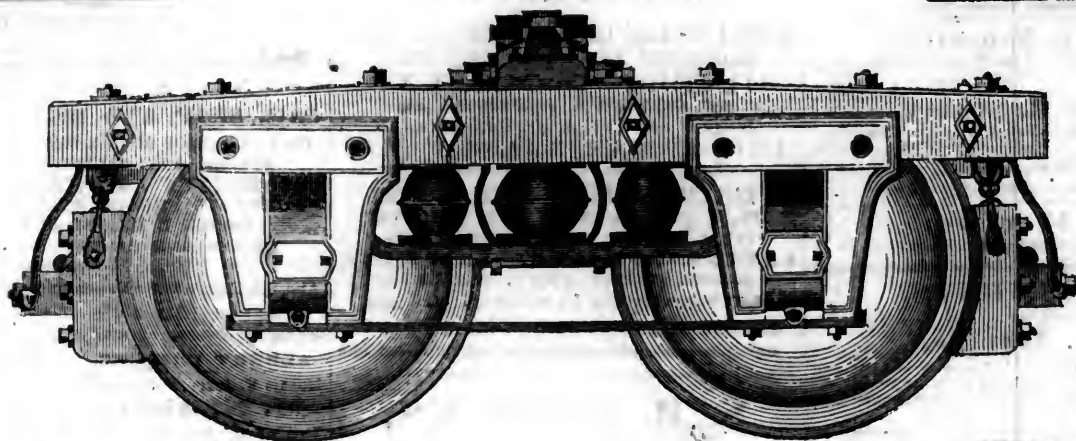
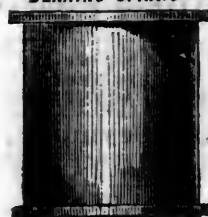


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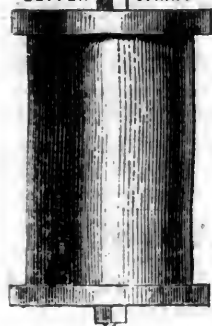
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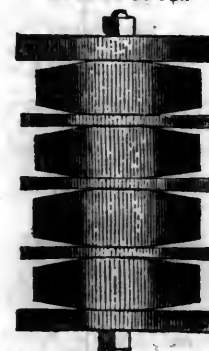


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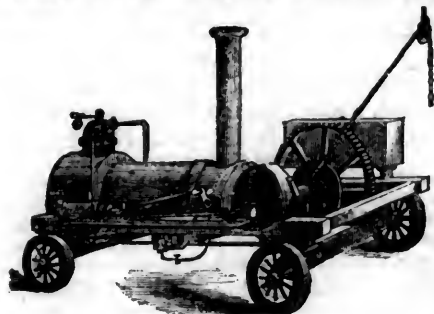
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HENRY V. POOR, *Editor.*

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, October 29, 1859.

Norfolk and Petersburg Railroad.

We have received the Sixth Annual Report of this company for the fiscal year ending March 31, 1859. At the date of the previous report, there remained to be done the graduation of the line within the corporate limits of Petersburg, the grading of the depot grounds in that city and at Norfolk, the construction of a number of culverts and small bridges upon the interior 45 miles of the line, the laying of 35 miles of main track and sidings, the ballasting of nearly the whole road, the erection of buildings, water stations, depots, etc., etc. Since that date the work has been prosecuted with all the energy that the means of the company would warrant. On the 15th of August, 1858, a temporary connection was effected with the rails of the South Side Railroad, and the main line thereby practically completed; and since the 1st of September of that year, passenger and freight trains have been passing regularly over the entire road. In April last, a thorough examination of the whole line was made by a committee appointed for that purpose; who reported that on 31 miles out from Norfolk and 5 miles out from Petersburg the permanent structure had been completed—the bridges are built of iron and stone in the most substantial manner, and must remain

for years without any cost to the company for repairs. On the intervening 44 miles, the bridges and culverts are of wooden trestle work of a temporary nature. At Black Water river, the masonry for the bridge had been completed, and only needed the iron superstructure to make it complete and permanent. At Underwood Swamp, permanent stone culverts were being put in, the material having been previously provided. The committee also recommend that permanent iron and stone structures be substituted for the wooden trestles and bridges, as soon as the finances of the company will permit. A large and conveniently arranged engine house, together with a depot and ticket office had been erected at Norfolk, and the track laid in Wide Water st. Depots had also been erected at all the stations except four. At four stations, substantial brick houses had been built for wood and water and a small stationary engine placed in each, for sawing and pumping. At Petersburg, a ticket office, reception room and large shed for passengers had been constructed. The committee believe the track to be one of the best in the country—the entire road is thoroughly drained with ditches on each side, and was being ballasted as fast as circumstances would permit. The cross-ties are heavy and closely laid. Heavy rail of the most approved pattern has been used, the ends secured by substantial joint fastenings and splice pieces. The road must commend itself to the traveling public as one of the safest in America.

The receipts of the road from business other than the transportation of materials, during its construction, amounted to \$2,675 06, and were placed to the credit of railway track, to which account all expenses incurred in operating the road were also charged. From September 1st to January 1st, the earnings of the road from all sources amounted to \$16,315 07; and the expenses to \$9,841 06—showing a balance to the credit of the four months operations of \$6,474 01.

From January 1st to March 31st, 1859, the receipts were \$13,821 32; and the expenses, \$12,063 14—leaving a balance of \$1,758 18.

The original estimated cost of the road was \$2,158,000; deducting from this the expenditures already made, and there remains the sum of \$114,

334 02—sufficient to complete the road, and appurtenances, as originally contemplated.

At the commencement of the fiscal year 1858, the floating indebtedness of the company amounted to \$327,000, viz: in open accounts, \$81,000 (including nearly \$11,000 due the State of Virginia for interest on permanent loan,) in plain notes and acceptances, \$45,000, and in negotiable notes, secured by collaterals, \$215,000. The assets of the company, subject to this indebtedness, were: Virginia State bonds, \$90,000; Norfolk City scrip, \$55,000; the company's 8 per cent. bonds, \$166,500; and in good individual stock subscriptions, \$5,000—in all, rating everything as cash, \$316,500—sufficient, if used at its face value, to retire all the floating indebtedness of the company. For the accomplishment of this object, a plan of liquidation was proposed by the Chief Engineer, at the instance of the directors, which, upon their examination, was approved by them, and the work of carrying it out assigned to him. This plan of liquidation was based upon certain proportions of payment in cash, and company's 8 per cent. bonds at 90 cents, measured out to suit each particular claim; requiring in money \$165,000, and in bonds \$78,500—leaving a balance of \$91,350. Of this, \$11,000 was due the State, and \$17,000 the Exchange Bank; these latter claims to be satisfied out of the mail pay of the road. For the retirement of the remainder \$34,350 of which was to mature at convenient intervals during the year, and \$29,000 in 1860, there remained of company's bonds \$60,000, and of city bonds \$10,000, sufficient to pay the larger portion of it, including the Exchange Bank debt, and the interest due the State, maturing within the year, leaving a balance of about \$28,000 for the next year to be retired out of the earnings of the road.

The cash part of the means required was proposed to be raised: from State stock \$90,000; from individual stock subscriptions, \$5,000; from a sale of \$28,000 of first mortgage 8 per cent. bonds at 90 cents, and from an accommodation loan of \$45,000, loaned upon an equal amount of city scrip to be paid out of the mail service, until the debt should be brought within the market value of the collaterals, which, in the meanwhile, it was thought, would greatly appreciate in value.

influence to divert the traffic to other lines that will grant them. Would respectable men thus act in opposition to their own actions? Do editors send their papers and insert advertisements without remuneration? Do hotel proprietors allow a large portion of the community to live at their hotels without cost? Do merchants part with the commodities in which they deal, to their friends and acquaintances, without remuneration? Do officers of employees of railroads and merchants' clerks, ever labor without salaries? This opinion of railroad managers is, in fact, a vile libel on the respectable members of the above classes; but, were it true, what influence could they exert when the motive for their action would be so apparent?

A reduction in the rates of transportation and of fares, being always followed by similar reductions on the part of competing lines, results in nothing but loss to all, leaving the business divided precisely as it was previous to the reduction—for the few days start, which any company can gain over its competitors, need not be taken into account. The alteration of the classification of freights, produce precisely the same results.

The speed at which the express trains are run is a great tax on railroads. It is the well established opinion of all engineers and railroad men, that the wear and tear of a road is in the same proportion as the square of the speed; that is to say, that trains run at twenty miles, and trains run at thirty-five miles an hour, affect the wear and tear of the road-bed and machinery as 400 is to 1,225. Can there be any doubt as to what the true interests of the stockholders of all railroads require, particularly as the public do not ask for the high rates of speed at which the trains are run?

On reflection, it must be admitted that the true interests of all parties should lead railroad managers to compete for all traffic by the promptitude and safety with which their trains are run; by the civility of all their employees towards the traveler; by the cleanliness and comfort of the refreshment saloons where the trains stop, and by the promptness and good order in which the freight is delivered. Attention to all these points would produce a system and an order in the administration of railroads which would contribute to the interests of the stockholder and shipper, as well as to the comfort of the traveler. Let the time now devoted by the officers of all companies in making war on competing lines and in attending to applications for free passes, be devoted to the true interests of the traveler, shipper and stockholder, and they will all be equally benefited, whilst the self-respect of the employees of the railroads will raise them far above their present position in the community.

Another subject of great importance to the interests of stockholders is that publicity be given at all times and in all cases to everything affecting the interests of a company. No important action, entailing large outlays of capital, should be taken by its officers until the project in contemplation be publicly known, so as to permit it to be criticised by the stockholders. This will in general prevent the errors of judgment of honest officers, and the evil intention of dishonest ones. It will also prevent the sudden loss of credit so frequently the consequence of incurring debts without its objects being known by the stockholders and the public.

The stockholders will be greatly benefitted by insisting on detailed annual reports of the administration of the affairs and of the position of every company, as the preparing of such reports forces the officers of a company to analyse the results of the working of the road, and often makes them acquainted with important facts or results, which otherwise might escape their observation.

I trust that by calling the attention of all railroad managers to these important subjects they will, one and all, heartily co-operate with the New York and Erie Railroad Company in its present efforts to make the reforms so much needed; but should long established habits and prejudices

make them refuse or hesitate to do so, I call on the stockholders of all railroad companies, if they believe these reforms will arrest the present alarming depreciation of their property, and aid in ultimately re-establishing its value, to place the management of all railroads in the hands of men who will have more regard to the true interests of the stockholders.

It is very difficult to lay down rules that will govern all the multifarious subjects that come up for decision in a business so ramified as the management of a great railroad, but the following appears to me the most important:

Never to make a contract of any nature whatever that shall bind the company beyond a short period—in fact it is doubtful whether they should not, in all cases, be terminable at the pleasure of the company. No human foresight can foresee the effect a contract may have on the future interests of a corporation. A contract between an individual or individuals, or a weak corporation, and a great corporation like the New York and Erie Railroad Company, is rarely, if ever, carried out by the former when it becomes injurious to his or their interests, whereas the latter will always be forced to fulfill it to the letter, however ruinous it may prove. Contracts are invariably made with a view to force one of the parties to do that which it may not be to their interest to do. If it is to their interest to carry it out, a contract becomes unnecessary. Besides, a corporation never overreaches an individual in a contract.

Never issue free passes to any one, except when occupied on business of the company, because a precedent once established, it is availed of by every one. It is far better to pay a higher price for services rendered, in some other form, than to open the door to a system liable to so great an abuse as free passes.

Never to do acts of Charity in the name or with the funds of the company—"Be just before you are generous." Officers of corporations have no right to use the funds entrusted to their care for such purposes, and a pass over the road is the same thing as money, for the road was constructed at an expense of \$38,000,000, because it was supposed that parties would have to travel over it when finished. If there be a surplus beyond the just claims against the corporation, it belongs to the stockholders, to whom it should be paid in dividends, and they will dispense it in charity themselves, if they see fit; but they never delegated the power to the officers to do it for them.

Watch closely the operations of competing lines, and immediately on acquiring the information, communicate to their leading officers any infringement of existing agreements, requesting an immediate cessation of the acts complained of. If an answer be not promptly received, write a second time, and after a short delay, if the matter be not attended to at once by the party advised, then take the redress in your own hands, giving notice of the steps taken and the reasons therefor. Never allow the party complained of to delay their answer to your complaint, for if such matters be not attended to at once, it emboldens them to acts of aggression, which rapidly increase until open warfare is the result. Very few men can be found who will continue a wrong act when detected and complained of. But never redress your own wrongs without first appealing for redress to the offending party, because it frequently occurs that the act complained of is susceptible of explanation, or is the result of an unintentional error.

Never fear that your competitor should get the start of you for a few days. What are a few days to a corporation that is to exist for centuries? It is far better that your competitor should divert traffic from your line for several days, than to establish a reduction of rates on the entire traffic for months, which might be avoided by the delay of action on your part.

Never give up the principle that an expensive and an economical line of communication, have the right to transport freight and passengers at the same rates between all competing points, when-

ever the expensive line deems it necessary to exercise the right. It is a sufficient advantage to the economical line, that, at the same rate, it realizes a greater profit than its competitor. It would be too unjust—nay, absurd—to give it the further advantage of carrying at lower rates. If an Iron master be near a market and another at a distance, or if one has the advantage of cheap water communication, whilst the other is forced to resort to the more expensive communication by railroad, can one be asked or expected to hold his iron in the same market at a higher rate than his competitor, merely because of his disadvantageous position? In regard to railroads, the principle is the same. Be competing lines longer or shorter—be they part rail and part water, or be they all rail—be their cost greater or smaller—they must have the right to carry at the same rates between any common points; but it may be a question for the expensive line, whether it shall always avail itself of this right, so long as it shares the traffic at a higher rate, or does not need it. The economical line can never retain a monopoly, if its competitor does not consent to it, and the question then is simply, whether it is better to divide the traffic at a lower or at a higher grade.

Never allow anything to prevent the purchase of the supplies required to run the road and to keep the track and equipment in high condition. Second in order comes the payment of persons in the employ of the company. The true interests of all the creditors require that these claims should first be provided for, otherwise the earnings of the road might be seriously affected to the great injury of the creditors themselves, for the earnings, after all, must be the principal dependence wherewithal to meet the debts of the company.

Make every possible effort to treat all creditors of same class in a similar manner. Nothing will irritate them more or bring greater difficulties on the company, than to have it known that one creditor has obtained a preference over the others. It is generally good policy to encounter law suits, expense and difficulties, rather than to deviate from this rule.

Never adopt or enforce a rule without attempting to show the propriety or necessity of it. You must make men feel the propriety or necessity of your rules, before you can obtain their willing assent or hearty co operation.

Make any present sacrifice, or encounter any present difficulty, to secure a great future benefit. Nothing is more injurious to corporations than to follow the rule of expediency, which sacrifices the future to the present. No rule or principle will entirely avoid difficulties or disadvantages, but it is the preponderance of the good over the evil—the greater amount of the advantages than of the disadvantages—which render correct principles more advantageous than erroneous ones.

Avoid giving advantages to one party over others. This policy is often urged by specious arguments, but in practice it will be found that there is no line of demarcation that can indicate who shall, and who shall not, be entitled to the special position. It will end by being obtained by all, or nearly all, and thus burthen the company without satisfying, except temporarily, the favored party or parties.

The preceding rule should, however, not be interpreted to mean that no discrimination is to be made between different kinds of traffic. The through traffic, being subject to competition, must be obtained on the best possible terms, so long as it affords any profit; when it gives a loss, allow your competitors to monopolize it without fear. The more they do of it, the sooner they will cease to seek it on these terms, and the weaker they will become. This discrimination in favor of the through traffic is not, as it is often supposed, an act of injustice towards the local traffic. Railroads are generally built principally for the local traffic. The entire traffic of a road must produce a sum sufficient to pay running expenses, including the thorough repairs of track and equipment, and an interest on its cost. Whatever be the amount obtained from through traffic, at the rates necessary

to secure it, is so much that can be taken off of the local traffic. The great point is not to neglect the local traffic for the through, as this checks the growth of the most profitable and most reliable traffic, to the great injury of the company.

Manufacturers of heavy or bulky products on the line of the road, must sometimes be favored, because a slight difference in the rate of transportation will often divert the location of these establishments, which contribute greatly to the local traffic of a road by increasing the population, whose wants have to be supplied by, and whose travel is secured to, the road in whose vicinity their establishment is located.

CHARLES MORAN,
President New York and Erie R. R.

Journal of Railroad Law.

TRAINS MUST STOP LONG ENOUGH AT STATIONS TO LET ALL THE PASSENGERS ALIGHT.

Sarah Kilgore took passage in the cars of the Pennsylvania Railroad Company from Pittsburg to Greensburg. She had been some time sick and still in feeble health. Besides this she had in her charge three children, all of tender years. The cars did not arrive at Greensburg until about dusk; then receiving notice of her arrival, from the conductor, she attempted, among others, to get from the cars to the platform, with her children. Two of the children had alighted, and while the cars were in the act of starting, she, with the remaining child, sprang upon the platform, upon which one of the children had fallen prostrate; and in so doing fell between the cars and the station platform, and was seriously injured.

The chief question arising upon the trial was as to whether the plaintiff had been herself guilty of negligence in springing from the cars while they were in motion. If she was negligent then, notwithstanding the improper conduct of the employees of the company in starting the cars prematurely, she would not be entitled to recover, for, according to recent and now well entitled decisions, that where an accident happens through the concurrent carelessness of both plaintiff and defendant, no action can be maintained. The counsel for the defendant strongly maintained the affirmative of this proposition both upon the trial and upon the appeal. Upon the trial he requested the court to charge the jury—

1st, That although sufficient time may not have been allowed to the plaintiff to get safely off the train, yet, if the jury believe that she attempted to get off the train while it was in motion, it was such a want of ordinary care of her own person and safety as will prevent her recovery:

2nd, That if the jury believe that the plaintiff was cautioned by an agent of the defendant of the danger of getting off the cars while they were in motion, and that she refused to heed such warning, and persisted in her attempt to leave the train while it was going, the negligence which caused the injury was her own, and she cannot recover.

The court instructed the jury as follows:

The principle is well settled, that if an accident occurs, or an injury is sustained by the carelessness of the party injured, he has no right to complain of the want of care in others; and this principle applies equally, even when the defendant has been in equal fault, because when both parties are to blame neither has a right to complain of the other. If, therefore, the injury was the result of carelessness in the plaintiff, she is not entitled to recover.

Assuming the position that the plaintiff was not

in fault, was the defendant or the agents of the company guilty of carelessness? It was their duty to have the road and all the machinery in good order, with careful and discreet agents, and that all persons connected with the running of the cars should conduct themselves with all proper prudence and care. In this case the plaintiff only complains of one act of carelessness: that is, in not stopping the train sufficiently long to enable her to get out safely. How long a train ought to stop at various stations may depend upon circumstances. We have no law fixing the time, and of course, the court cannot pronounce it as a matter of law. Nor is there any rule, by law, or regulation of the company, fixing a time, and of which travelers had notice, and from which a contract might be inferred to comply with such rules. It depends upon the peculiar circumstances of each particular case; upon the number of passengers to be let out, their age, sex, and condition. Prudence and duty would require of a conductor to detain a train longer to pass out fifty aged females than five active men. This duty, varying according to various circumstances, is a question peculiarly proper for the decision of the jury to determine.

How long then did the train stop on this occasion? The evidence on that subject is very various and somewhat contradictory. One of the witnesses think that the train scarcely ceased to move; several others think it stopped as much as two minutes, and some a longer period. The jury will determine this question according to their best judgment, upon the whole evidence, which they believe to be true. Was it sufficiently long under all the circumstances to permit the plaintiff and her children, together with all the other passengers, to leave the cars with reasonable convenience and safety? We do not think it was the duty of the conductor to go through the train and see that every person was safely passed out of the cars. But it was his duty to know about how many passengers were leaving the train at the station. And it was further his duty to stop the train sufficiently long to enable them to get out without danger to their persons and lives, and if he did not he was derelict in his duty; neglectful of the safety and rights of the passengers entrusted to his care, and the company would be liable for the consequences, provided the plaintiff was not in fault.

But it is alleged, by the defendant's counsel, that the misfortune is attributable entirely to the rashness of the plaintiff; or, at least, her rashness, although the conductor may have been in fault, was the immediate cause and contributed to the injury. If the plaintiff had been in the car or on the platform, when the train had started and was in motion, and was in a situation to choose between getting off and remaining on, and with a full consciousness of her danger, with foolish rashness persisted in leaving the car, in defiance of warning to the contrary, we would be compelled to tell you' as a matter of law, that she could not recover. But we deem this a question for the jury. The evidence, we repeat, shows that she was a feeble and sickly woman, with three helpless children under her charge. She was in a strange place, and it was either dusk or approaching it. Her eldest daughter, with the little boy, had left the car, and she was getting out with the other little girl. The little girl says she was on the lower step

when the car gave a jerk, and threw her off the car on to the platform of the station. How are the facts in regard to this? Where was the mother at that time? Was she in a position where she could safely choose between leaving the car and remaining on, with a consciousness of the danger she would be in by leaving the car and getting to her children? Proper allowance must be made for her embarrassing condition under the circumstances, in determining the fact whether she was rash and negligent of her safety or not. If she was, and that was the cause, or in part the cause of the injury, she cannot recover. In that event, it would be her own fault, and she must suffer the loss. But if, under the circumstances in which the jury find her to have been placed at the time, she was guilty of no rashness, but was reasonably careful of her safety, and the accident occurred from the want of sufficient time for her to get out, in the situation she was placed, and the injury occurred from that cause, then she is entitled to recover.

If she was in a situation to exercise a cool and deliberate judgment of the dangers that beset her in leaving the train at that time, and was cautioned not to do so; and in the face of, and in defiance of such caution and danger, which she ought to have apprehended, she persisted in getting off, it would be such rashness, on her part, as would defeat her right to recover for the injuries she sustained, and the consequences thereof. But if she was not in a situation to exercise such cool and deliberate judgment, and the train had started while she was in the act of getting off, and her condition was one of embarrassment, from her state of health, and the apparent danger of one child, and her separation from the others; and she was in a situation not to appreciate her danger, but embarrassed by surrounding perplexities and difficulties, and in this condition attempted to leave the car, it is a question for the jury to decide, whether her getting off, under such circumstances, would be rashness or negligence on her part. If so, she could not be entitled to recover; but if the jury believe otherwise, then her right of action against the company, if they were in fault, would not be barred.

The defendant's attorney excepted to this charge, and the points involved were fully argued upon appeal. The opinion of the Appellate Court was as follows:

WOODWARD, J.—After an attentive consideration of the ingenious criticism to which the charge of the learned judge has been subjected in the hands of counsel, we have come to the conclusion that it was only too favorable to the plaintiffs in error. Whilst there is no doubt about the doctrine of concurrent negligence which the learned counsel invokes, the circumstances of this case scarcely admit of its application. The company as public transporters, took the plaintiff and her three children aboard of the cars at Pittsburg under a contract to set them down safely at Greensburg. That it was their duty to stop there long enough to let these passengers off at the point of destination is not denied, and that they failed in performing this duty is established by the verdict.

The court is complained of for putting it to the jury to say whether the stop was sufficiently long to permit the plaintiff and her children "together with all the other passengers, to leave the cars

with reasonable convenience and safety." The expression 'all the other passengers' is to be understood, as the jury doubtless understood it, as referring to those who were to alight at Greensburg; and so limited, it was the very form the question ought to have assumed, for she was to get off in the midst of all others who were to get off at that place, and no consideration of her case could be fair that would lose sight of this fact. It is an established fact, then, that the company did not give her, in the actual circumstances in which she was placed, reasonable time to leave the cars in safety.

But they are not responsible for this wrong, it is argued, because she was guilty of an act of imprudence in attempting to leave the cars after they had resumed motion, and Aspell's case is relied on. If the train had not stopped, at all, at Greensburg, and she had jumped off in spite of remonstrance whilst it was sweeping past that point, there would have been a parallelism betwixt her case and Aspell's: but as the facts were, there is none. A sickly woman with three young children in charge, is informed by the conductor that she is arrived at her destination—the cars are stopped to permit her to alight, and whilst engaged in getting her children off, they start again, and she springs for the platform on which one of her children has fallen prostrate—where is her negligence or rashness in all that? If you do not mean she should attempt to get off there, you should not have stopped and invited her to try—if you involved her in the attempt, and yet denied her time to accomplish it, her efforts are not to be imputed to her for negligence, and her case likened to Aspell's, that would be grievous injustice. That it is wrong for a party to attempt to leave cars whilst they are in motion, is an abstract truth that counsel complain of the court for not misapplying here. It is one thing to define a principle of law and a very different matter to apply it well. The rights and duties of parties grow out of the circumstances in which they are placed. It was as natural for this woman to leave the cars as she did, in her circumstances, as it was rash for Aspell to leap from them in his circumstances. It would be as unreasonable to impute negligence to her, as it would have been to have held the company responsible to him.

The cause seems to have been well ruled at all points, and the judgment must be affirmed.

Covington and Lexington Railroad.

The following preamble and resolution in regard to the recent sale of this road, were adopted by the City Council of Cincinnati:

Whereas, The city of Cincinnati holds claims against the Covington and Lexington Railroad to the amount of \$100,000; and the said road has recently been sold upon such terms which, if confirmed, will result in the entire loss of said claim to the city; and there being good reason to believe that there was no necessity for such sale, and that the road is now yielding more than sufficient to pay the expenses of running and repairs of said road and the interest of all its indebtedness; and that said sale is for far less than the true value of said road; therefore,

Resolved, That the City Solicitor, in connection with the Chairman of the Finance Committee, take such measures as to them may seem proper to prevent a confirmation of said sale, or a delay of such confirmation, until proper examinations can be made, and to report at the earliest practicable day.

Great Western Railway of Canada.

REPORT OF THE DIRECTORS.

Under six acts of the Provincial Parliament, this company has been authorized to raise in share capital the sum of \$25,800,000, or £5,301,369 16s. 2d. sterling. During the last half year there has been received on capital account £168,867 11s. 6d. as follows:—On account of share capital, £147,867 11s. 6d.; do. perpetual 5 per cent. debenture stock, £1,000; do. 6 per cent. non-convertible bonds, £19,000; do. 5½ do., £1,000; total, £168,867 11s. 6d., bringing the total amount of the company's receipts to 31st July on capital account to £1,984,713 19s. 7d., of which £3,087,326 4s. 7d. has been raised by shares, and £1,807,387 15s. by bonds and government loan. The expenditure on capital account during the six months, has been £35,537 15s. 1d. as follows:—On Main line, Hamilton and Toronto line, and Galt branch, 279 miles £8,355 0s. 5d.; Sarnia extension, 51 miles, £27,122 1s. 4d.; Galt and Guelph Railway, £601 3s. 4d., in addition to which further advances have been made on account of authorized loan to Detroit and Milwaukee Railway Company, amounting to £65,976 4s. 5d. The total amount of capital expenditure of the company to 31st July, 1859, being £4,874,718 9s. 4d. In the last report it was stated that but little more expenditure upon the Main line and Galt branch remained to be incurred. By the foregoing statement it will be seen that the sum of £8,355 0s. 5d. only has been expended during the half year, and the capital account, in respect to the 279 miles of railway of which that part of the company's property consists, may be considered as practically closed. The expenditure of £27,122 1s. 4d. during the half-year on the Sarnia extension, of 51 miles, has been chiefly for ballasting and finishing the line and works, and for the cost of a grain elevator and machinery at Port Sarnia. The further outlay for completing the Sarnia extension will not exceed £10,000, and the only other claims on account of this line will be those arising out of the settlement of the original contract for the construction of the works, which are now before arbitrators. The amount for interest during the half-year is materially increased by the discontinuance of the charge against the cost of the Sarnia line. The working expenses, exclusive of renewals of permanent way, are £103,935 13s. 5d., being a reduction of £12,695 17s. 10d. as compared with the corresponding half of 1858, although 51 additional miles of railway have been worked during the whole of the half-year. The miles run by trains are 529,551, being a decrease of 4,339 as compared with the corresponding half-year; the cost per mile is reduced from 4s. 5¼d. to 4s. 0¼d. The revenue account presents the following results:

The total amount of the half-year's traffic and rents is	£181,476	3	11
Less working expenses and renewals.	120,326	5	6
Leaving a net revenue account of ..	61,149	18	5
Adding surplus from last half-year..	3,349	18	10
	£64,499	17	3
Against which the following charges have to be made:			
Interest on the government loan and on the bonds of the company	48,126	17	8
	16,372	19	8
Also amounts paid during the half year on account of Desjardins-bridge accident compensations	£4,466	1	1
And amount paid for repairing the embankments at Flamboro', Copetown, &c. and other expenses caused by the extraordinary floods of the 19th March, 1859..	3,739	3	5
	8,205	4	6
Leaving a surplus of	£8,167	15	1

which the directors recommend should be carried forward to the credit of the next half-year's account. The Directors, in placing this statement before the shareholders, cannot but express their extreme concern and disappointment at the altered position, which it exhibits, of the company's affairs. In the report placed before the meeting of the 6th April last, a sanguine hope was entertained that the worse was then over, and that a gradual improvement from the state of depression the company was at that period laboring under, might fairly be calculated upon. Unfortunately, this has not been borne out by the result; and this company has had to sustain, during the last half-year, a continuation of the most adverse circumstances, in common with every other railway in the northern portion of the American Continent. The traffic of the line, both true and local, has undergone a diminution during the last three years, of which we have no parallel in the history of railways in this country; and though the exertions of the executive in Canada have effected most important reductions in the working expenses, this has not been adequate to sustain the company's position and to earn a dividend. The comparative position of the company is shown by the following statement of its earnings and expenses, for the last four half-years ending 31st July:

			Wk. expenses were.
1st half 1856 earnings	£292,398		£164,704
" 1857 "	266,430		153,722
" 1858 "	213,652		128,561
" 1859 "	181,475		120,326

Disastrous and unprecedented as the above statement of traffic undoubtedly is, the Great Western Railway of Canada has really suffered less than the other railways in its vicinity; and there is no reason to suppose that its proper and legitimate revenue has been abstracted by rival companies to any serious extent. There can be no doubt, however, but that the evil during the last half-year has been materially aggravated by the severe competition which has been carried on for the through traffic, on the part of the American lines. But with this exception, no doubt of considerable importance, the directors have reason to believe from every information which is available to them, that this company's position in respect to the falling off of its traffic is to be attributed to a succession of bad harvests, aggravated in the colony by the financial convulsion in the end of 1857. The executive in Canada wisely abstained, as far as lay in their power, from taking any part in the rivalry of the American Companies, whilst at the same time they made every effort to bring about a better state of things, but as there were traffic arrangements which could not be abruptly or hastily terminated, this company became necessarily involved in the pecuniary consequences of the unwise competition. This is now happily terminated, and it is to be hoped that more prudent counsels will prevail for the future. All the accounts from the United States and from Canada concur in stating that the harvest just gathered in, has been a most abundant one. From this source, from the revival of the lumber trade, and from the improving condition of the province as well as the Western States generally, it is to be hoped this company may soon recover its former prosperity. The following mileage receipts on neighboring railways show that this line still compares favorably with others similarly circumstanced:

	For 6 mos. end. June 30, 1859.
Michigan Central, earnings per mile ..	\$2,282 17
Michigan Southern do	1,404 72
Cleveland and Toledo	1,814 09
Great Western of Canada do	2,596 60

The favorable comparison in the mileage receipts thus exhibited by this railway is owing to the traffic derived from its connection with the Detroit and Milwaukee line, which has added an average of about \$3,000 a week to this company's receipts, without entailing any increased mileage of trains or other expenses. This is an indicator of the value of the Detroit and Milwaukee Rail.

way as a feeder to this line, the full benefit of which will be rapidly exhibited now that Michigan, Wisconsin and the North-west have secured the largest crops, and of the best quality, that they ever produced, and the line is in a state to successfully carry a large traffic, and has the prospect of being able to command fair rates for the business it secures. The shareholders will observe from the accounts, that the interest on the loan to that company remains outstanding; the directors have thought it advisable to exercise forbearance in enforcing this claim, its traffic having also been injuriously affected by the causes already referred to, and feeling convinced that the credit of the Detroit and Milwaukee Company is essential to the welfare of both companies. The two new steamers, built expressly to run between Grand Haven and Milwaukee, in connection with the railway, were placed on the route in the beginning of September, and thus the Detroit and Milwaukee Company is now prepared to properly accommodate the growing trade of the North-west, the effects of which will be seen as soon as the crops begin to move. The approaching opening of the Grand Trunk Railway to Sarnia and Detroit will bring into operation another line from Toronto to those places. The great injury which has resulted both in England and America from the competition of rival railways, has led the boards of both Companies to discuss the position of the two lines, and there is every reason to hope that these negotiations will terminate satisfactorily.

Signed on behalf of the Board of Directors in England.

ROBERT GILL,

President of the Company and Chairman of the English Board.

LONDON, September 23d, 1859.

Finances of Alabama.

The receipts into the treasury of this State from all sources during the fiscal year ending 30th September, 1858, were \$764,648 87
Add balance at date of previous report..... 1,635,271 80

\$2,399,920 67

The disbursements during the same period, including \$1,143,849 of the notes of the State Bank and Branches burned, by act approved January 22, 1858, were..... 2,028,584 93

Leaving a balance Sept. 30, 1858, including \$37,579 00 in the notes of the State Bank and Branches of... \$371,335 74

The receipts from all sources during the fiscal year ending this day, Sept. 30, 1859, have been 945,900 16

\$1,317,235 90

The disbursements during the same period, including \$16,079 of the notes of the State Bank and Branches, burned, have been.... 685,556 90

Leaving a balance in the Treasury at the close of the fiscal year ending 30th Sept., 1859, of..... \$631,679 00

First Trip to Riviere du Loup by Rail.

The road from Quebec to Riviere du Loup was informally opened on the 17th instant. It is not quite completed, the rails for the last eight or ten miles having been only laid temporarily for the occasion. Speaking of the construction of the road, the Quebec *Chronicle* remarks as follows:

Over that part which is fully finished, between St. Rochs and St. Thomas, which was built by Mr. Reekie, the trains went at the rate of 42 miles an hour. Mr. Reekie, who constructed the road from Quebec to Richmond, and from the Chaudiere to St. Thomas, has earned himself a reputation which will always associate him with Canadian Railways. The neatness and uniformity of the station-houses, substantially built in fire-brick, and the engine-house at Riviere du Loup, reflect the highest

credit on Mr. Hodges, whose name in connexion with that of Alexander Ross, and the Victoria Bridge will henceforth be a household word in Canada. The bridges at St. Anne and Riviere Ouelle combine great strength with elegance of structure.

New York and Erie Railroad.

The plan now formally and officially presented to the stock and bondholders of the Erie Railroad, for the adjustment of its affairs, is as follows:

A CONTRACT—Between the Shareholders and the Creditors of the New York and Erie Railroad Company, for maintaining the Mortgage Securities, Unsecured Bonds, and Capital Stock of the Company.

The New York and Erie Railroad Company having failed to pay at maturity certain of the coupons upon its bonds, and certain of its acceptances and other floating debt, in consequence of the falling off of the receipts from its traffic; and certain of the mortgage creditors having, in consequence, commenced proceedings against the company to enforce the mortgage trusts; and a Receiver of the property covered by the 4th and 5th mortgages having been appointed; and a large number in amount of the mortgage and other creditors of the company having recommended the following plan for liquidating the liabilities of the company, and the Board of Directors of the company having also adopted and recommended it:

Now, therefore, we, shareholders, bondholders, and creditors of the New York and Erie Railroad Company, each, in consideration of the agreements of the others herein contained, and of \$1 to each of us paid, and each holding and representing the interest set opposite our respective names, do hereby agree as follows:

First: Such of us as are holders of the 1st mortgage bonds of the said company, agree to deposit with the trustees hereinafter named to receive the net earnings, our respective coupons past due and to mature Nov. 1, 1859, for payment hereafter from net earnings (not hereby waiving any lien under the Statutes of New York), and to exchange them for scrip of a form annexed, marked (A), they holding the coupons in trust for us until payment in full as herein provided for.

Second: Such of us as are holders of 2d mortgage bonds of said company, assent to receive the payment of our respective interests past due and to mature March 1, 1860, out of said net earnings (not, however, waiving any liens under said 2d mortgage), and such of us as have received coupon extension sheets will surrender to said trustees in exchange for scrip of like form, the coupons to be thus paid from net earnings.

Third: Such of us as are holders of the 3d mortgage bonds of said company agree to deposit with said trustees our respective coupons past due and to mature March 1, and September 1, 1860, for payment hereafter from net earnings (not waiving any lien under our mortgage), and exchange them for scrip of like form—said trustees holding said coupons in trust for us until payment in full. We further consent and request that the 3d mortgage bonds of the said company to the amount of \$1,000,000 principal, redeemable in 1883, to be issued under the trust, to take up the 2d mortgage bonds of the company at maturity, be issued and applied to that purpose.

Fourth: Such of us as are holders of the 4th mortgage bonds of said company, hereby agree to deposit with said trustees our coupons past due and to mature April and October, 1860, and April, 1861, for payment hereafter from net earnings, (without waiving any lien under our mortgage,) and to exchange them for scrip of like form—said trustees holding the same in trust for us till paid in full; and such of us as are holders of the 5th mortgage bonds of said company agree to deposit with said trustees our respective coupons past due and to mature December, 1859, and June and December, 1860, and June, 1861, (without waiving any lien under our mortgage,) and to receive payment thereof from net earnings as herein provided—said trustees holding the same in trust for us till

paid in full. But if, in order to carry out this scheme, either, or both, said 4th or 5th mortgages are foreclosed, and a new company formed, new mortgage bonds of the new company, of like amounts, terms of payment, and priority of lien with our present bonds, are to be issued to us, with corresponding coupons placed with said trustees, so that the holders of 4th and 5th mortgage bonds hereto subscribing, shall have the same rights as if the scheme were carried out without a foreclosure.

Fifth: Such of us as are holders of the Convertible, Sinking Fund, and other unsecured bonds of said company, hereby agree to exchange our respective bonds for preferred stock of like amount, with the principal of our bonds, with coupons now over one and for two years in advance added, and to deposit our bonds with said trustees, to be so exchanged, receiving therefor receipts of the form annexed, marked (B). Such preferred stock is to be entitled to preferred dividends, out of the net earnings, (if earned in the current year, but not otherwise,) not to exceed 7 per cent. in any one year, payable semi-annually, after payment of mortgage interest, and delayed coupons in full.

Sixth: Such of us as are holders of the Stock of the New York and Erie Railroad Company, hereby assent to the foregoing, and agree to exchange our respective shares to the same amount in such new company, should it become necessary to organize the same, and to place our shares in trust with said trustees for that purpose, on receiving receipts therefor, of form annexed, marked (C).

Seventh: Dudley S. Gregory, of Jersey City, and J. C. Bancroft Davis, of New York, whose names are hereto subscribed for the purpose of signifying their assent hereto, are hereby created trustees for the following purposes:

I. To receive and hold said mortgage, coupons of each class, and issue scrip therefor.

II. To receive and hold such 4th or 5th mortgage bonds, in case of foreclosure, and exchange them as herein provided.

III. To receive and hold such unsecured bonds and coupons, and exchange them for such preferred stock, and issue receipts therefor.

IV. To receive and hold such shares in the capital stock of the New York and Erie Railroad Company, for the purpose above-named, and issue receipts therefor.

V. To cause proper arrangements to be drawn in order to carry out the purposes of this agreement, and they, or either of them, as the attorney in fact of the subscribers, hereto, to sign the same.

VI. In case a sale of the road under foreclosure is necessary to carry out this agreement, to buy the same in on our account, assessing us as hereinafter provided, said trustees being under no liability to furnish money for that purpose.

VII. After said railroad passes out of the hands of the Receiver, to receive the net earnings thereof from the new management, and apply them to the payment of 1st, such of the present floating debt of said New York and Erie Railroad Company, not exceeding \$320,000 principal sum, interest to be added to date of payment, as shall be contained in a schedule thereof to be furnished to said trustees by the Board of Directors, and for which 4th mortgage bonds are pledged as collateral; 2d., to the expenditures upon the Long Dock property, estimated to amount to \$500,000; 3d., to the liquidation of said delayed mortgage coupons, in the order of their priority, which shall terminate said trust.

VIII. To retain from said net earnings, as a compensation for their own services, a sum to be fixed by the Board of Directors.

Eighth: Should the whole or nearly all on the 4th and 5th mortgages, and unsecured creditors and stockholders of the New York and Erie Railroad Company, become parties to this contract, we propose to carry it out without a foreclosure, by obtaining legislative sanction to it. But should such general assent not be obtained, a foreclosure will be necessary. We invest the said trustees, jointly with the present Board of Directors, or a majority of them, with discretionary power to de-

termine whether to proceed by foreclosure or not. If no foreclosure is had, the stock of each class provided to be issued by such new company is to be issued by the New York and Erie Railroad Company, after legislative sanction is obtained. If a foreclosure is had, we authorize said trustees to assess us as follows:

I. Holders of the bonds issued under the mortgage which shall be foreclosed to the full amount of the bonds held by them respectively, payable in their respective mortgage bonds, for which they are to receive new mortgage bonds of like amount and lieu as above provided.

II. All the subscribers hereto holders of mortgage bonds secured by the mortgages which may be foreclosed, of unsecured bonds, and of stock, a pro rata contribution for any cash necessary to complete the purchase, payable at such day as the trustees shall fix before the day named for payment by the terms of sale. Any subscriber failing to make such payment is not to be entitled to an interest in the new mortgages.

The amount of the said contribution is to be a charge upon the net earnings of the road, to be repaid before the payment of dividends upon the preferred stock, or to be funded as the Board of Directors shall determine.

Ninth: In case of a sale under decree in a foreclosure suit, this contract shall be spread upon the record by answer of the company to the complaint or otherwise, and so much thereof incorporated into the decree as the Court shall permit, so as under directions of the Court, to have the sale made subject thereto, and protect the rights of unsecured bondholders and stockholders.

Tenth: An assessment of one eighth of one per cent. shall be paid said trustees by each bondholder whose bonds are to be converted or exchanged, and by each subscribing shareholder, when the exchanges are made, and the trust in that respect executed, for which a lien is created upon the respective bonds and certificates—said assessment to constitute a fund for the expenses of re-organization, and to be administered under the direction of said trustee, who are authorized to employ agents and counsel, and incur such other expenses as they may think necessary in securing a re organization of the company, on the basis of this contract.

Eleventh: It is further agreed that such 2d mortgage bondholders as shall elect to exchange their 2d mortgage bonds for 3d mortgage bonds, dollar for dollar, shall, in addition to such 3d mortgage bonds, receive a bonus of 10 per cent. on the par value of their bonds in preferred stock of same class as that issued for unsecured bonds.

Twelfth: The time within which bondholders and stockholders can become parties to this agreement is limited to January 1, 1860.

Thirteenth: The Board of Directors named in this contract shall be either the Board of Directors of the New York and Erie Railroad Company, or in case of foreclosure, the Board of Directors of the New Company.

Fourteenth: The New York and Erie Railroad Company, by Samuel Marsh, its President, and Horatio N. Otis, its Secretary, under authority from the Board of Directors, have signed this agreement in token of its assent thereto.

Dated New York, Oct. 22, A. D. 1859.

If the within plan is carried out, the capital stock and indebtedness of the company will stand thus:

Preferred Stock \$8,911,000
Common Stock 11,000,000

Total Stock \$19,911,000
First Mortgage Bonds \$3,000,000
Second Mortgage Bonds 4,000,000
Third Mortgage Bonds 6,000,000
Fourth Mortgage Bonds 3,700,000
Fifth Mortgage Bonds 1,253,000

Total Debt 17,953,000

Total \$37,864,000

PROPOSITIONS for maintaining the Mortgage Securities, Unsecured Bonds, and Capital Stock of the New York and Erie Railroad Company, recommended by the Board of Directors for the Bondholders and Stockholders, as a basis of a contract for re-organization.

The payment of First Mortgage Coupons to be resumed May 1, 1860. One year's arrears at that date to be paid, as per statement below. Am't of arrears \$210,000

The payment of Second Mort. Coupons to be resumed Sept. 1, 1860. One year's arrears at that date to be paid, as per statement. Amount of arrears 280,000

The payment of Third Mortgage Coupons to be resumed March 1, 1861. Eight'n months' arrears at that date to be paid, as per statement. Amount of arrears 630,000

The payment of Fourth Mort. Coupons to be resumed October, 1861, and the Fifth Mortgage Coupons to be resumed Dec., 1861. Two and one-half years' arrears at that date to be paid, as per statem't. Amount of arrears 875,000

\$1,995,000

The earnings of the road to be conveyed to Trustees for the payment of the floating debt, the completion of the Long Dock property, and the liquidation of the delayed Mortgage Coupons in order of priority, which, it is calculated, will all be paid in two years.

The unsecured bonds, with coupons now overdue, and for two years in advance, to be converted into preference 7 per cent. stock, to receive dividends out of net earnings after payment of mortgage interest, and of delayed mortgage coupons.

STATEMENT OF OPERATION.

Year ending December, 1860:
Estimated net earnings \$2,000,000

Payments:
Float'g debt and Int. on same. \$340,000
First Mortgage Interest in full. 210,000
Second Mort., 6 mos. Interest. 140,000
..... 690,000

Leaving balance applicable to the completion of Long Dock and necessary works \$1,310,000
These are estimated to cost 500,000

Balance applicable to redemption of suspended Mortgage Coupons \$810,000

Year ending December, 1861:
Estimated net earnings \$2,250,000

Payments:
First Mort. Interest in full \$210,000
Second Mort. Interest in full.. 280,000
Third Mort. Interest in full... 420,000
Fourth and Fifth Mort., 6 mos.
Interest 175,000
..... 1,085,000

Balance applicable to entire redemption of suspended Mortgage Coupons, and other necessary payments \$1,165,000

Year ending December, 1862:
Estimated net earnings \$2,500,000

Payments:
First Mort. Interest in full \$210,000
Second Mort. Interest in full.. 280,000
Third Mort. Interest in full... 420,000
Fourth and Fifth Mort. Inter't. 350,000
..... 1,260,000

Balance \$1,240,000
Of which there will be applicable to payment of interest on preferred stock created from unsecured bonds 623,770
And the balance is applicable to dividends upon the common stock, or about 5½ per cent. 616,230

Reading Railroad.

The interest on the whole funded debt of the Company last year was \$739,701.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending October 24, 1859.

SONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6s.....55	
Covington and Lexington, 2d Mortgage..	7s.....65	
Ohio & Miss., E. D., Construction ..	7s.....26	
Cinc. & Ham. and Dayton, 2d Mortgage ..	7s.....54	
Indianap. & Cincinnati, do.	7s.....52	
Do. do. Dividend	65½	
STOCKS.		
Cincinnati, Hamilton & Dayton	Ex Div. 66	
Columbus and Xenia	4	
Indianapolis & Cincinnati	48½	
Little Miami	66	

Railroad Earnings.

The following statement shows the business of the Philadelphia and Reading Railroad Company, for the month of September, 1859, compared with the corresponding month of last year, and for the previous nine months in both years:—

	1859.	1858.
Received from coal....	\$189,729 20	\$184,881 41
Do. merchandise.	38,467 06	34,370 69
Do. travel, etc.	36,425 71	35,488 27
Total	\$264,621 97	\$254,740 37

Transportation; road-way; dumpage, renewal Fund, and all charges 134,167 93 123,795 23

Net profit for the m'th. \$130,454 04 \$130,945 14
Do. for previous 9 mos. 850,568 15 770,746 47

Total net profit for 10 months. \$981,022 19 \$901,691 61

Comparative statement of the business of the Philadelphia and Reading Railroad for ten months, ending Sept. 30:

	1859.	1858.
Tons of coal carried in 10 months.....	1,281,413	1,216,446
Tons of merchandise ...	262,204	146,182
Number of through passenger	105,445	84,221
The receipts of the Grand Trunk Railway of Canada for the week ending October 8, were.....	\$58,697 96	
Week ending Oct. 9, 1858.....	49,695 96	

Increase \$9,002 00
Total traffic from July 1st \$665 818 51
Same period last year 600 116 33

Increase \$65,202 18

The September earnings of the Macon and Western Railroad are:—

Passengers \$12,067 81
Freight 24,616 74
Mails, etc. 838 55

Total \$37,523 05
September, 1858 38,971 10

Decrease \$1,447 25

The annexed is a comparative statement of earnings for the month of Sept., 1858 and 1859, on the Buffalo and State Line Railroad:—

	1858.	1859.
Passengers.	\$52,341 80	\$42,333 85
Freight	34,603 95	35,506 26
Other sources	3,274 17	1,529 97

Total \$90,219 42 \$79,370 08
Increase in freights 902 31
Decrease in passengers and other sources, 11,751 05

Total decrease \$10,849 35

The traffic of the Panama Railroad for September, was \$174,372 67
September, 1858 143,125 36

Increase \$31,247 31


The aggregate of the nine months since December 31, is.....	\$1,338,004 41
Same time 1858.....	1,108,772 00
Increase.....	\$229,232 41

American Railroad Journal.

Saturday, October 29, 1859.

RAILROAD SHARE LIST.

We have prepared a full and elaborate *Share List* of American Railroads for the columns of the JOURNAL, embracing about 400 roads. It will contain such information as will enable our readers to form a pretty correct idea of the value and condition of each road. Accompanying it will be a *Bond List*, the whole covering six pages, for which provision will be made by adding eight pages to the reading matter of the JOURNAL. We give this week the first page by way of *proof*, for the purpose of sending the same to the several companies for verification of our figures, and the necessary additions thereto. Only a few reports contain all the information we desire to give. As soon as the corrections are completed, we shall publish the full list, with the necessary changes, from week to week.

 Railroad Companies are respectfully solicited to return to us the additional copy of the JOURNAL sent to them, with our figures properly verified, and the blank spaces filled.

New York and Erie Railroad.

We give elsewhere the plan proposed for adjusting the affairs of this company.

We do not see any practicable features about it. In the first place we do not believe it possible to obtain the assent of any considerable numbers of various classes of bondholders. Something like positive persuasion must be exerted to overcome the *inertia* resting upon every man who holds a security, and which leads him to remain in his present status, than to resort to others, whereby his right may be periled, and his advantage, very likely, in no degree promoted. Personal influence cannot reach one in ten of the creditors of this company. The great mass of them, consequently, are not likely to become parties to the proposed agreement. On the other hand, should any attempts be made to foreclose the road, the present stockholders will probably avail themselves of their legal rights to which little consideration seems to have been given.

This is one of those cases where difficulties multiply as we proceed. The simple remedy for them seems to be well nigh forgotten, which is to make the utmost out of the earnings of the road, and to pay off the overdue coupons. There is no creditor that would not gladly receive his interest, though by doing so, he would waive the condition which has rendered the fourth mortgage and sinking fund bonds presently due—the non-payment of their interest. This is the short cut to place company on its legs again—no other will accomplish the object in half the time, nor with half

the very comfortable *see-saw* ap-
between the Receiver and the
Mr. Davis secures the
Mr. Marsh recipro-
as well as himself, di-

rectors, vesting in them the rights and powers of the stockholders. Both now unite in the creation of a fat office for Mr. Davis. All the hard buffets that the road receives are sport to them, though death to the poor stockholders. In the meantime, how is it with the road? While all our other great lines are rapidly recovering, the Erie, which should be the first to show signs of renewed life, still lies in the slough. The salvation of this concern does not consist in elaborately devised plans, but in ability and economy in its management—the all important matter with all roads, but one which usually receives the least attention, and is the first to be forgotten.

The Re-organization of Our Embarrassed Railroad Companies.

We give herewith a very able article from the hands of a gentlemen of wide experience, and occupying a very prominent position in one of our leading companies, upon the subject of the re-organization of such of our railroad companies as have, from a vicious financial system, fallen into embarrassment, and whose organization will have to be re-constructed. The positions taken in the article are so sound, and are enforced so ably, that any remarks by ourselves, except to invite careful attention to them would be superfluous.

Plan of Re-organizing the Debts of Defaulting Railway Companies, Where there are More than One Class of Creditors.

Much has been written, and more said during the past two or three years, respecting the existing depression in the railway investments of this country; while the price of nearly every description of property has fallen during the same period, this peculiar investment seems to have been singled out and proscribed by capitalists. Why is this? Have not investments made in Western lands, and the various other enterprises of the day, been equally unproductive? Such, I believe, is the general experience. Those who have made investments during this period have mostly paid too "dear for the whistle"—having been drawn into them by long credits, and promises of a large interest upon their money. This has been particularly the case with the investors in the railway bonds of the country.

If these works had all been built upon a sound stock basis, amounting to two-thirds, or at least one-half of the cost of the line, no more roads would have been constructed than the wants of the country justified, and but few would then have failed to pay dividends.

Instead of this policy, the 7, 8 and 10 per cent. bonds of these companies have been sold at from 90 to 50 per cent. of their par value, covering, in the discount thus allowed, nearly their whole stock basis, and, in many instances, greatly exceeding it—the debt of the company, by this means, being made to represent more than the cost of the work. If capitalists had required, as they do in loaning money upon real estate, a basis of about 50 per cent. of actual value in the property offered as a security, all the money necessary for legitimate railway projects in the United States could have been obtained on 6 per cent. bonds, at or near par.

They suffered themselves, however, to be deluded by promises of high interest, fortified as it was by its punctual payment out of the principal as long as it lasted, and afterward, while money could be borrowed in the same way on second class securities, income bonds, or other devices.

In venturing their means upon this unsound basis, the transaction assumes the character of a commercial speculation, in which the parties risk their money upon contingencies, and must expect to apply the same rules in adjusting their claims as are customary against ordinary commercial debtors.

It cannot be that the "properly located ave-

nues," by which the social and commercial intercourse between the different sections of this great country, is now almost wholly carried on, will not afford fair profits upon all of the legitimate capital investments in them. Such has been the result almost universally upon Southern railroads, where the unfounded suspicions of Northern and European capitalists as to the safety of their investments in a Slave State, has generally saved the companies from the financial sacrifices that Western companies have been led into, by the facility of procuring money through the easy and simple plan of issuing bonds, which, from the previous punctual payment of the coupons, were eagerly sought after by Foreign Agencies, without much examination into their merits.

It is equally absurd to suppose that railroad property will pay fabulous rates of interest in a country where railroad charters can be so easily obtained.

A re-organization of the financial basis of the companies that have failed to meet their coupons, owing to this false system of credits (in inaugurating which, the bondholders are not free from blame), appears now to be necessary for their interests as well as those of shareholders. At present, these securities are almost worthless in the market, as the purchaser can expect nothing but a long and expensive lawsuit to secure his legal rights, and but few are disposed to incur this risk.

This re-organization, it seems to me, can only be done by wiping out all existing mortgages, where there is more than one, and placing a first mortgage or lien upon the road and equipment, for an amount that the company can, at all times, readily pay the interest upon, not exceeding one-half of the cost of the property mortgage.

The bonds issued under this mortgage to bear 6 per cent. interest, payable semi-annually. All the bonds of the highest class upon a process of scaling, to be agreed upon (if such is necessary to equalize their original value, the first class to be placed at par), to be converted into these securities.

The indebtedness exceeding the limit of one-half of actual cost of the road and outfit, to be absorbed by a preferred 7 or 8 per cent. stock, which shall be represented in the Board of Directors by one member.

Upon a default of the common stock, holders to meet the interest punctually upon the preference shares, from the *net revenues* of the company.

The preferred shareholders to elect the Board of Directors, except one member, who shall be elected by the common shareholders, to look after their interests.

When the net profits of the company shall exceed the amount necessary to meet the interest upon its bonds, a sinking fund to be established for the extinguishment of the company's debt (amounting to at least 1 per cent. upon its indebtedness), and the dividend on the preferred stock—by 2 per cent. upon the common stock—the common shareholders may again elect their Board of Directors, to be lost as before, in case of default in meeting the amount of the dividend on the preferred shares.

Legislation will be required to carry out this plan, and there will probably be some difficulty in effecting it; but, through the agency of referees, appointed by some high and disinterested tribunal, these can be readily overcome. The railroad property of the country will then again be placed upon a substantial basis, and the beneficial effects of this re-organization at once felt upon all legitimate enterprises.

The Preferred Shares issued under this plan would bear a *higher* value, and be much more esteemed among substantial capitalists than the lower classes of bonds for which they are a substitute. The holder of such stock would have control of the property it represents; and to some extent he would be relieved from the apprehension that a prior lien might sweep off his security without an opportunity to protect it.

In Europe, where railroad companies have been confined to a limited indebtedness—in England to one-third of the cost of the work—and compelled

to resort to an issue of preference shares to complete or enlarge these enterprises, such an arrangement will inspire much additional confidence in our railway securities. In all future charters of railroads these restrictions upon the right of the company to issue bonds should be placed, and the payment of the bonds of stock to contractors for work or materials prohibited.

There have been some well planned railroads ruined by bad management after their completion, and others where there was no sufficient public necessity for them—as there have been houses erected that could not be tenanted.

These are exceptions to the rule, and the owners and creditors must suffer, where it applies, the loss of their investment.

Of the various railroads constructed in this country none have attracted so much attention as the four great trunk lines between the East and West. The two Southern lines having been completed upon a sound financial basis, they require no adjustment of their debts. The bondholders of the New York Central Railroad Company are equally fortunate. But the New York and Erie road ventured upon a different financial system—the plan we have condemned—and it has sunk under the weight of its debts thus incurred.

To establish the credit of railway companies—the sound as well as the unsound—this re-organization of the character of the indebtedness of the latter seems to me to be indispensable, and it cannot be too early commenced. It will be much better for parties holding a security bearing a high rate of interest, irregular and uncertain in its payment, to receive one as provided for under the plan sketched, upon which the coupons or dividends will be promptly met, and in which the holder will feel that he has a bona fide interest in the property it represents. J. E. T.

St. Louis Car Works.

A writer in the *St. Louis Republican*, after expatiating upon the facilities enjoyed by the people of that city for manufacturing the various articles which enter into the general use, and enumerating some of the existing impediments to a full and perfect development of her resources, and which tend in a measure to retard the progress of her manufacturing interests—such as: the general want of capital among men of genius and energy, and the unwillingness of capitalists to thus employ their surplus funds, together with the scarcity of dwellings suited to the means of the industrial classes, etc., etc., goes on to say:

But, although the drawbacks mentioned may have retarded, they have not precluded the establishment of manufactures in St. Louis. We have here persons engaged in almost every branch—some very extensively, some on a smaller scale, but all growing, and having generally as much work as they can do.

Not the least important of the establishments recently commenced, and now in full tide of successful operation, is the

CAR WORKS OF MESSRS. S. B. LOWE & CO.

The opening of so many lines of Street railroads, and the very rapid increase of business, render these works of great importance, as they will afford the means of building here the great number of cars needed, and thus, while keeping at home the money payable for all these vehicles, will furnish employment to many mechanics, thus increasing the aggregate wealth and population of the city.

Messrs. S. B. Lowe & Co. commenced operations in September, 1858, since which time they have turned out some \$250,000 worth of work. They have built passenger cars for the North Missouri and other railroads; also freight, box and gravel cars; and since the commencement of our Street railroads, have, in addition, been building passenger cars for them. They employ in their car works, which are situated on the corner of Palm and Second streets, North St. Louis, some 135 hands, say carpenters and finishers 60 to 80; blacksmiths

and helpers, some 20 to 30; painters, grainers, gilders, glaziers, &c., some 12 to 15; machinists, 15 to 20, besides laborers, &c. All these are so many more than are employed in other branches of business here, and are consequent upon this business.

There is one great advantage in the establishment of any extensive branch of manufacture here—the collateral branches are almost necessarily carried along with it; for instance, among the earliest wants realized by Messrs. Lowe & Co., was the necessity of home workmen to get up the brass mouldings, fittings, door handles, rings, &c., &c., to be used on the finished cars. These, with the attendant delays, at great expense, they had to get from the East; but since the demand for these articles has arisen here, the necessary establishments for their production have been got up, and soon our own merchants will import direct all the "plush cloth," and other foreign manufactures entering into the construction of cars, so that the whole will be of St. Louis make and direct importation.

Thus our cars may clearly be called St. Louis cars, both in whole and in part, and the whole cost of their construction, less the prime cost of the foreign plush, &c., will be retained here to add to the increasing wealth of our city.

The first cars for Street railroads, built by this firm, were for the Citizens' Railroad, the President of which has since ordered 10 more, and from an examination made of them, and also of those made at older, and consequently better equipped, establishments, I am proud to state, that in point of workmanship finish, material and price, they will compare favorably with any Eastern cars.

Dalton and Jacksonville Railroad.

We learn from the *Dalton Times* that the contract for the grading and masonry on the Dalton and Jacksonville (Ala.) Railroad, has been let out to O'Hara & Lamson, from Dalton to the Alabama line, a distance of 64 miles. They are to commence the work by the 20th instant, and complete it by the 1st of January, 1861. The distance yet to let, from the State line to Jacksonville, is 27 miles. We also learn that the grading on the Selma and Tennessee road, from the town of Talladega to Jacksonville, is finished and ready for the cross-ties and iron. These gaps completed, and a connection will be formed between Selma, on the Alabama river, and the State road at Dalton, Ga.

Cincinnati and Chicago Railroad.

The *Chicago Tribune* says that the iron for this road has been shipped from New York for that city, where it will arrive in a few days. The track at the north end of the road is about ready for the iron. The Kankakee and El River bridges are nearly finished, and the bridge across the Wabash, at Logansport, will be finished in time for the iron. We now confidently expect to see iron going down next month.

Proposed New Roads in Russia.

A St. Petersburg letter, of the 29th August, says:

"A new line of railway, intended to unite Kiev to Odessa, is in contemplation. The company, which has already received the preliminary authorization from the Government, is engaged in making the surveys, in order to ascertain the best direction to be followed. Very considerable works are, it is said, to be executed in the Caucasus for the improvement of the great military road of Georgia. The avalanches of snow, which are very frequent in the mountains, and the great height of the chain of the Caucasus, render communications in that country most dangerous, and frequently impossible. Two commissions had been appointed to examine into the subject, and they have proposed a new line of road, which will avoid most of the difficulties of the old one. The highest point of the new road will be on the mountain of the

Cross, 7,698 feet above the level of the sea, while the passage of the Saint Gothard is only 6,600 feet. The works to be executed will be on a gigantic scale, and cannot be terminated in less than fifteen years. A sum of twelve millions of francs has been specially assigned for this great enterprise of public utility."

Dividends.

The Pennsylvania Railroad Company have declared a semi-annual dividend of 3 per cent., clear of State tax, payable on and after the 15th November next.

The Concord Railroad has declared a semi-annual dividend of 4 per cent., payable Nov. 1.

Nashua and Lowell Railroad, 4 per cent., payable Nov. 1, to holders 25th inst.

The coupons on the First mortgage and other bonds of the Harlem Railroad Co., will be paid on and after Nov. 1, at the Treasurer's office.

The interest on the Third mortgage and Convertible bonds of the Hudson River Railroad Co., due Nov. 1, will be paid at the office of company, 68 Warren street.

The Hartford and New Haven Railroad Co. have declared a dividend of 5 per cent.

North Carolina Railroad.

The receipts of the road from freights and passengers for the first six months of 1857 were \$143,571.31; for the first six months of 1858, \$152,185.19; and for the first six months of 1859, \$180,000.

Jeffersonville Railroad.

We learn that the earnings of this road for September were about \$27,000, an increase of some \$6,000 over the corresponding month of the previous year. The opening of the Louisville and Nashville road, which will take place on the 27th inst., must necessarily very favorably affect the earnings of the Jeffersonville road, even, as some predict, to the extent of \$200,000 per year in the aggregate. We doubt whether it will reach that enormous figure, at least for some time to come; but that the Jeffersonville road will reap a large advantage, we have no doubt. The road is in a prosperous condition, with but a trifling floating debt, and a bonded debt of about \$700,000 only.—*Cin. Eng.*

Railroads in Kentucky and Tennessee.

It is believed the Edgetfield and Kentucky Railroad will be opened by the middle of autumn, and at the same time the Clarksville road will make a junction with the Edgetfield and Kentucky at the Kentucky line. The track laying upon the Central Southern Railroad is rapidly progressing from Columbia southward. By October, the road was completed to Pulaski. The track-layers on the Decatur end of the road are eight miles north of Athens, Alabama, and it is thought that by January the entire road will be open for travel. The Louisville and Nashville Railroad will be completed and trains running regularly between Nashville and Louisville via Bowling Green, by the 1st of November.

Memphis and Ohio Railroad.

At a meeting of the stockholders of this road, held on the 3rd inst., a Board of Directors was elected for the year, who subsequently made choice of the following officers: President, Robertson Topp; Secretary and Treasurer, J. M. Tom-enty; Chief Engineer, W. D. Pickett; Superintendent, W. L. Nelson.

North-Western (Va.) Railroad.

We learn that the extension of the North-western (Va.) Railroad has been completed to within sight of Parkersburg, where a connection will be made by ferry with the Marietta road, forming a through route from Baltimore to the West.

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (-) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.				Road in progress or projected.	Equipment.			Companies.	Abstract of Balance Sheet.							Earnings.					
	Main Line.	Lateral and Branch Lines.	2d Track and Siding.	Engines.		Cars.		Property and Assets.			Liabilities.				Balance, total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.		Dividends.	Price of shares.	
						Passenger.	Freight, etc.	Railroad and Appurtenances.		Rolling-Stock.	Invested in other works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.				Gross.	Net.			
30 Jun. '59	43.3			72.3	3	2	19	Alabama and Florida	1,086,278	*		539,306	473,500	101,205	1,127,174	27.3		50,430	22,350			
28 Feb. '51	30.3			58.1	12	12	19	Alabama and Mississippi	461,506		30,091	558,010	109,500	21,632	518,965	30.3		55,791	31,852			
31 May '51	99.2			68.4	7	7	84	Ala. and Tennessee Rivers	2,101,007	144,549		1,054,915	713,226	212,496	2,264,468	99.2		155,028	78,907			
30 Jun. '51	57.0			171.3				Mobile and Girard	1,500,000							57.0		76,773	21,006			
1 Jan. '51	319.2	14.7		213.0	25	15	361	Mobile and Ohio	7,252,801	681,859	114,894	3,441,859	4,051,547	726,546	8,360,702	202.0		763,787	420,000			
28 Feb. '51	58.5	28.4		295.8	20	14	272	Montgomery and West Point	1,819,408	279,435	100,000	1,419,672	922,621	18,956	2,462,492	116.9		446,153	211,880	6		
16 Dec. '51				26.1				North East and South West	728,000			105,760										
								Tennessee and Ala. Central														
				301.4				ARKANSAS.														
30 Nov. '51	38.5			107.5				Calro and Fulton	553,877	*		351,524	446,000	10,725	811,949							
								Memphis and Little Rock														
30 Sep. '51	22.5			41.8				CALIFORNIA.														
								Sacramento Valley	1,547,100	*		791,100	756,000		1,547,100	22.5		185,108	102,726			
								CONNECTICUT.														
31 Jan. '59	23.9				8	6	30	Danbury and Norwalk	333,237	49,773		279,050	85,000	3,502	404,622	23.9		56,044	20,618	6		
30 Sep. '51	122.4			75.1	16	28	238	Hartford, Provid. and Fishkill	3,903,455	302,511		1,936,740	1,862,738	319,962	4,308,307	122.4		273,426	163,615			
31 Aug. '51	61.4	10.6						Hartford and New Haven	3,108,018	254,000	102,880	2,550,000	904,000	16,463	3,932,432	72.0	314,763	723,496	204,134	10	124	
31 Dec. '51	74.0				11	19	212	Housatonic	2,438,847	*	5,559	2,000,000	278,500	76,675	2,555,837	159.0		271,273	66,330			
30 Dec. '51	57.0				7	15	178	Naugatuck	1,578,301	*		1,031,800	437,500	30,713	1,706,802	57.0		199,536	314,098			
30 Nov. '51	62.3							N. Haven, N. London and Ston.	1,470,661	*		738,538	750,000		1,488,538	62.3		76,758	8,446			
31 Dec. '51	46.4	8.5						New Haven and Northampton	1,400,000	*	11,050	922,500	500,000		1,481,722	55.2		172,369	70,487			
30 Nov. '51	66.0				5	5		N. Lond., Willimant. & Palmer	1,561,241	*	5,453	510,000	1,055,600	27.2	1,575,147	66.0	91,134	104,464	30,612			
31 Mar. '51	62.2			63.8	29	72	368	New York and New Haven	4,593,698	661,547		3,000,000	2,219,002	79,722	5,582,071	74.6	482,024	682,554	231,666	3		
31 Mar. '51	59.0	7.0						Norwich and Worcester	2,245,406	176,792		2,522,300	324,130	59,614	2,598,672	66.0		265,417	44,587			
								DELAWARE.														
31 Dec. '51	71.0			19.4				Delaware	1,146,311	*		252,561	735,000	123,750	1,146,311	71.0		66,628				
30 Nov. '51	14.3							Newcastle and Frenchtown	699,514		25,000	762,320			767,278	14.3		19,893				
								FLORIDA.														
								Florida														
30 Apr. '51	154.2			45.1				Florida and Alabama	292,291	*		317,847	154,000	70,620	543,237							
30 Jun. '51	31.8			2.0	2	1	24	Fla., Atlantic and Gulf Centru	396,310	28,608		205,781	204,000	164,670	594,836	19.3		10,255	1,504			
	26.5	3.9		227.0				Pensacola and Georgia								29.4						
								GEORGIA.														
31 July '51	86.7				15	11	105	Atlanta and La Grange	1,179,381	*		1,000,000	187,500	23,384	1,459,075	86.7		362,061	197,357	7 1/2		
	30.0			133.5				Atlantic and Gulf-M. Trunk								30.0						
31 Dec. '51	53.0							Augusta and Savannah	1,032,200	*		733,700	298,500		1,032,200	53.0		125,427	69,079			
30 Apr. '51	43.5			23.7				Brunswick and Florida	755,000	*		151,887				31.0						
30 Nov. '51	191.0				52	28	633	Central of Georgia	3,750,000	*	550,152	3,750,000	199,851	5,645,001	229.0	714,787	1,353,722	755,615	10			
31 Mar. '51	171.0	61.0						Georgia (and Bank)	4,174,492	*	829,550	4,150,000	373,000	7,368,055	232.0		1,154,621	644,363	4			
31 July '51	102.5				18	16	171	Macon and Western	1,500,000	*	5,073	1,438,800	52,500	1,861,721	102.5		325,192	163,124	7 1/2	100		
31 July '51	50.0				7	2	107	Muscogee	774,244	102,534		669,950	249,000		1,026,956	50.0		202,714	110,510	8		
1 May '51	68.1				3	4	38	Savannah, Albany and Gulf	1,386,634	52,373		1,275,901	10,200	180,621	1,473,140	71.6		547,876	337,769			
31 July '51	106.1	56.5	14.8	44.3	15	18	166	South Western	3,165,000	*		2,254,000	631,000			147.2	171,758	647,876	337,769			
30 Sep. '51	138.0				52	24	705	Western and Atlantic	5,901,497	*		built and owned by State.				138.0		852,139	457,916			
								ILLINOIS.														
								Chicago, Alton and St. Louis	10,000,000			3,500,000	4,500,000		10,000,000	220.0						
30 Apr. '51	220.0				62	31	990	Chic., Burlington and Quincy	6,068,054	1,400,872	680,155	4,629,240	2,990,000		8,149,084	210.0		1,044,576	171,515			
31 Dec. '51	45.0				6	14	101	Chicago and Milwaukee	1,799,894	67,809	120,000	988,000	762,865	188,085	2,050,065	45.0	14 mo.	243,282	135,384			
	138.0			75.0				Chicago and North Western	4,250,000	*		4,250,000	6,350,000	2,500,000	13,330,000	138.0						
30 Jun. '51	181.8				58	57	990	Chicago and Rock Island	6,776,119	*	175,165	5,003,000	1,397,000	5,651	7,643,104	223.4		1,407,940	629,029	62 1/2		
10 Nov. '51	33.2							Fox River Valley	580,000	*						84.0						
31 Dec. '51	121.0	138.5	73.6		60	63	1,309	Galena and Chicago Union	8,027,473	1,311,017	211,003	6,026,400	3,783,015	292,466	10,300,517	326.5	808,231	1,547,561	630,325	4	74 1/2	
	77.5							Great Western	6,022,926	*		1,000,000	3,068,426	334,500	5,022,926	175.0						
31 Dec. '51	454.0	250.0			113	96	2,305	Illinois Central	19,674,214	3,347,799		10,249,210	20,000,000	1,297,277	31,596,487	704.0		1,976,578	558,624		66	
								INDIANA.														
								Ohio and Mississippi	4,870,586	*		1,780,295	3,292,403			143.0						
	143.0							Pooria and Bureau Valley								oper by Chic.						
	46.6							Pooria and Hannibal								oper by Chic.						
	136.0			129.0				Pooria and Oquawka	5,400,000	*		1,500,889	2,200,000			186.0						
31 Dec. '51	100.0							Quincy and Chicago	1,978,556	*		800,000	1,200,000			100.0		oper by Bur. & Quincy.				
	1.0							Rock Island Bridge								oper by Chic.						
31 Dec. '51	168.5	39.8	12.2		31	30	424	Terre Haute, Alton & St. Louis	7,008,958	623,487		3,026,903	5,035,015	741,040	8,865,252	208.3		823,767				
								INDIANA.														

Pacific Railroad.

The Directors of this company have advertised for work to be done from Kansas City to connect with the Eastern end of the line. For the details reference is made to an advertisement in this paper. The work will be prosecuted as rapidly as funds can be raised from Jackson county and other sources, and, as that is now the second county in the State, little trouble is anticipated from this source.

We learn, also, that work upon the road in Pettis county will soon be commenced, under arrangement with the authorities of that county. Meanwhile, the Southwest Branch of the Pacific is being pushed forward with as much rapidity as possible.

The Cleveland Convention and the Free Pass System.

The following resolutions upon the subject of giving free passes by railway companies, were adopted by the Cleveland Convention:

Resolved, That the following rules in regard to free passes, shall be strictly observed by all roads represented at this Convention, on and after this date:

1. Each company may issue annual or time passes to the President (when an active and salaried officer), Superintendent, and Traveling Agent of such company, as it may have, pursuant to ticket or freight arrangements; with, also, two tickets to be issued to the company, as such, to be used under the control of the President or Superintendent for business purposes; also, not to exceed two passes to each daily paper and one to each weekly paper printed in the counties through which the road may run; and all free tickets heretofore issued to persons other than those designated in this section, to continue beyond the first day of January next, shall be invalid from and after that date.

2. Passes may be issued to drovers accompanying their stock; not to exceed in number one for two cars, two for over two and under six cars, three for five and under ten cars, and four for ten cars and over, and return.

3. No passes, other than above provided, shall be issued, except under the recorded orders of the Board of Directors of each road for purposes purely local to such road, but no passes shall be issued, the effect of which, will be to influence cattle or freights as against any competing road or roads.

4. No road shall pass any person or persons over its line upon the pass ticket of any other roads, or the letter or request of any other road; nor shall any such letters be given.

5. Half-fare arrangements may be made for the Fourth of July, to State Fairs, and to the National Fair, on the roads terminating where such National Fair is held.

Resolved, That it is the sense of this Convention that the free-pass system be totally abandoned from and after January 1, 1860.

Staten Island Railroad.

This road is approaching completion, and the company expect to have so far progressed with the work by the 1st of January as to put it in operation at that time. The road when completed will be about fourteen miles in length, extending from Stapleton on the east side, to a point nearly opposite South Amboy, with which place it will be connected by boats, thus offering additional facilities to passengers over the Camden and Amboy Railroad to Philadelphia for communication with this city.

The road, as at present in course of construction, is divided into nine sections, upon each of which from 30 to 50 men are employed. The grading throughout the entire route is nearly completed, and the contracts for rails and other materials have been made. 1,100 tons of rails are being furnished by the Montour Company, of Philadelphia, 200 tons of which are already on the ground. The locomotives and cars have also been contracted for, and will be ready at the specified time.

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Adapted to every branch of business where a correct and durable Scale is required.

SCALES FOR RAILROADS,

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All of which are **WARRANTED** in every particular.

Call and examine, or send for an illustrated circular.

FAIRBANKS & CO.,

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IRON AND COAL COMPANY,

SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 65, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the Office of the Company, 46 Exchange Place, N. York.

Address **J. H. SCRANTON, President,**

Scranton, Pa.

or **DAVID S. DODGE, Treasurer,**

46 Exchange Place,

NEW YORK.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HIRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA (North Penna. R. R. BUILDING, OFFICE, No. 407 Walnut st.

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FOR LOCOMOTIVE ENGINES,

Brass Domes, Escape Pipes, Steam-Chest Covers,

Cylinder Heads, Jackets, Raised Bands for Boilers, etc., etc.,

Also, Smoke Stacks and Russia Iron Jackets.

Also, COPPER PLUES of SUPERIOR QUALITY, and

All other Copper Work for Locomotive and Stationary Engines.

Brass and German Silver Name and Number Signs

FOR LOCOMOTIVE ENGINES,

Furnished at unusual short notice.

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THE subscriber is prepared to enter into CONTRACTS

FOR RAILS delivered at an English port or at a port in the United States.

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Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

SUBMARINE BLASTING.

PATENT Electric Submarine Safety Fuse Train for military and civil purposes. Also,

A substitute for the Galvanic Battery for sale by **E. GOMEZ,** 165 Broadway, N. Y.

Notice to Contractors.

PROPOSALS will be received at the office of the Chief Engineer of the Pacific Railroad, in the city of St. Louis, until the eighth day of November next, for the graduation and masonry of that portion of the Pacific Railroad in the county of Jackson, lying between the Little Blue and the city of Kansas, a distance of 17 miles; and also for the improvement of the Levee in the City of Kansas.

The work is heavy and very desirable for contractors; there being a large amount of cutting and filling on the same. The route passes the cities of Independence and Kansas, and occupies a populous and wealthy country.

The profile may be seen at the office of the Chief Engineer in St. Louis, and all necessary information may be obtained on the ground from the Resident Engineer, Mr. C. M. Randolph after October 20th. By order of the Board.

EDWARD MILLER, Chief Engineer.

TO CONTRACTORS**HAVING CAPITAL.**

THE MARYLAND AND DELAWARE R. R. CO., will receive sealed proposals until the first of December for the work and material in fifty-three miles of road; extending from its junction with the Delaware R. R. at Smyrna, Del., to Oxford Md. forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt) consist of individual stock, State appropriations, and work already done; but they propose to make payment for a work now offered principally in first mortgage bonds, which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the road are already graded, the entire line located and secured, and the nature of the work very favorable for contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst, and sent by mail on application to J. C. W. Powell, Sec. Md. and Del. R. R. Co., Eason, Md., to whom proposals will also be addressed.

TENCH TILGHMAN, President

5143

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAISO AND FULTON R. R. CO. Van Buren, Ark. Sept. 10, 1859.

SEALED PROPOSALS for the Graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office until **THURSDAY NOON, DECEMBER 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of the Division may be made; but no bid for less than one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Estimate of work done will be made on the first day of every alternate month, and payments made on the 1st day of the month following; and fifteen per cent of all estimates will be retained until the completion of the contract.

Contractors desiring other terms of payment may bid accordingly as the above terms are not positive or settled. The Company having a large amount of the fine timbers in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications, may be seen, and all desired information obtained, on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, President.

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAISO AND FULTON R. R. CO. Van Buren, Ark. Sept. 10, 1859.

SEALED PROPOSALS for the MASONRY of the First Division of twenty miles eastward from Van Buren, will be received at this office until **THURSDAY NOON, DECEMBER 1st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, President.

To Railroad Companies.

RAILROAD COMPANIES who will require rails for the coming year, and wishing to take advantage of the present low price, may avail of a favorable opportunity to negotiate for the same, through an old established House, a member of which, will sail for England early in November.

Reference is offered to several important Roads for whom purchases have been made. Address either Box 1,204 New York Post Office, or Box 258 Baltimore Post Office. 3142

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,
MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

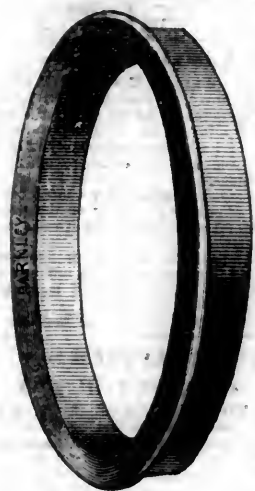
Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the **FARNLEY IRON** is precisely the same as that of **LOW MOOR** and **BOWLING**, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,
44 Exchange Place, New York,
SOLE AGENTS for the UNITED STATES and CANADAS.



RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the **ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG.,** are prepared to contract for the sale of **RAILROAD IRON** of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rail of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

Address
N. WILKINSON, Secy,
Wheeling, Va.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY,** and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.

New York, Aug. 1, 1853.

RAILROAD IRON.

THE KENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:
BUSSING, CROCKER & DODGE,
32 Cliff St.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.

Far superior to the ordinary kind.

FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 Cliff st., New York.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 3 inches bore, with Screw and Socket Connections. Tees, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1831.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS, **CHAR. WHEELER, JR.,**
THOS. T. TASKER, JR. **STEPHEN P. M. TASKER.**

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN.
Boston, June, 1851. 29 Central Wharf.

ROUND OAK IRON WORKS,
STAFFORDSHIRE.

LORD WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS of every variety.
Address **RICHARD SMITH, Esq., Dudley.**

UNITED STATES OFFICES.

NEW YORK, No. 17 Nassau St.
BALTIMORE, over Farmers' & Mer. Bank.
NORRIS & BROTHER, Agents.

MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL
IN ALL THEIR VARIETIES.

BOILER PLATE. CAR AXLES.
BOILER RIVETS. RAILROAD IRON.
CUT NAILS and SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of **IRON** can be executed.
August 16, 1854.

RAILROAD IRON.

THE subscribers are prepared to contract for **RAILS** delivered at an English port or at a port in the United States. Also for all descriptions of.

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.

CONTRACTS for **RAILS**, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,

10 Wall st., near Broadway, N. Y.
500 tons **T Rails** on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON
AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GRAY & CO., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their **G. L. Railroad Iron**, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in **STAFFORDSHIRE and WALES**, are prepared to contract for delivery on board ship at **LIVERPOOL, or WELSH port.**

C. CONGREVE & SON,
13 Cliff st., N. Y.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR
RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF

MACHINERY and BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and **TWENTY-FIVE** per cent more durable than **Sperm Oil**, for Lubricating, and the only Oil that in all cases **reliable**, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer. The *Scientific American and Manufacturer's Journal*, after testing this Oil, pronounce it **superior** to any other for Lubricating.—For sale **ONLY** by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or Europe

THE IMPERIAL
LUBRICATING OIL,
MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON,)

Nos. 108, 110, 112, 114, 116 & 118 Cliff St.,

NEW YORK,

For Railroads,
Machine Shops,
Steamships,
Mills, etc.

THIS OIL having been before the public for a long time, and having been **extensively used** in different parts of the country, and on each occasion meeting with **unqualified approval**, renders the manufacturers confident when making the following claims:—

1st. Its **first cost** is much less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will **not in any way gum or clog up** any journal or bearing, **all the gum in the Oil being entirely decomposed.**

3rd. It will keep all journals and bearings **cool, clean and bright** as new, thus not only **saving wear and tear**, but **saving also** an inconsiderable amount of motive power.

4th. It is fully as **durable** as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is **sweet and clean**, and entirely **free from all odor or unpleasant smell.**

6th. It will remain limpid at as low a temperature as **sperm.**

CERTIFICATES from a large number of **Railroad and Steamboat officers**, also, prominent **Manufacturers and Machine Builders**, can be seen by application as above.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COMPANY,
44 Exchange Place.

New York, 1st June, 1859.

HOFFMAN'S
ROSENDALE CEMENT,
OFFICE, 92 WALL ST., NEW YORK.

THE LAWRENCE CEMENT COMPANY are prepared to receive and execute orders for their Cement, to any extent that may be required. They would particularly call the attention of purchasers to the distinguishing brand of their manufacture, viz.: **HOFFMAN'S ROSENDALE CEMENT.** This seems to be necessary, as they have established a reputation for the superior quality of their Cement, and there are various other brands offered, as "Rosendale" Cement. It has the unqualified approbation of the most eminent Architects and Engineers, being used in almost every department of the Works under Government. It is put up in the most careful manner, each barrel being well lined with paper, and will be delivered on ship-board, in this city, on the most favorable terms. Particular attention given to shipping orders, and Freight obtained on the best terms.

M. W. WOODWARD, Secretary.

DELAFIELD & BAXTER'S,
Late OGDEN & DELAFIELD,
ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our CEMENT for public works, or other purposes. We warrant it equal in every respect to any manufactured in this country. It attains a great degree of hardness, sets immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength.

For sale in tight barrels, well papered, on application at their office, by **DELAFIELD & BAXTER, 104 Wall st.** The above CEMENT is used in most of the fortifications building by government.

CUTTA PERCHA
CEMENT ROOFING.

THE
Cheapest
and most
DURABLE
ROOFING
IN USE.
Sent to any part
of the country
with directions
for application.

SPECIMENS and references can be seen, and any desired information obtained on application, by letter or in person, at our office,
510 BROADWAY, N. Y.
(Opposite the St. Nicholas Hotel).
JOHNS & CROSLY.

THE LAWRENCEVILLE MANUF'G
CEMENT COMPANY,
OFFICE 96 WALL ST,
NEW YORK.

THIS Company manufacture **ROSENDALE HYDRAULIC CEMENT** of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings.

For sale upon favorable terms by addressing,
WM. N. BEACH, President.
CHAS. E. LAWRENCE, Sec'y.

CEMENT, PLASTER, ETC.

THE HUDSON RIVER CEMENT CO.

HAVE commenced manufacturing for the season, and can now furnish a very superior article of fresh **Rosendale Cement, Calcined Plaster, Farmers' Plaster and Marble Dust.** Address

HUDSON RIVER CEMENT COMPANY,
12 Jersey City, N. J.

Rosendale Hydraulic Cement.

THE NEWARK and ROSENDALE CEMENT COMPANY are now receiving fresh from the Mills their approved **ROSENDALE CEMENT**, warranted pure and free from quick lime, and which has given such general satisfaction in the various government and other public works in which it has been used. Purchasers and shippers should be careful to get the genuine **ROSENDALE CEMENT**, branded "NEWARK and ROSENDALE," "H. WILDE." This Cement does not swell and burst the hoops when stored in warm climates. It is packed in tight kiln dried barrels, and is specially adapted for safe shipping on long voyages. Terms reasonable, which may be known by addressing,

JOHN H. STEPHENS, President, Newark, N. J., or
HENRY WILDE, Secretary, 90 Wall st., N. Y.

DR. A. MERRIMAN,
DENTIST,
1 Waverley Place, opposite New York Hotel,
NEW YORK.

UNION
CAR WHEEL & TIRE
WORKS,

JERSEY CITY, N. J.

MOORE & ADAMS,

MANUFACTURERS OF

DOUBLE AND SINGLE PLATE

CAR, ENGINE AND TRUCK WHEELS,

MANUFACTURERS AND PROPRIETORS OF

MOORE'S PATENT

TRIPLE PLATE CAR WHEEL.

CHILLED LOCOMOTIVE TIRES,

Made from the best Charcoal Cold Blast Iron.

HIRAM W. MOORE,

GEORGE ADAMS.

G. G. LOBDELL. H. S. McCOMBS. D. P. BUSH.

BUSH & LOBDELL,

WILMINGTON, DELAWARE,

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,

FOR RAILROAD CARS

AND

Locomotive Engines,

ARE PREPARED TO EXECUTE PROMPTLY

ORDERS TO ANY EXTENT FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

WHEELS FITTED

To HAMMERED or ROLLED AXLES,

IN THE BEST MANNER, AT THE SHORTEST NOTICE,

AND ON THE MOST REASONABLE TERMS.

A. WHITNEY & SONS
CAR WHEEL WORKS,

Callowhill & Sixteenth Sts.,

PHILADELPHIA, PENN.

FURNISH

CHILLED WHEELS,

FOR CARS, TRUCKS, and TENDERS.

CHILLED

Driving Wheels and Tires,

FOR LOCOMOTIVES.

ROLLED AND HAMMERED AXLES

WHEELS and AXLES,

FITTED COMPLETE.

A. N. GRAY, Cleveland, O.,

RECEIVER AND FORWARDER OF

RAILROAD IRON, CHAIRS & SPIKES.

Also Cars, Locomotives,

AND ALL KINDS OF

MACHINERY FOR RAILROAD PURPOSES.

Office next door to the Custom House, Main street

FINANCIAL.**BANKING and COMMISSION AGENCY.**

A. G. JAUDON,
No. 54 Wall street, NEW YORK.

AGENCIES of a financial nature connected with Railroads Manufacturing and Commercial Business, and Banking operations generally, receive special attention.
STOCKS, BONDS, NOTES and PILLS OF EXCHANGE
BOUGHT and SOLD on orders.

THOMAS GEORGE WALKER. DAVID TWEEDIE.

WALKER & TWEEDIE,
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Business Paper and Bills of Exchange negotiated.
BONDS, STOCKS and other Securities bought and sold.

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BANKERS,
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STOCKS and BONDS Bought and Sold on Commission.
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Advances made on all approved Securities.
COLLECTIONS MADE throughout the United States and

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By SIMEON DRAPER,
OFFICE, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES

At 36 PINE ST., EVERY DAY.
STOCKS and BONDS bought and sold at private sale.

Sale every day at 1 o'clock. See Catalogue.

R. H. RICKARD,
MINING AGENT & STOCK BROKER,
Office No. 21 Nassau st., NEW YORK.

BUYS and sells MINING SHARES, MINES and
MINERAL LANDS on commission, will examine
Mines and Mineral Lands in any part of the United States, and
report on their value, etc., etc.

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Particular attention given to Lake Superior business.

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STOCK AUCTIONEER and BROKER.
No. 37 William st., NEW YORK.

AUCTION SALES of STOCKS and BONDS every
TUESDAY, at 12½ o'clock, at the Merchants' Exchange,
RAILROAD BANK, INSURANCE and other SECURITIES bought and sold at the **BANKERS' BOARD**, at **PRIVATE SALE, or at AUCTION.** All dividends payable in New York collected, and prompt remittances made.

NOTE: **NOT BONA FIDE QUOTATIONS FURNISHED THE WEEKS.**
THE MARKET VALUE OF SECURITIES WILL NOT BE SUP-
PRESSED OR ALTERED, AND DECEPTIVE OR INRESPONSIBLE
CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last
semi-annual dividend of the Banks and Insurance Companies of
the city of New York, will be forwarded by mail upon applica-
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REFERENCES.—Messrs. Wm. and Jas. O'Brien, Thos. Denny
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John H. Griscom, M. D., Rev. Edwin F. Hatfield, D. D., Rev.
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Esq., New York; Otis Allen, Esq., Albany N. Y.; Messrs.
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Under Messrs. DUNBAR, SHERMAN & Co.

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CHARLES E. HOLDEN,
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Stocks, Bonds, Mortgages, & Commercial Paper Bought & Sold.

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sota.
A. Gridley, President McLean Co. Bank, Illinois. A. & W. A. Saunders, Bankers,
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ALBERT H. NICOLAY,
STOCK AUCTIONEER,
BROKER AND BANKER,
No. 52 WILLIAM STREET,
Near WALL STREET, NEW YORK.

REGULAR AUCTION SALES OF
STOCKS and BONDS,
NOTES and other SECURITIES,
EVERY MONDAY AND THURSDAY,
(Which have been the regular established days of sale for many years.)

Or EVERY DAY (whenever required)
AT 12 O'CLOCK P. M.
At the STOCK SALES ROOM, No. 52 WILLIAM ST.
Or at the MERCHANTS' EXCHANGE as desired.

STOCKS and BONDS BOUGHT AND SOLD AT
Private Sale and at the Brokers' Board on Commission. In-
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REAL ESTATE

AT PUBLIC OR PRIVATE SALE WHEN DESIRED.

A large variety of CITY, BANK AND IN-
SURANCE STOCK constantly on hand at
PRIVATE SALE.

A. H. DYETT,
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MORSE & CO.,
BANKERS and DEALERS in Stocks, Bonds, Exchange
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Orders for the purchase and sale of Stocks and Bonds, at the
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Cash advanced on sound saleable securities.

REFER TO
G. VAN BAUR & CO., N. Y. CONTINENTAL B'K. N. Y.

CINCINNATI STOCK EXCHANGE.
KIRK & CHEEVER,
STOCK BROKERS AND RAILROAD AGENTS,
No. 93 WEST THIRD STREET,
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Railroad Stocks, Bonds, etc., bought and sold, on Commission.
Regular sales at public auction at the MERCHANTS' EXCHANGE.

DUNCAN, SHERMAN & CO.,
BANKERS,
Corner PINE and NASSAU Sts.,
NEW YORK.

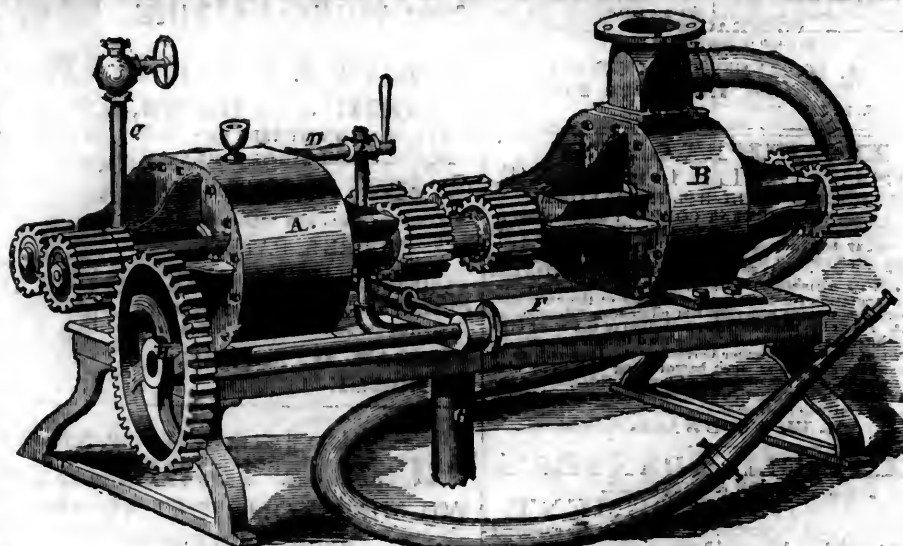
CIRCULAR NOTES AND LETTERS OF CREDIT,
FOR TRAVELERS,
AVAILABLE IN ALL THE PRINCIPAL CITIES OF THE WORLD.
ALSO, MERCANTILE CREDITS,
For use in EUROPE, CHINA, etc.

H. MEIGS, Jr. & SMITH,
BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)
STOCKS and BONDS Bought and Sold on Commission.
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH.
New York, May 11, 1858.

METALS for RAILROAD COMPANIES.
LUCIUS HART,
IMPORTER and DEALER IN METALS,
4 and 6 Burling Slip, NEW YORK.
BLOCK TIN, SOLDER, HABBIT METAL,
ANTIMONY, PIG LEAD, INGOT COPPER.

A GENTLEMAN who has upwards of 26 years experience
in conducting an extensive machine manufacturing busi-
ness (as principal) writes a good hand and has a thorough
knowledge of accounts and general business routine, wishes
an engagement with some established concern where his ser-
vices would command a fair compensation.
Satisfactory evidence of business capacity and integrity will
be furnished.
Address S. box 962 Baltimore Post Office.

RAILROAD STEAM PUMPS.



HOLLY'S PATENT ROTARY PUMP and ENGINE, the most simple, durable and reliable
PUMPING APPARATUS, yet introduced. Adapted for Steam Fire Engines, Railroad Stations and Factories, and arranged
to be driven by Steam, by Power or by Hand.

C. W. COPELAND, 122 Broadway, New York.

HENRY BURDEN'S PATENT REVOLVING SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this
Machine for the United States, now offers to make transfers
of the Right to run and Machine, or sell to those who may be
desirous to purchase the Right for one or more of the States.

This Machine is now in successful operation in ten or twelve
Iron Works in and about the vicinity of Pittsburg, also at
Phoenixville, and Reading, Pa., Covington Iron Works, Md.,
Troy Rolling Mills, and Troy Iron and Nail Factory, Troy,
N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are nu-
merous:

Considerable saving in first cost; saving in power; the entire
saving in shingler's, or hammerman's wages, as no attendance
whatever is necessary.

It being entirely self-acting: saving in time from the quan-
tity of work done, as one machine is capable of working the
iron from sixty piddling furnaces; saving of waste, as nothing
but the scoria is thrown off, and that most effectually; saving
of staffs, as none are used or required.

The time required to furnish a bloom being only about six
seconds, the scoria has no time to set, consequently is got rid
of much easier than when allowed to congeal, as under the
hammer.

The iron being discharged from the machine so hot, rolls
better and is much easier on the rollers and machinery.

The bars roll sounder, and are much better finished.

The subscriber feels confident that persons who will examine
for themselves the machinery in operation, will find it possesses
more advantages than have been enumerated.

For further particulars address the subscriber at Troy, N. Y.

P. A. BURDEN.

**VULCANIZED RUBBER GOODS,
MACHINE BELTING,
STEAM & PISTON PACKING,
HOSE OF ALL DESCRIPTIONS,
SHOE SOLEING,
LACE LEATHER,
VALVES,
FIRE BUCKETS, ETC.**

THE undersigned Wholesale Agents of the BOSTON
BELTING COMPANY, beg to call the attention of
DEALERS and JOBBERS to the above mentioned goods,
which are conceded by all practical mechanics to be

THE BEST PRODUCED.

For list of prices, and a full description of goods, terms, etc.,
apply to

BRAMHILL & CAMPBELL,
190 William st., near Spruce, NEW YORK.

FAY, WOOD & CO.,
214 Pearl st., NEW YORK,
MANUFACTURERS OF
**WHITE LEAD, ZINC,
COPAL VARNISHES AND
JAPANS.**
Also, PUTTY, PAINTS and COLORS.

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Sylvester W. Barnes,
Chief Engineer Watertown and Madison R. R., Madison, Wis.

Alfred W. Craven,
Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,
Steam Marine and Railway Engineer,
122 Broadway, New York.

Davidson, M. O.,
Chief Engineer Havana Railroad Company,
HAVANA, CUBA.

C. Floyd-Jones,
Engineer Alton and St. Louis Railroad,
Residence, Vandana, Ill.

Gay, Edward F.,
Civil Engineer, Philadelphia, Pa.

Robert B. Gorsuch,
City of Mexico,
MEXICO.

James H. Grant,
Civil Engineer, Christiansburg, Rutherford Co., Tenn.

Theodore D. Judah,
Chief Engineer, and Commissioner of
San Francisco and Sacramento Railroad, and of
San Francisco and Sacramento Northern Extension Railroad,
SAN FRANCISCO, Cal.

S. W. Hill,
Mining Eng'r and Surveyor, Eagle River, Lake Superior.

Ellwood Morris,
Civil Engineer, Franklin Institute, Philadelphia.

Mills, John B., Civil Engineer,
Lake Ontario and Hudson R. R. R., 20 Exchange Place, N. Y.

Osborne, Richard B.,
Civil Engineer, Office 78 South 4th st., Philadelphia.

W. Milnor Roberts,
Civil Engineer, Carlisle, Pa.

J. S. Sewall,
CIVIL ENGINEER,
ST. PAUL MINNESOTA.

Silas Seymour,
Consulting Engineer and General Agent,
271 Broadway, N. Y.

Shanly, Walter,
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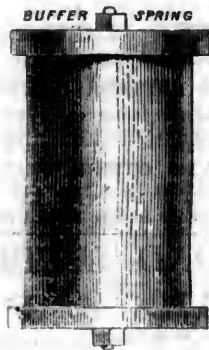
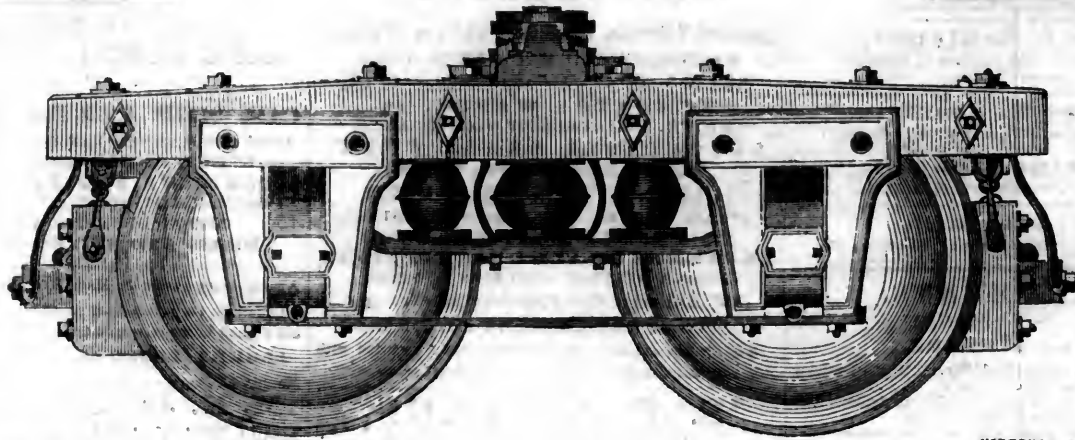
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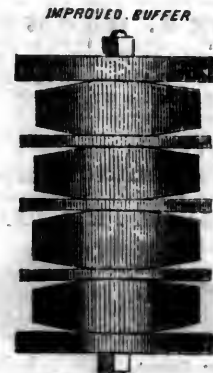
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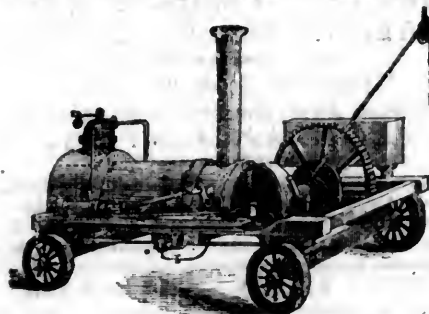
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STEAM NAVIGATION, COMMERCE, FINANCE,
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HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

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SECOND QUARTO SERIES, VOL. XV., No. 45.]

SATURDAY, NOVEMBER 5, 1859.

[WHOLE No. 1,229, VOL. XXXII.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, November 5, 1859.

Pacific Railroad in California.

They have been having a great railroad convention in California in which both the people and sentiment of the State on the subject of a railroad across the continent were well represented. It embraced delegates from nearly every section of the State as well as from Oregon and Washington Territories, and an earnest and determined feeling prevailed, indicating that the States on the Pacific slope were prepared to go to work and complete the portion of the line through the Sierra Nevada, as soon any assurance should be given that the portion between the Missouri State Line and the eastern slope of the mountain was provided for.

At the convention a series of resolutions, expressive of the views of the convention was adopted. The most important one was that offered by Gov. McDougal, urging upon the State the appropriation of the sum of \$15,000,000 for building the California section of the road. Governor McDougal supported his resolution by an able speech. The sum is a large one, but not greater, probably, than the exigency requires. With adequate provision made for other portions of the

great line, California should at once commence her own. With the excellent credit which the State enjoys, due in part to the manly assumption of a large debt, which the courts had decided was illegally created, there would be no difficulty in raising for the object stated the sum proposed.

The popular route for California is one directly across the continent, and which must pass, consequently, not very far from Salt Lake City—or perhaps, we should say, on the most direct route from the eastern slope of the Sierra Nevada to the western boundary of Missouri, where a continental line would probably strike several independent routes connecting with all the great eastern cities. A road on the extreme southern route is not favored, as it would, probably, stop some time at San Diego, and increase the importance of that point, at the expense of San Francisco.

With regard to the physical features of the route, we give a paper submitted to the convention by W. S. Watson, Esq., Civil Engineer, according to which the obstacles to be encountered are far from being as formidable as has been supposed. For the most difficult portion of the route, no surveys have been made, so that the estimates made are only approximations, and may be wide of the result. The obstacles from snow are regarded as inconsiderable, though they appear to us to be the most serious ones to be encountered. We do not think any inference can be drawn from the effect of snow in the North-eastern States, where there is seldom more than a foot lying on the ground at any one time. On the Sierra Nevada it accumulates, as we understand, to the depth of many feet, and packs into a firm and unyielding crust. This is a matter deserving careful investigation, which should be made before the work is commenced.

The action of this convention will undoubtedly give a decided impulse to the great project of a Continental Railroad. The commencement of this work cannot be delayed much longer. Its necessity and usefulness is becoming universally admitted, and the public voice will soon force Congress to act. From the Western boundary of Missouri to the Eastern boundary of California, the means, or a greater portion of them, must be contributed by the United States Government. There

is no escape from this. We cannot, however, expect to act till it is felt that the road is a public necessity, and till it is clearly seen that means for its construction can come from no other source than the public purse.

We think the action of the people of California will find a hearty response on this side of the mountains. The road will be as valuable to one section as to the other. The magnitude of the work will constitute no objection to undertaking it. It is the mission of our people to subdue and civilize the continent, and the proposed work will be a most effective instrument to this end. We trust and believe that the coming Congress will make a commencement in a proper spirit, and upon an adequate plan.

The following is the paper submitted by Mr. Watson:

The route to which I now call the attention of this convention, commences on the Bay of San Francisco at Benicia, thence to Sacramento, thence to Folsom, thence to Marysville, thence to Oroville, thence to Chico, in Butte County, thence to the head of Chico and Deer creek, thence to the head of Susan River, thence to Honey Lake, near the State line of California; and I shall, as briefly as possible, lay before you the facts that have been elicited by an *instrumental reconnaissance*, and about which there can be no dispute. I will present them in the following sections, with the most prominent features of each section, such as distance, cost of construction, snow line, elevations, and any other prominent features that may present themselves

Miles.

Section 1, to embrace the country between Benicia and Sacramento.....	68½
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806½

Making a total distance from tide-water to the head of Honey Lake of 806½ miles.

SECTION I.

From Benicia to Sacramento the line runs through the counties of Salano and Yolo. The highest elevation reached on this section is at the Montezuma hills, in Solano County, 125 feet above tide-water at Benicia, which again falls to 22 at

Sacramento. With 12 miles of curvature in 58½ miles of line. The general direction is north of east; and the entire cost, including equipment, rails, bridges, and fixtures, is estimated at \$1,950,000.

SECTION II.

This section embraces the Sacramento Valley Railroad, a distance of 22 miles. This road is already running, and cost the stockholders \$1,250,000. The elevation at Folsom is 225 feet above the point indicated as the terminus of the last division. The line is generally straight, making six miles of northing in twenty-two miles of easting. This point is 247 feet above tide-water. This road being built, it is unnecessary to say more on this division.

SECTION III.

This section is also now under construction, as the California Central Railroad, and will be completed by January of 1861. The entire cost is \$2,500,000, as per contracts. The line is generally straight, having about 12 miles of easy curvature in forty miles. The heaviest grade is forty-two feet per mile, with thirty miles of grade less than twenty feet to the mile. The direction is west of north, making seventeen miles of westing in forty miles of northing. The highest elevation is 407 feet above tide-water, at Benicia, which again descends to 157 feet at the Yuba. Of the entire distance to the Yuba it is unnecessary to speak, as the line is in the Sacramento Valley, and subject only to the general undulations thereof.

SECTION IV.

This division embraces the country between Marysville and Oroville, in Butte County, and forms the line known as the California Northern Railroad, now under construction, and to be completed in 1861, at a cost of \$1,750,000. The entire elevation attained on this division is 428 feet above tide-water, at Benicia. This line is nearly straight, making only 1¼ miles of easting for 25 miles of northing. The entire curvature is 2½ miles of a minimum radius of 1,900 feet in twenty-five miles. The city of Oroville is also in the main Sacramento Valley, and, consequently, has facilities for railroad construction, which need not be expatiated on here.

The latitude of Oroville is 39° 21' 33" N. The only stream crossed on this division is the Honcut, of thirty feet span. The highest grade is forty feet per mile for two-thirds of a mile.

SECTION V.

With this section commences the only part of the Sacramento Valley, so far, that has not been located on by railroad companies, and this presents new ground. The line it proposes continues along the valley for twenty-three miles in a north-easterly direction, to the crossing of Chico Creek; and, being along the foot hills on the east side of the valley of the Sacramento, there can be no difficulty in constructing a railroad. The entire rise for these twenty-three miles is 214 feet above Oroville, and making the point at Chico 642 feet above tide-water at Benicia. The streams to cross on this section are Feather river, of 227 feet, and twelve feet high; Table Mountain Creek, twenty-seven feet span and ten feet high; Little and Big Butte, of 100 feet in width each, and five feet above the high water mark. The general direction is N., 56° W., and the line nearly straight—having four miles of easy curvature in twenty-three miles.

Thus, then, it will be seen that we have advanced 168½ miles in a direction necessary from tide water to the Atlantic States, as all roads leaving from California by a central route must pass the Rocky Mountains at or near 42° 15' of north latitude, and so long as we are south of that latitude, and advancing in the direction required, we are subserving two important purposes—that of building a State and an Atlantic States railroad.

SECTION VI.

At the crossing of Chico we have attained an altitude of 642 feet above tide-water, and now the real difficulties of the construction of a Pacific Railroad commences—namely, at the base of the Sierras, and to which, in my humble opinion, the

attention of this convention should have been most exclusively directed. I, however, now propose to show that a railroad line can be built, and successfully run, from this point to Honey Lake, near the Eastern boundary of the State of California.

The line I propose takes the ridge between the waters of Chico and Big Butte, and traverses that ridge for 51 miles. The first ten miles has an average grade of 45 1-10th feet per mile, making 451 feet to a point on this ridge opposite Inskups, and at an elevation of 1,093 feet above tide-water, the direction is north 88° 30' east; with a maximum grade of 93 feet per mile; with 23 miles of curvature of easy curves, none of which exceed 2° curves.

From this point the general direction for the next 10 miles is north 41° east, and an average grade of 63 feet per mile, with a maximum grade of 88 feet per mile; the curvature in these 10 miles is 4½ miles, with a maximum curvature of 3° curves. This point is at an elevation of 1,721 feet above tide-water at Benicia.

From this point the general direction is 32 east for 20 miles. Having now ascended the main plateau of the first bench of the foot-hills of the Sierras, the general course of the line is more uniform, and the grades run from level to 100 feet per mile, making from the point indicated 55 feet per mile average rise. The curves are easy, as the ridge is wide, and readily adapts itself to railroad curves. The line now enters the chaparral fields, which extend to Walker's Plains on the south, and to Lawson's Butte on the north. The ridge is but little broken with streams, and such as a road can traverse almost in any direction. The elevation at the bottom indicated at the terminus of these 20 miles is 2,823 feet above tide-water.

From this point to the head of Butte Creek, the line passes a succession of gaps and valleys, and approaches the summit of Butte Creek in a distance of 11 miles, where the road could take almost any direction from east to north, as the ridge is, in some places, 10 miles wide; to the head of Butte Creek the general direction is north, 52° east, with grades ranging from 35 to 155 feet per mile, and average, as per profile, 80 feet per mile to Butte Creek Meadows, which elevation is 3,769 feet, above tide-water. Between the Butte Creek Meadows and head of Soda Valley Creek, lays the impenetrable Sierra Nevada, so much talked about, and which, instead of being the snow-capped mountains which as have always been represented, is as easy of access as almost any of the approaches to the head of the Delaware or the Susquehanna, the main summit from point to point across is only six miles, and starting with a point six miles from Woodville, in Plumas County, the line passes between the two points in a distance of 15 miles, with the meadows to the right, and the main summit to the left, on a grade of 81 feet per mile, and a general direction of north, 67° east for eight miles, and of north 28° east, for seven miles, striking a large valley on the summit and head of Soda Valley Creek, and as beautiful a spot in summer as can possibly be imagined, the entire elevation of this valley, which is the highest point attained on this survey, is 4,988 feet above tide-water at Benicia.

The entire cost of this section, from the foot-hills to the summit on Soda Valley, I have estimated at \$4,600,000, including all cost of a complete and running railroad.

SUMMIT SECTION VI.

For 15 miles, the entire snow belt, the obstructions of snow is not more than in some of the roads in the northern part of the State of New York, as I have passed this summit in March with mules; on the opposite ridge leading thereto, there has been a road for the last six years, and which has been much used by emigrants and teamsters for the last four years, and I might here also state, and I have no doubt but a great many of the members of this convention can bear me out in the fact of a stage coach passing this summit with eleven passengers, up and down, in 1857, making the trip from Honey Lake to Oroville, in thirty hours

driving time, I have myself passed this summit with a covered wagon, from Honey Lake to Oroville, in twenty-two hours driving time, and have no doubt that a railroad can be successfully worked through this summit at this point.

For the entire distance from the Sacramento valley the country abounds with the largest pine timber that I know of in the State, and will one day be an immense revenue to a railroad, in the transportation thereof to market.

The entire distance traveled from the valley is 77 miles, through a country which, until recently but little known, but which abounds in all the natural resources calculated to make a rich and important part of the State. Along the line and in its immediate vicinity are large tracts of rich and valuable land, in valleys varying from 10 to 100 square miles, and even on this dreaded summit of the Sierra Mountains is situated the Cold Spring and other ranches, where all the products of the farm are raised in abundance.

SECTION VII.

This division embraces that part of the route lying on the head of Deer Creek, Soda Spring Creek, Butte Creek and Susan River; and here it may also be observed that Deer Creek discharges into the Sacramento; Chico, into the Sacramento; Butte, into the Sacramento; Butte and Soda Creek, into Feather River; and Susan River, into Honey Lake. This section embraces a distance of 23 miles, from the main summit on Soda Creek to the head of the North Fork of Susan River, and has the appearance of an extensive and wide-spreading succession of meadows, some of which have the appearance of extreme fertility, and separated from each other by low ridges of heavy timbered land. The grades on this section are undulating, none of which are above 46 feet per mile, rising and falling in about equal ratios, until the line strikes the head of Susan River, at which point the entire elevation has decreased 4,762 feet above tide-water.

About 6 miles to the southeast lies the Big Meadows, on Feather River; and I may also remark that the most singular feature of the entire mountains of this State, as far as I have explored them, is this head of Feather River. The main source is in these meadows, which are 20 miles east of the main Sierra ridge, and yet the water discharges into the Sacramento valley. This, in fact, accounts for that vast canon, known on Feather River to rest between Rich Bar and the mouth of Butte Creek, some parts of which, namely: from the top of Spanish Peak to Rich Bar, a distance of 6 miles, descends 9,800 feet, and completely divides the Sierras separating Spanish Peak ridge from the continuation, as seen from Lawson's Peak.

It has, indeed, sometimes seemed to me that nature has provided this Pass for the very transit of a railroad, which she has refused in her more impenetrable mountains. I am almost persuaded that it would be worth while to make a passage with instruments in this canon, and if it could be done, the snow difficulty and the grades of higher latitudes would at once be avoided, as I am persuaded that Rich Bar cannot be over two thousand feet above tide-water, at a distance from the valley of sixty miles.

Another wonderful feature of this section of country which has been now fully explored, is Big Meadows of Feather River. One of these meadows is twenty-seven miles in length, nearly east and west, and varying from one to eight miles in width; another joining the above to the east, and forming a right angle with the above, is from eight to ten miles by eight, the two making a section area of 230 square miles, where stock to a large amount is annually driven from the Atlantic States and Oregon, on their way to this State; and sometimes wintering here. The Main head of Feather river is of itself a curiosity, well worthy the trouble of a visit. Issuing from the eastern side of a low range of hills is the Cosummes, a river of two hundred and six feet in width, and two feet deep, with a two mile current, and at a distance of one and a half miles from the extreme head, the stream is

three hundred and twenty-one feet in width, and on the 14th day of August, 1858, the water was three feet deep at Abbot's crossing on the Oregon trail.

The cost of this section from the head of Deer's Creek to the head of Susan river, thirty-eight miles, I have estimated at \$2,600,000.

SECTION VIII.

This section embraces the descent into Honey Lake, a distance of thirty-four miles, with an average grade of sixty-two feet per mile, descending to the east the general course of the section, 10° south of east, to the north end of Honey Lake. The first ten miles on the head of Susan River has an average descent of one hundred and eleven feet per mile; the twenty-four miles on the east end of the section has an average grade of forty-five feet per mile.

At Susanville, on Susan River, in Honey Lake Valley, the line descends from the ridge to the valley; thence for fifteen miles to the north end of the lake the line lays on the valley as level as the valley of the Sacramento. The entire cost of this section I have estimated at \$2,526,000; the fifteen miles from Susanville to the north end of the lake, I have estimated at \$450,000.

It has been conceded that a road once at Honey Lake there is no difficulty in connecting with any line, that may come from the Atlantic States through the South Pass in the Rocky Mountains.

And, Mr. President, I should here call your special attention and that of this Convention, that there is no point on this line, as herein designated which lays north of 41 degrees north latitude, as follows: The latitude of Oroville is 39° 21' 33" north; latitude of Deer Creek summit is 40° 16' 25"; latitude of head of Susan River is 40° 46' 12"; latitude of Susanville, Honey Lake, is 40° 19' 33"; longitude of north end Honey Lake, 119° 22' 18"; making Honey Lake Valley in the State of California.

SUMMARY OF ESTIMATE.

Miles.	Cost.
Section 1—58½	\$1,900,000
" 2—22	1,400,000
" 3—40	2,500,000
" 4—25	1,750,000
" 5—23	1,000,000
" 6—62	4,600,000
" 7—38	2,600,000
" 8—34	2,526,000
" Honey Lake Valley—16	500,000
	<hr/> \$18,776,000

Making a grand total of eighteen and three-quarter millions of dollars, and on a line which, be it observed, would subserve the following results: First, of having a State Railroad along the present line of travel, and where all the travel of the northern part of this State and Oregon would concentrate; as being through the most populous counties of the State, and who will build the road as far Chico in any event. Secondly, the purpose of being on the most direct route in the State to Honey Lake Valley and the South Pass of the Rocky Mountains; thereby being such a route as Oregon could reach, either from the Bend of the Humboldt or through the extreme north of this State, into her own territory, by the way of the Susan River summit, and on the train that is now and has been traveled for the last ten years by wagons, at all seasons of the year.

British Coal Exports.

Messrs. Laird, of Liverpool, in their monthly circular, give the following particulars respecting the British Coal Trade: The total exports during August were—from the Northern ports, 353,048 tons; Yorkshire ports, 27,338 tons; Liverpool, 71,220 tons; Severn ports, 160,045 tons; and the Scotch ports, 43,170 tons—making a total of 659,821 tons, against 528,527 tons in the same months of the previous year. The total exports from January to August were 4,499,956 tons; in the same period of 1858, 4,229,324 tons, being an increase of 270,632 tons.

Locomotive Adhesion and Steep Gradients.

On the reading of Mr. Isaac's paper in November last, at the Institution of Civil Engineers, there was a perceptible appearance of incredulity upon the statement that a locomotive, with tender and a loaded wagon attached, had worked successfully, and for some time, up a gradient of 1 in 10. The weight of the entire moving mass—entire tender and wagon—was 49 tons, the gravity of which, therefore, must have been 4.9 tons. The friction was not, probably, as much as 6 of a ton, as at 20 lb. even per ton, it would amount to but 980 lb. The engine weighed, in running order, 24 tons on a level—the whole weight being on the driving wheels. On an incline of 1 in 10, however, it would be but nine-tenths of this, or 21.6 tons. It was to be concluded, therefore, that an engine, having an available adhesive weight of 21.6 tons, had overcome a total resistance of 5.5 tons, equal to a trifle more than one-quarter of the weight available for adhesion. It might be doubted whether the tractive power of the engine, or the force developed by the action of the steam at the peripheries of the driving wheels, would be sufficient to render such a high proportion of adhesion effective; but it appears that the engines in question had very large cylinders and very small wheels, to wit: 19 in. cylinders, 22 in. stroke, and eight coupled driving wheels, each 3 ft. 7 in. in

diameter. Taking, therefore, the formula $\frac{d^2lp}{D}$,

where d = diameter of cylinder, and D diameter of wheel, each in inches; l = length of stroke, in inches; and p = pressure in pounds per square inch, we have, with but 70 lb. of steam on each square inch of the pistons, 12,929 lb. of steam tractive force, equal to more than the assumed amount of adhesive power.

The question of the power of locomotives working upon steep gradients turns, therefore, upon that of the adhesion of the wheels upon the rails. Although engineers have been accustomed to refer with ridicule to Blenkinsop's notable contrivance for gearing the engine to the rails, few practical men, we apprehend, are aware of the actual adhesion of locomotive driving wheels. It is estimated variously at from one-twelfth to one-fifth of the insistent weight, or the weight exerted by such wheels upon the rails. That the proportion of the whole weight, usefully exerted in adhesion, is very capricious, every engine driver well knows. In some conditions of the rails it is difficult for the engine to start its own weight into motion upon a level. But with clean rails, there are many facts going to show that the adhesion of the wheels is even more than one-fourth of the insistent weight. Morin found the friction of cast iron on cast iron, when wet, to be .314 of the weight by which the surfaces were pressed together. The friction of pear tree on cast iron was .617 of the weight. The success of Robertson's frictional gearing, which appears entirely to supplant all systems of toothed wheels, shows how, also, with a modification of plane surfaces, metallic friction may be greatly increased, and with the peculiar form of the flanged surfaces of railway wheels, it is probable that much of the "bind" relied upon in the fractional gearing is brought into effective play. The form of the surfaces in contact has certainly much to do with their mutual friction, however the result may be affected, or otherwise, by the more area of the bearing surfaces. We have always been told that friction between surfaces of any given kind was dependent on weight only, and altogether irrespective of the extent of surface in contact. Yet every one who has observed the working of engines having, in one case, plain or cylindrical tyres on their driving wheels, and, on the other, ordinary flanged tyres, is aware that the latter, under conditions otherwise equal, have the greater available adhesion. We cannot always determine the exact weight upon the driving wheels, since, under many circumstances, it varies considerably, when the engine is working, from the weight, carefully obtained, of the engine at rest upon a level weighing machine. It is very easy so to connect the engine and tender that a considerable

portion of the weight of the latter shall bear upon the foot-plate of the former. Again, at the ordinary height of the coupling bar influence between the engine and tender, the moment steam is applied a portion of the weight of the engine is lifted from the front upon the hind wheels. If we conceive the engine to be coupled to its train through a connecting link attached to a standard rising several feet above the foot-plate, any power applied, as is that of the steam, in the horizontal line of the cylinders and driving axle, would have a tendency to tip the engine from its front upon its hind wheels. In ascending a gradient, say of 1 in 30, 1.30 of the whole weight may be altogether lost, since the engine would press upon the rails, even when standing still, with but 29.30 of its actual weight; as determined upon a level; but if the engine have driving wheels behind, and bearing or leading wheels only in front, the base of the centre of gravity falls farther behind upon an ascending gradient than upon a level, and consequently increases the weight on the hind wheels. So, too, the water in the boiler, if a constant total quantity be carried (and we may say that more is required in ascending a steep gradient than on a level, in order to avoid burning the forward ends of the tubes), the water runs backward over the fire-box so much, indeed, that on a gradient of 1 in 66, the difference of the apparent height of the water in a boiler 16½ feet long inside, is 3 inches, and, on an incline of 1 in 10, nearly 20 inches. Even the strong discharge of steam from one or two large safety valves on the boiler, perceptibly increases by the re-action against the air, the weight of the engine upon the rails—a circumstance which is not mentioned in order to attach any material importance to it, but simply because it is a physical fact.

But so far as we can know the weight upon the driving wheels of an engine, whilst it is at work, we may presume that the ultimate adhesion of the wheels, on clean rails, is at least one-third of the weight acting to produce adhesion. Carefully noted particulars of actual experiments were introduced into the discussion upon Mr. Isaac's paper—particulars which showed that the working adhesion had been found in some instances, to be from three eighths to two-fifths of the weight upon the driving wheels, as weighed upon a level platform and at rest. Mr. Flachet, in an appendix to his paper recently read before the Institution of Civil Engineers in Paris, and of which we have commenced the translation in another column of the *Engineer*, quotes cases wherein the effective adhesion of the driving wheels, probably with the assistance of sand upon the rails, was equal to one half of the insistent weight; and to show to what extent adhesion is dependent upon the form of the surfaces in contact, he also quotes the following case: In a straight line a gradient of 1 in 57½ was immediately succeeded by one rising at the rate of 1 in 40½; the former was laid with narrow convex-topped rails of an old pattern, the latter with broad-topped rails giving a good width of bearing. It was found in practice that the same engine would ascend, with a given load, with greater apparent ease, at least with less slipping and greater speed, on the steeper than on the lighter gradient. Yet the gravity of 1 ton, which, upon the latter gradient, was but 39 lb., must have been, upon the former, over 55 lb., and the united resistances of friction and gravity must have been, at the least, one-third more on the gradient of 1 in 40½ than upon that of 1 in 57½.

If an engine, with all its weight upon coupled driving wheels, has a tractive and adhesive power equal to two-fifths of its whole weight, it would draw about 150 times its own weight upon a level, equal, with an engine of 25 tons weight, to a train of 3,750 tons. Upon a gradient of 1 in 10, such an engine would press with but 9.10 of its actual weight, and its adhesion would be reduced therefore from 40 to 36 of its weight; whereby it would take up the incline its own weight, and about two and a-half times as much more, a 25 ton engine taking itself and a train weighing sixty-two and a half tons.

We by no means intend to imply that either of

the results thus deduced has been ever accomplished. That they could certainly be effected, it is not essential that we should stake our opinion, whatever that may be worth, in asserting. But there is reason to believe that locomotives can exert much more propelling power than is commonly supposed. Many of our readers would at one time have believed it impossible that a locomotive could work successfully up the Oldham incline of 1 in 27 for $1\frac{1}{2}$ miles. Competent engineers at one time declared that such a result could not be accomplished.

Modern railway practice is becoming more and more reconciled to heavy gradients. Their abstract disadvantage is palpable, but there are often many advantages in their adoption. A difference between gradients of 1 in 100 and 1 in 50 may become a difference of 25 per cent. of length in favor of the line on which the latter are adopted; whilst, with heavy gradients, the earth-work, bridging, and tunneling, are likely to be very much less than where a flatter line is adopted. Again, the cost of locomotive power by no means forms the total working charges of a railway; and the increased wear of railway iron, and of rolling stock, consequent upon working heavy gradients, would often be more than offset by the interest upon the total outlay necessary to avoid them.

In France, M. Flachet has come out strongly against the scheme going slowly forward, under the authority of the Sardinian Government, for tunneling Mount Cenis. He proposes a line, upon the natural surface of the ground, across the Alps, and is prepared to defend the heavy gradients and sharp curves which would be necessary in carrying out such a plan. It is his wish to renew the discussion not only in France but in other countries, as to the working of lines so situated, and from his high professional position and great practical experience, we have no doubt his invitation will meet with a proper response.—*London Engineer*.

Journal of Railroad Law.

DECOY SUBSCRIPTIONS TO RAIL STOCKS—HOW SOME RAILROADS ARE BUILT.

The following case recently determined in Pennsylvania, illustrates the principles of law applicable to what are called "decoy" subscriptions to companies intended to be formed. The facts of the case were these:

William Robinson, upon the 17th day of February, 1853, subscribed for one hundred shares of the Pittsburg and Connellsville Railroad Company, at fifty dollars per share. The subscription was in writing, and in the usual and regular form. When calls were made upon him for payment of instalments, however, he refused to pay; and the present suit was brought against him by the company, to enforce the payment.

At the time when the subscription to the stock was given, Mr. William Larimer, Jr., was the President of the company; but he was subsequently succeeded by some other individual, who was unwilling to carry out the whole of the contract as understood by the defendant, Robinson. Mr. Robinson alleged that he did not wish in reality to buy the stock, but that Mr. Larimer wished him to become a subscriber for a certain number of shares; and in order to induce him to become a subscriber, he agreed that he would at no time call upon him for the payment of the subscription, and that he should not in fact own the stock, or ever become liable to the company thereon. Whatever might have been the equities as between Mr. Robinson and Mr. Larimer, as between the company and Mr. Robinson, the court decided that Mr. Robinson was indebted to the company for the full amount of the subscription, which, according to the verdict, amounted to \$5,960.48.

Mr. Robinson set up two defences to the suit. First, that he subscribed for the stock at the request of Mr. Larimer, the President of the company, with the express understanding that he was not either to pay for, or to hold, the stock for which he subscribed, and that the same was to be cancelled.

Second, That the stock was afterwards taken by the company from Larimer, as his own, by virtue of a previous purchase from Mr. Robinson, and thereby the claim of the company against Robinson was extinguished.

There was no proof, however, to sustain his second defence. There was no evidence that Robinson ever sold, or that Larimer ever bought and re-sold to the company the stock in question, and this part of the defence entirely failed. We give only so much of the opinions as relates to the first ground of defence.

On the trial of the case, in the first instance, Judge WILLIAMS charged the jury as follows:

This is an action to recover the unpaid instalments alleged to be due on one hundred shares of the capital stock of the Pittsburg and Connellsville Railroad Company, subscribed for by the defendant, on the 17th of February, 1853. The plaintiffs having given in evidence their charter, the defendant's subscription, the calls for the instalments, and the notice of the Treasurer, are entitled to recover unless the defendant has shown that he has a good and valid defence to the action.

The defendant contends that he is not liable for the unpaid instalments in question, because the subscription was made by him at the request of William Larimer, Jr., the President of the company, with the express understanding that he was not either to pay for or hold the stock for which he subscribed, and that the same was to be cancelled. In support of this position, he has given in evidence the certificate of William Larimer, Jr., verified by affidavit, showing the fact to be as alleged. This evidence is objected to as incompetent, on the ground that it tends to contradict the contract or agreement of subscription, given in evidence by the plaintiff. It seems to me that the objection to the evidence is well-founded. No principle of law is better settled than that parol evidence is inadmissible to contradict, vary, or change the terms of a written contract, where there is neither fraud or mistake in the transaction. This evidence does tend directly and positively to contradict the terms of the contract of subscription, and must, therefore, be disregarded by the jury. It is not pretended that any fraud was practiced on the defendant to induce him to make the subscription. He must have known, when he made the subscription, that he was thereby rendering himself liable to the company for the amount of the stock for which he subscribed; and if it was the understanding that he should neither pay for the stock or hold it, but that the same should be cancelled; it is his misfortune that he did not have the stock transferred to the company, or his subscription cancelled, during the Presidency of Larimer; or that he did not require of Larimer satisfactory indemnity against any demands of the company on account of the subscription, before making the same. If he made the subscription, on the faith of the pledge, or assurances of Larimer, that he should not be called on to pay for the stock, he must look to Larimer to make

good his pledge. It is no defence to this action for the instalments, which, by the very terms of the subscription, he agreed, and became liable, to pay.

To the charge the defendant excepted; and a verdict having been rendered for the plaintiff, the defendant removed the cause to the Supreme Court.

The opinion of the appellate court was delivered by Judge Woodward, and is as follows:

The assignments of error are all founded on the charge of the court, and are supported by such verbal criticism as are easy to be made; but which amount to nothing when they overlook the plain purport, intent, and drift of the language used. In looking through the charge of the learned judge, we think it was more favorable to the defendant than it should have been. For instance, he puts the answer to the first ground of defence on the incapacity of parol evidence to control the written subscription, whereas he might have set aside that branch of the defence on the ground of fraud also.

If the defendant's subscription was made for the purposes as explained in Larimer's certificate, it was, whether so-intended or not, a fraud on the company, and on all subsequent subscribers, the legal consequence of which would be, that while the defendant might not reap any advantage from it, he would be held to all the responsibilities of a *bona fide* subscriber.

The court did not deprive the defendant of the benefit of his position, that Larimer had taken this stock off his hands, and transferred it to the company, and so extinguished it.

They applied the written memorandum at the foot of the subscription to the stock transferred in 1848, among which were 107 shares in the name of the defendant; and hence the memorandum had no other effect upon the subscription of 1853 than to entitle the subscribers to a credit on each share of \$1.07. This balance resulted from their former payments of \$2.50 on each of the transferred shares, for which they had received from Larimer \$1.43 a share—leaving them out of pocket \$1.07 a share—the amount which was to be credited on the new subscriptions. We apprehend that this was a very sound conclusion from all the evidence in the case, and we conceive that the defendant has no reason to complain of it. In the absence of all explanatory proof as to the time when the memorandum was added to the formal subscription, the legal presumption would be, that it was there when the subscription was made. And the evidence of Veeder fixed it there as early as August 1853.

Referring to the jury the only hypothesis which the evidence seemed to justify as to the time and application of this memorandum, the court declined to submit the question whether the stock sued for here was or was not part of the stock purchased by General Larimer, and by him transferred to the company.

And they were quite right in this; for there was no evidence to raise such a question. On the contrary, the evidence was that the stock which Larimer transferred to the company was purchased by him prior to the time of the defendant's subscription. And if a purchase and transfer, subsequent to the subscription sued on, there was not a title of evidence. It was labor lost, then, to at-

tempt to torture from such evidence the favorite defence relied on here.

The court might have dealt with it more summarily than they did; but it is no just ground of complaint that it received more attention than it deserved.

The judgment is affirmed.

Buffalo and State Line Railroad.

The following is a comparative statement of the earnings and expenses of the Buffalo and State Line Railroad for four years, from June 1, 1855, to June 1, 1859.

EARNINGS.		1855-6.	1857.
June	\$57,793 00	\$71,879 27	
July	50,149 69	60,933 84	
August	56,607 10	68,763 84	
September	72,893 01	94,622 77	
October	90,180 87	110,869 05	
November	97,312 54	110,893 62	
December	107,910 21	120,175 62	
January	87,731 25	87,135 56	
February	65,955 75	76,217 14	
March	89,803 18	123,029 98	
April	132,123 67	121,056 19	
May	95,003 55	79,970 47	

Total.....\$1,003,463 82 \$1,125,547 35

1858.		1859.	
June	\$76,893 27	\$66,219 37	
July	68,519 73	66,079 09	
August	67,582 73	73,376 55	
September	87,844 72	90,219 42	
October	94,004 10	88,022 78	
November	79,564 53	87,234 81	
December	91,055 61	81,078 28	
January	77,505 56	69,493 34	
February	61,163 71	68,231 61	
March	93,737 60	80,837 24	
April	87,704 76	64,893 69	
May	66,134 35	55,650 88	

Total.....\$950,740 67 \$891,337 09

EXPENSES.		1855-6.	1857.
June	\$62,541 07	\$74,682 17	
July	45,329 41	42,034 68	
August	40,662 53	47,894 64	
September	37,750 39	89,241 68	
October	43,819 19	81,609 99	
November	54,748 49	50,785 18	
December	42,032 47	148,475 64	
January	53,323 22	83,617 21	
February	62,968 85	55,548 70	
March	68,782 58	73,765 91	
April	66,639 91	47,842 33	
May	45,488 70	129,414 83	

Total.....\$623,986 81 \$924,412 96

1858.		1859.	
June	\$51,832 65	\$41,609 62	
July	62,265 36	39,837 29	
August	55,861 39	40,666 37	
September	65,892 12	71,444 87	
October	93,552 86	35,400 20	
November	35,063 83	41,415 81	
December	46,261 31	45,083 85	
January	38,514 23	37,007 64	
February	49,863 00	25,906 61	
March	53,390 02	25,830 46	
April	41,681 97	34,600 53	
May	46,920 49	35,983 38	

Total.....\$641,099 23 \$474,536 93

NET EARNINGS.		1855-6	1857-8	1858-9	1859.
June	\$379,477 01	\$309,641 44			
July	201,184 39	416,800 16			
August					
September					
October					
November					
December					
January					
February					
March					
April					
May					

EXPENSES.		1855-6	1857-8	1858-9	1859.
June	\$59,311 97	\$38,813 80			
July	49,056 39	33,787 87			
August	63,818 43	45,886 60			
September	79,370 08	32,111 08			

New York and Erie Railroad.

26 THROGMORTON STREET, }
LONDON, 14th October, 1859. }

To the Editor of the AM. RAILROAD JOURNAL.

SIR—Nothing will so much promote the interests of American Railways as thorough investigation. Much English capital is embarked in them; and as the *Times* of this day justly says—"America, which might at this juncture—the want of employment for British capital—have afforded the most serviceable field for the employment of British capital to the advantage not merely of the two countries, but of the world, is at present not to be seriously named as a competitor for our financial confidence." And why not? Because such a vast amount of worthless Railway Bonds and Shares have been negotiated in this country that the very name of American Securities is causes British capitalists to regard the individual who addresses them, with distrust; and, indeed, he is almost vexed for wasting his time upon so worthless an employment as the study of their intrinsic merits. Yet, if American Railways had been more closely studied, and their financial agent less implicitly believed, the result would have been far different. English capitalists need not have lost one cent of their principal, and yet have received a high rate of interest for their money. Having well studied the statistics of English and American Railways, I fearlessly challenge comparison between the two; well knowing that an impartial judgment will be in favor of well conducted American lines. Can the United Kingdom produce a line to compare with the Western Railroad of Massachusetts; the Buffalo and Lake Shore; the Little Miami; the New York Central; with some of the Southern lines, or with the best conducted railways of New England? Let the British capitalist answer. All he knows about American Railways is deduced from the results of lending to such lines as have sought foreign aid, and have been endorsed by those who should have known the character of the undertakings before they recommended them. In a small way I may include myself in this general confidence making; but then I retailed the opinions of those I thought more capable than myself of forming a correct judgment, I had not acquired the insight into the working of American Railways as has since been my ardent study to attain.

That American railway securities will become a favorite investment in this country, I do not doubt; for the investor may obtain first-rate security, and from six to seven per cent. for his money. But such things as unprotected Erie bonds, Illinois Central shares, and the like, will not find supporters again in this market. The day for obtaining British capital to uphold sinking American schemes is, it is to be hoped, passed; and an new project will be tested by better standards than have hitherto influenced the judgment of our capitalists. We shall have no more Erie schemes for selling Fourth Mortgage bonds at par, upon the assurance of a London Committee, that the earnings of the road equaled 11 per cent. dividend upon its capital; when, at the time, I was enabled to show to the chairman of the committee, and several gentlemen esteeming themselves high railroad authorities, that the road from 1853 had not earned interest upon more than its first three mortgages. Why, I could not then tell. But subsequently that problem was solved, and your columns have exhibited the result. That result was made

publicly known, before the London Deputation to visit New York, to consult with the New York Directors, had been appointed. And yet, the basis of the proposition to be submitted by them is founded upon the "Premises and Arguments" approved at the meeting of the Bond and Shareholders, held in London, to nominate Mr. Evans and Mr. Splatt to their mission.

These Premises and Arguments, which appear in your JOURNAL of the 17th ult., are founded upon the assumption that the road has sufficient vitality in itself to secure the re-payment of some \$1,000,000, required to discharge pressing claims; and that this is so, is evident from letters canvassing those Premises and Arguments, wherein the proposers of the scheme adopted, ridicule the idea that the road was only capable of earning \$1,400,000 net revenues, which will suffice for \$20,000,000 of debts. I question the correctness of those Premises. I contend that the first object of the Deputation, or, more properly, of those who promote the Deputation, is to investigate thoroughly the accounts of the company, to see why it is that the road does not earn more than its net profits show. If they will do this, it will prove an interesting as well as a profitable investigation.

Hitherto the road has not been equal to its debt, and not improbably because it has no western terminus. It ends nowhere! And the New York Central can carry passengers and paying freight from New York west or east at a less gross cost than the Erie. Whether this new line which is to tap the Erie at Olean, and carry a direct traffic west and south-west, may make the road a formidable rival to the Central, has yet to be proved. The proposed line will doubtless be constructed sooner or later and upon an ordinary estimate it recommends itself to the notice of those who apparently will lose their investment, unless some new element can be introduced to make the Erie a paying line. With your permission I will resume the consideration of the prospects of the New York and Erie, awaiting the report of the deputation, which will be most certainly considered.

WM. LANCER.

Lehigh Luzerne Railroad.

The tunnel and superstructure of this road being completed, it was formally opened for public use on the 20th ult.

The tunnel through Council Ridge is 1,023 feet long, 21 feet wide, and 15 feet high, the natural rock forming the arch, except at the south end, where for 120 feet a brick arch was put in. The grade of the road in the tunnel is 102 feet below the crest of the mountain pierced with the drill and powder blast, to open an iron way from the Hazleton bride-groom train to the bride-bed of anthracite in the basin Black Creek.

The President of the company is Algernon S. Roberts, Esq., a gentleman of practical capacity and thorough acquaintance with the geological formation, physical topography, and mineral resources of the Lehigh region, and who, besides, has a keen insight into the operations of the coal market, into which the Black Creek region is soon to send down an amount of coal apportioned to the general consumption and competing sources of supply.—*Pottsville Mining Register*.

Buffalo and Lake Huron Railroad.

We learn that this road is driven to its utmost capacity at the present time. The demand for cars to carry forward the wheat that is offered is greater than can be accommodated. An international bridge is needed to facilitate the entry of the trains into this city.—*Buffalo Com. Adv.*

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (-) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.			
	Main Line.	Lateral and Branch Lines.	2d Track and Sidings.	Road in progress or projected.	Cars.				Property and Assets.				Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.		Price of shares.
					Engines.	Passenger.	Freight, etc.		Railroad and appurtenances.	Rolling Stock.	Invested in other works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.	Net.				Dividends.		
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.	
ALABAMA.																						
30 Jun. '59	43.3			72.3	3	12	19	Alabama and Florida	1,086,278	*		539,396	473,500	101,205	1,127,174	27.3		59,430	22,350			
28 Feb. '59	30.3			68.1	12	7	19	Alabama and Mississippi	461,506	30,991		335,010	109,300	21,632	518,965	30.3		55,791	31,852			
31 May '59	59.2			68.4	7	7	84	Alabama and Tennessee Rivers	2,101,007	144,549		1,064,916	710,226	212,496	2,264,468	99.2		155,628	78,907			
30 Jun. '59	67.0			171.3				Mobile and Girard	1,500,000							67.0		76,773	21,006			
1 Jan. '59	319.2	14.7		213.0	25	18	361	Mobile and Ohio	7,252,801	681,859	114,894	3,441,859	4,061,547	726,546	8,360,702	202.0		769,781	430,000			
28 Feb. '59	88.5	28.4			20	14	272	Montgomery and West Point	1,819,403	279,435	100,000	1,419,672	922,621	18,956	2,462,492	116.9		446,153	211,880	6		
16 Dec. '59				295.8				North East and South West	728,000													
				20.1				Tennessee and Ala. Central														
ARKANSAS.																						
			301.4					Cairo and Philton														
30 Nov. '58	38.5			107.5				Memphis and Little Rock	553,877			361,524	446,000	10,725	811,940							
30 Sep. '58	22.5			41.8				Sacramento Valley	1,547,100	*		791,100	756,000		1,547,100	22.5		185,108	102,726			
CALIFORNIA.																						
CONNECTICUT.																						
31 Jan. '59	23.9				3	0	30	Danbury and Norwalk	333,237	49,773		279,050	85,000	3,502	404,622	23.9		56,044	20,618	6		
30 Sep. '58	122.4			75.1	16	28	238	Hartford, Provid. and Fishkill	3,903,455	302,511		1,936,749	1,862,730	319,862	4,308,307	122.4		273,428	163,615			
31 Aug. '59	61.4	10.6						Hartford and New Haven	3,108,018	254,000	102,889	2,350,000	984,000	16,463	5,992,432	72.0	314,768	723,460	204,134	10	124	
31 Dec. '58	74.0				11	19	212	Housatonic	2,438,847		8,559	2,008,000	278,500	76,676	2,556,837	159.0		271,273	66,330			
31 Dec. '58	57.0				7	13	178	Naugatuck	1,578,301	*		1,631,800	437,550	30,713	1,708,932	57.0		199,536	314,068			
30 Nov. '58	62.3							N. Haven, N. London and Ston.	1,470,671	*		738,535	750,000		1,488,538	50.1		76,758	8,946			
31 Dec. '58	46.4	8.5						New Haven and Northampton	1,470,671	*	11,050	922,500	600,000		1,481,723	55.2		172,369	70,487	5		
30 Nov. '58	66.0				5	6	167	N. Lond., Willimant. & Palmer	1,561,241	*	5,453	1,610,900	1,055,600	272	1,875,147	66.0	91,134	104,464	30,512			
31 Mar. '58	62.2		63.8		29	72	368	New York and New Haven	4,583,698	561,547		3,000,000	2,219,002	79,722	5,682,071	74.0	432,024	932,550	231,560	3		
31 Mar. '58	59.0	7.0						Norwich and Worcester	2,245,406	176,792		2,522,300	324,130	59,614	2,598,672	66.0		265,417	44,587			
DELAWARE.																						
31 Dec. '58	71.0			19.4				Delaware	1,146,311	*		252,661	735,000	123,750	1,146,311	71.0		66,628				
30 Nov. '58	14.3							Newcastle and Frenchtown	699,514		25,000	762,320			767,278	14.3		19,895				
FLORIDA.																						
								Florida														
30 Apr. '58				45.1				Florida and Alabama	292,291	*		317,847	154,000	70,620	543,227							
30 Jun. '59	31.3	2.0		23.6	2	1	24	Fla., Atlantic and Gulf Central	396,310	28,608		205,781	204,600	164,670	594,836	19.3		10,255	1,504			
	28.5	3.9		227.0				Pensacola and Georgia								29.4						
GEORGIA.																						
31 July '58	86.7				15	11	105	Atlanta and La Grange	1,179,381	*		1,000,000	187,500	23,384	1,459,075	86.7		362,061	197,257	7%		
	30.0			133.5				Atlantic and Gulf—M. Trunk								30.0						
31 Dec. '57	58.0							Augusta and Savannah	1,062,200	*		733,700	298,500		1,032,200	53.0		125,427	69,679			
30 Apr. '59	43.5			23.7				Brunswick and Florida	755,000	*		161,887				31.0						
30 Nov. '58	191.0				52	28	633	Central of Georgia	3,750,000	*	550,152	3,750,000	199,881		5,645,001	229.0	714,787	1,263,722	755,615	10		
31 Mar. '59	171.0	61.0						Georgia (and Bank)	4,174,492	*	829,550	4,150,000	373,000		7,368,663	232.0		1,154,621	544,363	4		
31 July '59	102.5				18	16	171	Macon and Western	1,500,000	*	8,073	1,438,800	52,500		1,561,717	102.5		325,192	163,124	7%	100	
31 July '59	60.0				7	2	107	Muscogee	774,244	162,534		669,950	249,000		1,026,868	50.0		202,714	110,516	3		
1 May, '58	68.1				3	4	33	Savannah, Albany and Gulf	1,386,684	52,373		1,275,901	16,200	180,621	1,473,140	71.6						
31 July '59	106.1	56.5	14.8	44.3	15	18	166	South Western	3,165,000	*		2,254,000	631,000		3,489,000	147.2	171,768	547,876	337,769			
30 Sep. '58	138.0				52	24	705	Western and Atlantic	5,901,497	*		built and owned by State.				138.0		852,139	457,916			
ILLINOIS.																						
	220.0							Chicago, Alton and St. Louis	10,000,000			3,500,000	4,500,000		10,000,000	220.0						
30 Apr. '59	133.0				62	31	990	Chic., Burlington and Quincy	6,068,054	1,400,872	680,158	4,629,840	2,990,000		8,149,084	210.0		1,044,573	171,515			
31 Dec. '58	45.0				6	14	101	Chicago and Milwaukee	1,799,894	67,899	120,000	988,000	762,865	188,085	2,050,065	45.0	14 mo.	243,282	135,284			
	133.0							Chicago and Northwestern				4,250,000	6,350,000	2,500,000	13,330,000	133.0						
30 Jun. '58	181.8				58	57	960	Chicago and Rock Island	6,776,119	*	175,165	5,608,000	1,397,000	5,651	7,543,104	228.4		1,407,846	629,029		62%	
10 Nov. '58	33.2							Fox River Valley	580,000			580,000			580,000	33.2						
31 Dec. '58	121.0	138.5	73.6		60	63	1,369	Galena and Chicago Union	8,027,473	1,311,917	211,008	6,028,400	3,788,015	292,466	10,300,517	326.5	808,231	1,547,561	620,328	4	74%	
	57.0							Great Western	5,022,926	*		1,000,000	3,088,426	334,500	5,022,926	176.0						
31 Dec. '58	454.0	250.0			113	96	2,305	Illinois Central	19,674,214	3,347,799		10,249,210	20,000,000	1,297,277	31,596,487	704.0		1,976,578	556,624		66	
								Illinois River														
	148.0							Ohio and Mississippi	4,870,586	*		1,780,295	3,292,403			148.0						
	40.6							Peoria and Bureau Valley					600,000			oper	by Chic.	& R. Is.	125,000			
	186.0							Peoria and Hannibal								186.0						
31 Dec. '58	100.0			129.0				Peoria and Oquawka	5,400,000	*		1,569,889	2,200,000			oper	by Chic.	Bur. & Quincy.				
	1.0							Quincy and Chicago	1,978,555	*		800,000	1,300,000		2,000,000	100.0	oper	by Chic.	& R. Is.	Quincy.		
31 Dec. '58	108.5	39.8	12.2		31	30	424	Rock Island Bridge								oper	by Chic.	823,767				
								Terre Haute, Alton & St. Louis	7,608,958	628,487		3,026,903	5,085,615	741,040	8,865,252	208.3						
INDIANA.																						
	108.0							Cincinnati and Chicago	2,080,433	*		1,196,679	1,006,125			108.0						
	29.0							Cincinnati, Peru and Chicago								29.0						
31 Aug. '57	109.0							Evansville and Crawfordsville	2,233,413	*	2,750	986,061	1,219,100	51,772	2,823,143	109.0		249,867	119,432			
1 Jan. '58	72.4				19	21	278	Indiana Central	1,666,290	244,081	25,641	1,611,050	1,166,000	47,850	2,111,059	109.0		368,189	132,094	6		
31 Dec. '58	89.8	20.2			23	19	313	Indianapolis and Cincinnati	2,497,952	540,043	25,689	1,689,900	1,362,284	140,689	3,458,108	89.8		448,858	230,834			
31 Dec. '58	84.0							Ind., Pittsburg and Cleveland	1,904,956	*	10,000	835,971	1,025,200	19,719	2,109,336	114.0		232,905	92,859			
31 Aug. '57	78.0							Jeffersonville	1,839,576			1,014,252	681,000	99,400	1,608,000	78.0		222,737	74,328			
	59.0							Lafayette and Indianapolis	1,850,000	*		1,004,000	600,000		2,000,000	64.0						
	86.0	49.0						Madison and Indianapolis	2,984,616	*		1,647,700	1,336,816			135.0		206,114	82,632			
	288.0							New Albany and Salem	6,000,000	*		2,800,000	3,000,000	2,000,000	6,000,000	288.0		645,827	371,402			
	74.0							Peru and Indianapolis	2,000,000	*		1,100,000	820,000	80,000	2,000,000	74.0						
30 Nov. '58	73.0				18	25	298	Terre Haute and Richmond	1,611,450	*	26,555	1,376,450	235,000	69,353	1,846,990	73.0		380,274	179,196	10		
IOWA.																						
1 Jun. '58	75.5			201.5				Burlington and Missouri	1,514,257	*		752,733	665,000	92,663	1,542,766	30.0						
	86.0							Chicago, Iowa and Nebraska	1,350,000			516,072	800,000	369,064	80.0							
31 May, '58	50.1			269.0	8	8	86	Dubuque and Pacific	1,579,985	166,823		838,086	965,000	441,787	2,267,313	50.1						

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Years ending.	Railroad.				or projected.	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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Railroad Earnings.

The business of the Cincinnati, Wilmington and Zanesville Railroad for September was as follows:

Passenger earnings	\$14,666 18
Freight	7,358 10

\$22,024 28

The expense of operating, repairing and improving the road was	13,177 18
--	-----------

Leaving.....\$8,847 10

The receipts from all sources were.....	\$21,219 50
And the disbursements	14,955 78

Leaving.....\$6,263 72

The debts and liabilities contracted by Receivers and remaining unsatisfied on the 30th of September, were

\$29,916 90

Debts and liabilities due the road which have accrued during the present Receivership and remaining uncollected Sept. 30, were.....

\$27,958 89

The receipts of the Grand Trunk Railway of Canada for the week ending October 15, were.....

\$60,032 46

Week ending Oct. 16, 1858.....

52,975 21

Increase

\$7,057 24

Total traffic from July 1st

\$725,350 97

Same period last year

653,091 55

Increase.....

\$72,259 42

The traffic of the Great Western Railway of Canada for the week ending Oct. 21, 1859, was as follows:

Passengers	\$27,405 63
Freight and live stock	19,946 71
Mails and sundries	1,630 46

Total.....

\$48,982 81

Corresponding week of last year

47,117 14

The earnings of the New Albany and Salem Railroad in September were

\$51,860 60

Expenditures

47,890 25

Net earnings.....

\$3,970 35

The business of the Pennsylvania Central Railroad shows an increase over last year as follows:

First nine months of 1859	\$3,996,891 06
Do. do. 1858	3,871,292 69

Increase in 1859.....

\$125,598 37

Death of Robert Stephenson, the Eminent Engineer.

(From the London Times, Oct. 13.)

The death of Stephenson comes with startling rapidity upon that of Brunel. Both men of rare genius, and both occupying a sort of double throne at the head of their profession, they have gone to their rest together, and their rivalry has ceased. Distinguished sons of distinguished fathers, the two men who in these latter years have done most to perfect the art of travel, and in this way to cultivate social intercourse, multiply wealth and advance civilization, have been struck down at one fell swoop in all the maturity of their power. Mr. Stephenson's health had been delicate for about two years, and he complained of failing strength just before his last journey to Norway. In Norway he became very unwell; his liver was so much affected that he hurried home, and when he arrived at Lowestoft he was so weak that he had to be carried from his yacht to the railway, and thence to his residence in Gloucester Square, where his malady grew so rapidly as to leave from the first but the faint hopes of his recovery. He had not strength enough to resist the disease, and he gradually sunk until at length he expired yesterday morning. If his loss will be felt severely in his profession, it will be still more poignantly felt in his large circle of friends and acquaintances, for he was as good as he was great, and the man was even more to be admired than the engineer.

His benevolence was unbounded, and every year he expended thousands in doing good unseen. His chief care in this way was for the children of old friends who had been kind to him in early life, sending them to the best schools and providing for them with characteristic generosity. His own pupils regarded him with a sort of worship, and the number of men belonging to the Stephenson school who have taken very high rank in their peculiar walk shows how successful he was in his system of training, and how strong was the force of his example. The feeling of his friends and associates was not less warm. A man of the soundest judgment and the strictest probity, with a noble heart and most genial manner, he won the confidence of all who knew him, and perhaps in all London there were not more pleasant social gatherings than those which were to be found in his house in Gloucester Square, he himself being the life of the party. Without a spark of professional jealousy in his own nature, he was liked by all his fellow engineers, if they did not know him sufficiently to bear him affection; and we do not believe that even those who had the most reason to wish him out of the way, such as the promoters of the Suez Canal, which he strenuously opposed, ever bore him any ill will. He has passed away, if not very full of years, yet very full of honors—the creator of public works, a benefactor of his race, the idol of his friends.

American Railroad Journal.

Saturday, November 5, 1859.

Hartford, Providence and Fishkill Railroad.

The annual report of the Trustees and Directors of this company for the fiscal year ending Sept. 30th, show the gross earnings to have been \$333,500; expenses, \$180,720; leaving net, \$152,777, which is \$11,752 increase over the previous year. The amount necessary to meet the interest for one year on all the bonds, including those claimed to be held as collateral, is \$148,850, which sum deducted from the net earnings (\$152,777) leaves a surplus for the year of \$3,927. The receipts and expenses for operating the road from Feb'y, 1, 1858, when it came into the hands of the Trustees, to September 30, 1859, a period of twenty months, have been as follows:—

RECEIPTS.

From passengers	\$286,741 78
From freight	224,259 33
From mails, express, rents, etc.	24,002 80
	\$535,003 91

EXPENSES.

Repairs of road	\$69,337 78
Do. rolling stock ..	40,556 67
Do. bridges, fences, etc.	17,484 42
Salaries and labor	90,898 09
Fuel and oil	46,307 92
Miscellaneous	25,425 94
	290,012 82

Net earnings from operating road.....

\$244,993 09

Less bonds redeemed.....

\$52,230 00

" interest paid

133,059 18

185,285 18

\$59,703 91

Deduct interest accrued from July 1, 1859, to October 1, 1859, on bonds sold.....

31,875 00

Estimated surplus on hand, Sept. 30, 1859

\$27,828 91

This sum represents the profits of the road under the management of the Trustees, which has been very satisfactory, and the results of which afford a prospect that the interest on all bonds

will be regularly and punctually paid, and means gradually secured to pay off the back interest ere long.

There are now due and unpaid interest coupons to the amount of \$123,934, which will be paid as soon as there is a sufficient surplus on hand for the purpose. Bonds amounting to \$52,230 were paid at maturity, July 1, 1859, leaving but two classes of bonds now outstanding, viz., those secured by a mortgage of the road located in the State of Connecticut, together with the entire equipment, materials and supplies of the road; and those issued to the city of Providence, secured by a mortgage of the entire road located in the State of Rhode Island.

Nothing has been added to construction account since the road passed into the hands of the Trustees, all payments, excepting interest on bonds, having been charged directly to operating expenses.

The equipment of the road consists of 16 locomotives; 20 passenger, 9 baggage, 201 box and flat cars, and about 40 small gravel cars.

Nearly 40,000 new sleepers have been laid, equal to 17 miles of track, and 1 200 rails, equal to two miles, thoroughly repaired, at a cost of over \$17,000. Taken as a whole, the value of the road and property has rather increased than diminished.

The result of the year's business proves, that if well and economically managed, the road will pay punctually the interest on all its bonds, accumulate a fund to pay off the back interest at no distant day, and eventually relieve itself of its embarrassments, and yet prove itself of value to the stockholders.

The general statement of the affairs of the company, on the 1st of October, 1859, is as follows:

Stock	\$1,537,939 39
Preferred stock issued ..	\$500,000 00
Preferred stock claimed to be hypothecated ..	101,200 00
	898,800 00
Bonds issued	\$2,055,500 00
Of which are claimed to be hypothecated ..	245,000 00
	1,810,500 00
Notes and accounts payable	319,443 62
Premium and interest received on bonds sold, issued by cities of Hartford and Providence	100,324 84
Profit and loss	104,684 35
Canceled bonds paid by Trustees ..	52,230 00

Total

\$4,323,922 79

Cost of road

\$3,908,455 56

Equipment.....

302,510 93

Materials and supplies delivered Trustees

20,348 20

Sink'g Fund City of Hartford

\$37,088 00

Sink'g Fund City of Providence

26,913 92

*64,001 92

Sundry notes and accounts

17,227 93

Cash on hand and in dispute, in American Bank, Providence

7,378 25

Total.....

\$4,323,922 79

The officers are:—

JAMES G. ANTHONY, President.

G. M. BRIDGEMAN, Treasurer.

SAMUEL NOTT, Superintendent.

* This fund is deposited with the Trustees of the two cities, to provide for the payment of the company's bonds for \$1,000,000, maturing in 1876, now held by the cities of Hartford and Providence.

Tennessee and Coosa Railroad.

The southern terminus of this road is at Gadsden, on the Coosa river; the northern terminus at Guntersville, on the Tennessee river. It is 36½ miles in length, of which 23 miles are graded. The remaining 13½ miles, including the ascent and descent of Sand Mountain, is under construction, and the work being vigorously prosecuted, with a force of 300 men. From the heavy character of the work, at least two years will be required to complete the graduation. When built, it will form a link in the great chain of railroads from the waters of the Mobile Bay to the Tennessee river, and from thence to the valley of the Ohio. At Gadsden, it connects with the Alabama and Tennessee River Railroad, running thence to Selma, at which point connection is made with Mobile, at present by the Alabama river, but will ultimately be made by the Selma and Gulf Railroad.

From Guntersville, a connection will be made north with the Winchester and Alabama Railroad to Winchester, and from which point, *via* Nashville, to the Ohio river.

The estimated cost of the road, in running order, from Gadsden to Guntersville, is \$718,000, or \$19,672 per mile.

The resources of the company are:

Individual subscriptions.....	\$51,000
Appropriation by State of a portion of 3 per cent. fund in 1849-50.....	54,421
Appropriations of 1853-4.....	250,000
Appropriations same date of the accumulations of 2 and 3 per cent. fund.....	250,000
Lands donated by Congress of United States, 50,000 acres.....	100,000

Total resources.....\$705,421

The lands are estimated at a low figure, and it is believed that by the time they are put in market a sufficient sum will be realized to leave a surplus in the Treasury.

The officers of the road are:

S. K. Rayburn, *President*.
G. H. Arms, *Chief Engineer*.
J. H. Moore, *Treasurer*.
G. Greenwood, *Secretary*.

Discovery of Iron in Texas.

The New Orleans *Bulletin* says: "A discovery of great importance has just been made by the State Geologist in Texas. It is no less than the discovery of vast bodies of iron ore, as well as tertiary coal or lignite, beds of limestone, pipe, clay, fire rock and hydraulic limestone in the region of country immediately south of Harrison county in which Marshall is situated, and between that and the point or points on the Sabine river at which the Houston and New Orleans Railroad and the Opelousas Railroad will reach that river. The Geologist commenced in Travis county, which contains Austin, the capital of the State, and proceeded nearly east through Harris county (Houston) to the Sabine, and thence up towards Marshall. But a small portion of the State has therefore yet been explored, yet the discoveries already made are of great importance, not only to Texas, but to Louisiana, and especially to New Orleans. It must have a direct and powerful bearing upon the construction of the Opelousas Railroad, and the road to connect this city with Houston as will as the Southern Pacific Railroad. No doubt exists whatever that valuable ores will also be found in other parts of the State. Indeed, they are known already to exist, and the particulars will be given as soon as the Geologist can extend his explorations.

A suit against the Cleveland, Columbus and Cincinnati, Cleveland and Toledo, and Cleveland and Pittsburgh Railroad Companies, for about eight acres of ground in the city of Cleveland, occupied by the depot of said companies, is now on trial in the United States Court in Cincinnati. The suit is brought by the heirs of the original Connecticut Reserve, and involves property estimated at \$1,000,000.

Attention is invited to the advertisements of GEO. T. M. DAVIS, Esq., in our advertising columns. By reference to them it will be seen that he has for sale at a bargain, on 12, 18 and 24 months' credit, three Locomotives, of 6 feet gauge, weighing 27 tons, 16x20 cylinder, 138 flues, 11 ft. 2 in. x 2 in. diameter, boiler 44 in. outside connections. Also 1,000 Stanley's best Car Wheels, sizes to suit, at a bargain for cash or approved paper.

Mr. Davis is the agent in this city for the sale of railroad goods manufactured by Messrs. Corning, Winslow & Co., at their Albany Iron Works, Troy, N. Y.—such as chairs, spikes, nails, steel, axles, rivets, etc., etc. Address GEO. T. M. DAVIS, Esq., 47 Exchange Place, N. Y.

Finances of Georgia.

From the report of the Comptroller General of this State for the fiscal year ending Oct. 20, 1859, we learn that the available balance in the State Treasury at the close of the fiscal year 1858, was \$130,354 65. The receipts into the Treasury during the year 1859 were \$1,032,879 27; and the disbursements, \$874,465 92—leaving an available balance in the Treasury on the 21st ult., of \$288,768, to meet the balance unpaid on the appropriations for 1859, amounting to \$258,432 10. In addition to which there is an *un-available* balance in the treasury of \$325,564, consisting of bank stock, \$290,900, stock in Milledgeville and Gordon Railroad, \$20,000, and Darien Bank bills, Western and Atlantic Railroad scrip, and uncurrent funds, \$14,664. The last three items are pronounced utterly worthless, while the two former, public property, cannot be converted into cash being without legislative action. It is recommended by the Comptroller that hereafter these unavailable items be omitted altogether from future reports, or given under the head of "assets belonging to the State"—in order that the true cash condition of the treasury may be the more readily understood, while the total assets belonging to the State can be seen with equal facility.

The estimated receipts into the treasury during the current fiscal year is \$903,305 90; and the disbursements, (including \$7,000 for the reduction of the public debt, and \$50,000 for extraordinary appropriations) \$813,700—leaving a surplus of \$289,605 90 to apply to a further reduction of the public debt, to education, or to any other purpose the Legislature may direct.

There is still due the Atlantic and Gulf Railroad Co. the sum of \$250,000; and the State is bound for a further subscription of \$500,000 when the private stockholders raise an additional \$600,000. Including these sums, the public debt of the State in bonds amounts to \$3,354,750, of which \$7,000 only will be due during the current year. The State can, however, if it chooses, force in and redeem \$267,500, having, in 1848, reserved to itself the right to redeem certain bonds at any time after 10 years. These bonds are due in 1863 and

1868. Of the bonds issued and unredeemed, \$2,080,750 bear 5 per cent., \$452,000 7 per cent., and \$72,000 5 per cent. interest.

Since the payment of the bonds due the past year, and the redemption of \$99,250 of 7 and 6 per cent. bonds due in the years 1860, '61, '62 '63, '64, '65, '68 '69, '70, '71, '72, and '73. The public debt of the State in bonds is as follows:

Due in 1860 7 per cent. Central R. bonds.	\$7,000
" 1861 " " " "	12,000
" 1862 " " " "	52,000
" 1862 7 do.....	100,000
" 1862 6 do.....	20,000
" 1863 " do.....	55,000
" 1863 " do, now redeemable....	62,500
" 1865 " do.....	25,000
" 1868 " do, now redeemable....	205,000
" 1869 " do.....	272,500
" 1869 5 do.....	72,000
" 1870 6 do.....	150,250
" 1871 " do.....	161,500
" 1872 " do.....	625,500
" 1872 7 do, redeemable in 1862..	100,000
" 1873 6 do.....	173,000
" 1874 " do.....	80,000
" 1874 7 do.....	181,500
" 1878 7 do.....	100,000
" 1879 " do.....	150,000

\$2,604,750

Amount subscribed, but not issued.... 250,000
" pledged conditionally..... 500,000

Total.....\$3,354,750

The firm of Decoppet & Co., long and favorably known in Wall street as bankers and brokers, has dissolved, the senior member retiring. The business will be continued under the firm of Weston, Dortic & Co. The members of the new house are Edward Weston, H. Theo. Dortic, Geo. H. Weston, Fred. S. De Billier.

Michigan Southern Railroad.

It will be seen by the following circular that this company are to forego their interest due on the 1st of March next. The announcement creates no surprise, as the event has been expected for a long time, ever since the road has been under its present imbecile and incompetent management.

The next step should be to purchase the mortgages as speedily as possible. The value of the road and its property does not exceed its indebtedness. The sooner therefore it is put on its legs, with no greater loan than it can carry, the better for the public and all parties interested in the road.

The stockholders will not, we presume, feel sufficient interest to take any action whatever. The creditors can, and should, take immediate action to take the road from the hands of its present managers.

The following is the official notice:

TREASURER'S OFFICE, New York, Oct. 22, 1859.
To the Bondholders of the Michigan Southern and Northern Indiana Railroad Company:

The directors of the company are compelled to postpone the payment of the interest to fall due on the 1st of November next, upon the bonds of the First Mortgage of the Michigan Southern Railroad Company, and upon the Sinking Fund and Second General Mortgage Bonds, for not exceeding sixty to ninety days from that date. The Treasurer will give due notice of the time when the payment will be made.

The embarrassments of the company have been temporarily accumulated by a serious accident upon the road, and the dissatisfaction of the employees and their consequent proceedings, which have required the payment of large sums for their back wages, and determined the officers of the

company to bring upon the pay rolls, and thereafter to pay them punctually as due. This, and the payment of supply bills, added to the falling off of business the past season, in common with all western roads, has absorbed, and will absorb, the earnings of the company to such an extent as not to leave sufficient means for paying the interest on the 1st of November next.

The directors, however, feel confident that they shall be able to pay the said interest at the above deferred times for payment, and they trust that the holders of the bonds will be satisfied that, in this proceeding, they consult the best interest of all concerned, and will readily consent to the same.

(Signed) Wm. Walcott, Treasurer.
Geo. Bliss, President.

Interest and Dividends.

The coupons of the bonds of the Memphis and Charleston Railroad, due Nov. 7; the coupons of the bonds of the city of Louisville, issued to the Louisville Water Co., due Nov. 1; and the coupons of the city of Louisville on bonds issued to the Jeffersonville Railroad Co., due Nov. 1, will be paid at the Bank of America.

The second mortgage coupons of the Central Railroad of New Jersey, due Nov. 1, will be paid at the office of the company, 69 Wall street.

The interest on the debt certificates and 6 per cent. bonds of the N. Y. Central Railroad, due Nov. 1, will be paid at the Bank of Commerce.

The coupons of the Huron County (Ohio) Bonds, due Nov. 1, will be paid at the Mercantile Bank.

The Manchester and Lawrence Railroad Company have declared a dividend of 4 per cent., in stock, payable Nov. 1.

The city Treasurer of Boston advertises that holders of city scrip due in January, and Water Loan due in April next, can have their pay at any time, with accrued interest, on presentation.

The interest coupons on the bonds of the Lehigh Valley Railroad Company, due 1st Nov., will be paid at the office of the company in Philadelphia.

The New York and New Haven Railroad has issued a notice to the holders of its bonds due Dec. 1, 1860, offering payment, one-half cash, and the rest in first and only mortgage bonds, due in 1875, upon terms which, it is believed, may be satisfactory to the holders, and which will be stated on application to W. Bement, Esq., the Treasurer.

Holders of the Second Mortgage Bonds of the Cincinnati, Hamilton and Dayton Railroad Company, are requested to present their interest warrants, due in New York on the 1st Nov., 1859, to Frank S. Bond, at 21 Nassau street.

The interest on the bonds of the city of Rock Island, Illinois, issued to the Chicago and Rock Island Railroad, due Nov. 1, 1859, will be paid on presentation of the coupons at the office of Halsted & Gilman, No. 47 Exchange Place.

The Milwaukee and Mississippi Railroad Company are now paying the interest on the first and second mortgage bonds of that road.

The coupons of the second mortgage bonds of the Buffalo, New York and Erie Railroad Company, due Nov. 1st, are paid at the Bank of Commerce.

The coupons of the bonds of the Southern Vermont Railroad Company, maturing Nov. 1, and payable at the Bank of Commerce in this city, under the guarantee of the Troy and Boston Railroad Company, have been promptly paid on presentation.

Holders of coupons in the Mississippi Central Railroad, Nov. 1, are notified to present them for

payment to the redemption agent in New York. A. H. Green, 43 Wall street.

RAILROAD SHARE LIST.

We have prepared a full and elaborate *Share List* of American Railroads for the columns of the JOURNAL, embracing about 400 roads. It will contain such information as will enable our readers to form a pretty correct idea of the value and condition of each road. Accompanying it will be a *Bond List*, the whole covering six pages, for which provision will be made by adding eight pages to the reading matter of the JOURNAL. We give this week the first and second pages for the purpose of sending the same to the several companies for verification of our figures, and the necessary additions thereto. Only a few reports contain all the information we desire to give. As soon as the corrections are completed, we shall publish the full list, with the necessary changes, from week to week.

Railroad Companies are respectfully solicited to return to us the additional copy of the JOURNAL sent to them, with our figures properly verified, and the blank spaces filled.

Louisville, New Albany and Chicago R. R.

The name of the railroad heretofore known as the "New Albany and Salem," has been changed by the Directors to that of the "Louisville, New Albany and Chicago Railroad."

The Louisville and Nashville Railroad is now complete, the last rail connecting the two points having been laid on the 25th ult. This will bring to Louisville a large amount of Southern travel, a portion of which, on its way to Chicago and other points North, will pass over the New Albany road. To obtain this, and the more directly to associate in the public mind the close connection of Louisville with the road, this change of name has been made.

Tonika and Petersburg Railroad.

This company was incorporated two years ago. The line is to run from Jacksonville to Tonika, on the Illinois Central Railroad, with the branches thence to Ottawa and Morris, on the Chicago and Rock Island road. At Jacksonville it connects with the Jacksonville and St. Louis Railroad. The Chicago Press says that "the road will carry to the Central and to the Rock Island, and also to the Great Western and Peoria and Oquawka roads, large contributions of trade, which now find a most inconvenient and troublesome shipment on the Illinois river, and will open to Chicago and St. Louis the rich agricultural counties of Jersey, Green, Morgan, Cass, Mason, Menard, Tazewell, Woodford and Marshall."

Census of Georgia for 1859.

Accompanying the report of the Comptroller General of this State for the fiscal year just closed, is an abstract of the Census returns of 130 counties in the State for 1859, from which it appears that the total population in these counties is 1,014,418, viz: 571,534 whites, 439,592 slaves, and 4,292 free persons of color—showing an increase since 1852, of 80,256; viz: slaves, 45,487, whites, 31,477, and of free colored persons, 3,292. The remaining two counties are Butts and Montgomery; if these have increased in like ratio, the whole population of the State, according to the Census returns, will be about 1,024,000.

In these counties there are returned 999 deaf

and dumb, 400 insane, and 442 idiots. There are also returned 81,719 males, between the ages of 6 and 16; 73,480 females, between 6 and 15; 62,109 males, and 52,895 females, under 6 years of age; 131,592 males over 16, and 138,323 females over 15 years of age. The Comptroller alludes to certain discrepancies in the returns of the Receivers of Tax returns and the Census takers, as to the number of slaves in said counties, and suggests that the Census books be re-added, before an apportionment is made under them by the Legislature.

Wilmington, Charlotte and Rutherford Railroad.

We find in the North Carolina *Whig*, published at Charlotte, N. C., the proceedings of a meeting of the stockholders of this company, held at that place on the 14th ult., at which the annual report was presented and accepted, and a board of directors elected. The *Whig* says:

"We were not present at the meeting, but we understand that the road is progressing finely, some 10 miles of the road being completed and in running order. We believe the whole line is under contract, and we have no doubt the President will use every means to complete it as early a day as possible."

The following gentlemen were elected directors for the ensuing year, viz: Messrs. Gulon, Henderson, Dickson, Davis, Logan, Cole, Steele, Walkup, French, McDowall, Means, Cowan, Van Bockkelin.

At a subsequent meeting of the Directors, H. W. GULON was re-elected President, and JOHN C. McRAE Chief Engineer.

Don Pedro Segundo Railroad, Brazil.

A letter dated Rio Janeiro, Brazil, August 12, 1859, says:

"The Estrada de ferro de Don Pedro Segundo is the point upon which all eyes in the States are now resting, and upon this railroad I wish to locate you for a few minutes. Mr. Price (an Englishman) built the first section of this road running from Rio Janeiro to a place called Belem (Bethlehem) some forty miles in the interior. This portion of the road is badly constructed, and during the rainy season is entirely useless, as it was nearly all last season. It is, however, now under repair, and as the Brazilian Company have a very active man to superintend the matter. I expect it will do better this season than the last."

"The American Company, who have taken the second section of this road, are doing their best to complete it within a given time; but I fear they have undertaken something beyond their strength. The second section begins at Belem, and runs only seventeen miles further into the country, but this seventeen miles is equal to any fifty miles you can pick out in your State. The road for the first five miles runs like a snake, and forms a perfect W U, and so near is one division to the other, that a stone may be pitched over the intervening distance. After the five miles are passed, the line takes an acute angle for two miles, and ends against a mountain on division seven, now being worked by D. H. Sampon, a thorough railroad man. Division seven is, perhaps, as heavy a one as there is on the line. The first tunnel is about six hundred feet long, the second four hundred and eighty, and the third nearly three hundred feet. After this division is passed you reach another tunnel, on division eight. This division is a very heavy one, but is now nearly finished."

"There are thirteen tunnels on the seventeen miles, the contract taken by the American contractors; the last and the largest tunnel is over one mile long, and is now being worked by Robert Harvey, an old contractor and a member of the company. I hope he may finish the tunnel in time, but I fear he will not. The second tunnel is

located on division fourteen, and is now being worked by E. D. Muhlenberg, of Pennsylvania, who has a large fortune in the division. I know it to be one of the finest divisions on the line.

"W. Milnor Roberts, the President of the company, has arrived with his family. He comes with the intention of remaining during the time it requires to finish the work."

Bridge over the Delaware.

The work on the new bridge over the Delaware river, at Trenton, is steadily progressing. The foundation for one of the piers, about 300 yards from the Jersey shore, is laid, and considerable work already done upon it. A flatboat, to be driven by a steam engine, with paddle wheels on either side, is in course of construction, to be used in carrying the stone from the shores to the piers. It is expected that all the piers will be laid and above water before winter sets in, with the expectation of finishing the entire structure next summer.

Bridge over the Genesee River.

The High Bridge across the Genesee River at Portage, Wyoming County, N. Y., is 800 feet long, and 234 feet high from the bed of the river to the rail. The masonry in the river is 30 feet high—the trestles 190, and the truss 14 feet. It contains 1,602,000 feet B. M. timber; 108,862 lbs. iron in bolts, etc., and 9,200 cubic yards cement masonry. It was commenced 1st July, 1851, and completed so as to cross with an engine Aug. 14, 1852. It is estimated that one of the trestles, or bents, will sustain a weight of 3,109 tons in addition to its own weight and that of the truss above it. The general plan was designed by Silas Seymour, Chief Engineer of the Buffalo and New York City Railroad.

FAIRBANKS'



STANDARD SCALES,

Adapted to every branch of business where a correct and durable Scale is required.

SCALES FOR RAILROADS,

SCALES FOR COAL DEALERS & MINERS,

SCALES FOR HAY AND CATTLE DEALERS,

WAREHOUSE AND TRANSPORTATION SCALES,

PORTABLE AND DORMANT SCALES FOR STORES,

Scales for Grain and Flour Dealers,

Counter Scales, every variety.

BANKERS' AND JEWELLERS' BALANCES,

SCALES FOR FAMILY AND FARM USE,

WEIGH-MASTERS' BEAMS,

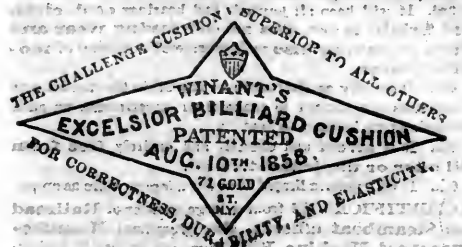
POST OFFICE SCALES, ETC., ETC.,

All of which are WARRANTED in every particular.

Call and examine, or send for an illustrated circular.

FAIRBANKS & CO.,

159 Broadway, New York.



CAR WHEELS.

1,000 STANLEY'S BEST CAR WHEELS, size to suit, for sale at a bargain for cash or approved paper.
GEO. T. M. DAVIS,
New York, Nov. 2, 1859. 4145 47 Exchange Place.

3 LOCOMOTIVES.

6 FOOT gauge, weight 27 tons. 16x20 cylinder. 138 flues, 11 ft. 2 in. x 2 in. diameter. Boiler, 44 in. outside connections; for sale at a bargain on 12, 18 and 24 months credit for approved paper adding interest.
GEO. T. M. DAVIS,
New York, Nov. 2, 1859. 4145 47 Exchange Place.

FOR SALE—The FOUNDRY and FORGING ESTABLISHMENT in 26th street West of 10th Avenue, New York, lately occupied by Messrs. PASSAVANT, ARCHER & Co. Terms very reasonable. For inventory and further particulars apply to **DELAPIERRE & LOCKWOOD**, 45 Cliff st.

THE GUTTA PERCHA MANUFACTURING COMPANY,

165 BROADWAY, NEW YORK,

(Factory 25th street 10th Avenue.)

MANUFACTURERS
OF EVERY DESCRIPTION OF
Gutta Percha Goods;
Army, Navy, Engineers and Emigrant Equipments,
CLOTHING,
HOSE, PACKING, BELTING,
LOCOMOTIVE BUCKETS,
ENAMELED CLOTHS, ETC.

These goods are free from offensive smell, are pliable and elastic, of fine finish, and unlike India Rubber, will not become decomposed or injured by oils or acids, or affected by the hottest climates.

GEO. N. DAVIS, Treasurer.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY**, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,

9 South William st.

NEW YORK, Aug. 1, 1858.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

NATHANIEL LANE,

PATERSON, N. J.,

COPPERSMITH AND BRASS PLANISHER,

MANUFACTURER OF

ORNAMENTAL, SHEET BRASS AND COPPER WORK

FOR LOCOMOTIVE ENGINES,

Brass Domes, Escape Pipes, Steam-Chest Covers,

Cylinder Heads, Jackets, Raised Bands for Boilers, etc., etc.

Also, Smoke Stacks and Russia Iron Jackets.

Also, COPPER FLUES OF SUPERIOR QUALITY, and

All other Copper Work for Locomotive and Stationary Engines.

Brass and German Silver Name and Number Signs

FOR LOCOMOTIVE ENGINES,

Furnished at unusual short notice.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,

Boston, June, 1851. 29 Central Wharf.

ROUND OAK IRON WORKS,

STAFFORDSHIRE.

LORD WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,

SHEETS, HOOPS and BARS of every variety.

Address **RICHARD SMITH, Esq., Dudley.**

UNITED STATES OFFICES.

NEW YORK, No. 17 Nassau St.

BALTIMORE, over Farmers' & Mer. Bank.

NORRIS & BROTHER, Agents.

SUBMARINE BLASTING.

PATENT Electric Submarine Safety Fuse Train for military and civil purposes. Also,
A substitute for the Galvanic Battery for sale by
E. GOMEZ,
165 Broadway, N. Y.

Notice to Contractors.

PROPOSALS will be received at the office of the Chief Engineer of the Pacific Railroad, in the city of St. Louis, until the eighth day of November next, for the graduation and masonry of that portion of the Pacific Railroad in the county of Jackson, lying between the Little Blue and the city of Kansas, a distance of 17 miles; and, also for the improvement of the Levee in the City of Kansas.

The work is heavy and very desirable for contractors; there being a large amount of cutting and filling on the same. The route passes the cities of Independence and Kansas, and occupies a populous and wealthy country.

The profile may be seen at the office of the Chief Engineer in St. Louis, and all necessary information may be obtained on the ground from the Resident Engineer, Mr. C. M. Randolph after October 20th. By order of the Board.
EDWARD MILLER, Chief Engineer.

TO CONTRACTORS

HAVING CAPITAL.

THE MARYLAND AND DELAWARE R. R. CO., will receive sealed proposals until the first of December for the work and materials of fifty-three miles of road; extending from its junction with the Delaware R. R. at Smyrna, Del., to Oxford Md., forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt) consist of individual stock, State appropriations, and work already done; but they propose to make payment for the work now offered, principally in first mortgage bonds, which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the road are already graded, the entire line located and secured, and the nature of the work very favorable for contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst, and sent by mail on application to J. O. W. Powell, Sec. Md. and Del. R. R. Co., Eason, Md.; to whom proposals will also be addressed.

TENCH TILGHMAN,

5143

President.

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859.

SEALED PROPOSALS for the **Graduation of the First**

Division of twenty miles eastward from Van Buren, will be received at this office, until **THURSDAY NOON, DECEMBER 1st 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of the Division may be made; but no bid for less than one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Estimate of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly as the above terms are not positive or settled.

The Company having a large amount of the finest lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications, may be seen, and all desired information obtained, on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, President.

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859.

SEALED PROPOSALS for the **Masonry of the First** Division of twenty miles eastward from Van Buren, will be received at this office until **THURSDAY NOON, DECEMBER 1st 1859.** No bids for less than the amount of masonry upon any one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payment, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, President.

To Railroad Companies.

RAILROAD COMPANIES who will require rails for the coming year, and wishing to take advantage of the present low price, may have a favorable opportunity to negotiate for the same, through an old-established House, a member of which, will sail for England early in November.

Reference is offered to several important Roads for whom purchases have been made. Address either Box 1204 New York Post Office, or Box 365 Baltimore Post Office. 5142

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COM'Y,
44 Exchange Place, New York,
SOLE AGENTS for the UNITED STATES and CANADAS.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 63, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. Y.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK

RAILROAD IRON.
THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS
received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.
New York Agency:
BUSSING, CROCKER & DODGE,
32 CHURCH ST.

CAST STEEL,
Of First Quality and Warranted.
BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.
Far superior to the ordinary kind.
FROG PLATES, POINTS.
Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.
SALTUS & CO.,
45 CHURCH ST., New York.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

WOOD, MORRELL & CO.,
HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JONESTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.
PHILADELPHIA, NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 Cliff st., N. Y.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR
RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF
MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Sperr Oil for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer. The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the inventor

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or Europe.

THE IMPERIAL
LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & Son,)

Nos. 108, 110, 112, 114, 116 & 118 Cliff St.,
NEW YORK,

For Railroads,
Machine Shops,
Steamships,
Mills, etc.

THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is much less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

6th. It will remain limpid at as low a temperature as sperm.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections. T's L's Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR. STEPHEN P. M. TASKER.

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS
upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL
IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
CUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

RAILROAD IRON.

The Crescent Manufacturing Company,
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Secy,
WHEELING, VA.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or ex ship at ports in the United States.

M. K. JESUP & COMPY,
44 Exchange Place.

New York, 1st June, 1859.

**HOFFMAN'S
ROSENDALE CEMENT,**
OFFICE, 93 WALL ST., NEW YORK.

THE LAWRENCE CEMENT COMPANY are prepared to receive and execute orders for their Cement, to any extent that may be required. They would particularly call the attention of purchasers to the distinguishing brand of their manufacture, viz: **HOFFMAN'S ROSENDALE CEMENT.** This seems to be necessary, as they have established a reputation for the superior quality of their Cement, and there are various other brands offered, as "Rosedale" Cement. It has the unqualified approbation of the most eminent Architects and Engineers, being used in almost every department of the Works under Government. It is put up in the most careful manner, each barrel being well lined with paper, and will be delivered on ship-board, in this city, on the most favorable terms. Particular attention given to shipping orders, and Freight obtained on the best terms.

M. W. WOODWARD, Secretary.

DELAFIELD & BAXTER'S,
Late OGDEN & DELAFIELD,
ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our CEMENT for public works, or other purposes. We warrant it equal in every respect to any manufactured in this country. It attains a great degree of hardness, sets immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength. For sale in tight barrels, well papered, on application at their office, by **DELAFIELD & BAXTER, 104 Wall st.** The above CEMENT is used in most of the fortifications building by government.

**GUTTA PERCHA
CEMENT ROOFING**

**THE
Cheapest
and most
DURABLE
ROOFING
IN USE.**

Best in any part
of the country
with directions
for application.

SPECIMENS and references can be seen, and any desired information obtained on application, by letter or in person, at our office, 510 BROADWAY, N. Y. (Opposite the St. Nicholas Hotel).

JOHNS & CROSLY.

**THE LAWRENCEVILLE MANUF'G
CEMENT COMPANY,**
OFFICE 96 WALL ST.,
NEW YORK.

THIS Company manufacture **ROSENDALE HYDRAULIC CEMENT** of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings.

For sale upon favorable terms by addressing,
WM. N. BEACH, President.
CHAS. E. LAWRENCE, Sec'y.

CEMENT, PLASTER, ETC.
THE HUDSON RIVER CEMENT CO.

HAVE commenced manufacturing for the season, and can now furnish a very superior article of fresh Rosendale Cement, Calcined Plaster, Farmers' Plaster and Marble Dust. Address

HUDSON RIVER CEMENT COMPANY,
Jersey City, N. J.

Rosedale Hydraulic Cement.

THE NEWARK and ROSENDALE CEMENT COMPANY are now receiving fresh from the Mills their approved **ROSENDALE CEMENT**, warranted pure and free from quick lime, and which has given such general satisfaction in the various government and other public works in which it has been used. Purchasers and shippers should be careful to get the genuine **ROSENDALE CEMENT**, branded "NEWARK and ROSENDALE" "H. WILDE." This Cement does not swell and burst the hoops when stored in warm climates. It is packed in tight kiln dried barrels, and is specially adapted for safe shipping on long voyages. Terms reasonable, which may be known by addressing,

JOHN H. STEPHENS, President, Newark, N. J., or
HENRY WILDE, Secretary, 90 Wall st., N. Y.

**DR. A. MERRIMAN,
DENTIST.**

1 Waverley Place, opposite New York Hotel,
NEW YORK.

**UNION
CAR WHEEL & TIRE
WORKS,**

JERSEY CITY, N. J.
MOORE & ADAMS,
MANUFACTURERS OF
DOUBLE and SINGLE PLATE

CAR, ENGINE AND TRUCK WHEELS,

MANUFACTURERS AND PROPRIETORS OF

MOORE'S PATENT

TRIPLE PLATE CAR WHEEL.

CHILLED LOCOMOTIVE TIRES,
Made from the best Charcoal Cold Blast Iron.

HIRAM W. MOORE,
GEORGE ADAMS.

G. G. LOBDELL. H. S. McCOMBS. D. P. BUSH.

BUSH & LOBDELL,
WILMINGTON, DELAWARE,

MANUFACTURERS OF

CHILLED WHEELS

AND

**TIRES,
FOR RAILROAD CARS**

AND

Locomotive Engines,
ARE PREPARED TO EXECUTE PROMPTLY
ORDERS TO ANY EXTENT FOR THEIR
CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED
To HAMMERED or ROLLED AXLES,

IN THE BEST MANNER, AT THE SHORTEST NOTICE,
AND ON THE MOST REASONABLE TERMS.

**A. WHITNEY & SONS
CAR WHEEL WORKS,**

Callowhill & Sixteenth Sts.,
PHILADELPHIA, PENN.
FURNISH

CHILLED WHEELS,
FOR CARS, TRUCKS, and TENDERS.

CHILLED
Driving Wheels and Tires,
FOR LOCOMOTIVES.
ROLLED AND HAMMERED AXLES.
WHEELS and AXLES,
FITTED COMPLETE.

A. N. GRAY, Cleveland, O.,
RECEIVER AND FORWARDER OF
RAILROAD IRON, CHAIRS & SPIKES.
Also Cars, Locomotives,
AND ALL KINDS OF
MACHINERY FOR RAILROAD PURPOSES.
Office, next door to the Custom House, Main street.

FINANCIAL.**BANKING and COMMISSION AGENCY.**

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AGENCIES of a financial nature connected with Railroads Manufacturing and Commercial Business, and Banking operations generally, receive special attention.
STOCKS, BONDS, NOTES AND PILLS OF EXCHANGE BOUGHT and SOLD on orders.

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Business Paper and Bills of Exchange negotiated.
BONDS, STOCKS and other Securities bought and sold.

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STOCKS and BONDS Bought and Sold on Commission.
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Advances made on all approved Securities.
COLLECTIONS MADE throughout the United States and Canada.

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By SIMEON DRAPER,
Office, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES
At 36 PINE ST., EVERY DAY.
STOCKS and BONDS bought and sold at private sale.
Sale every day at 1 o'clock. See Catalogue.

R. H. RICKARD,
MINING AGENT & STOCK BROKER,
Office No. 21 Nassau st., NEW YORK.

BUYS and sells MINING SHARES, MINES and MINERAL LANDS on commission, will examine Mines and Mineral Lands in any part of the United States, and report on their value, etc., etc.
REFERENCES:—P. Chouteau, Jr. & Co., New York and St. Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A. Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., Frost & Forrest, Corn Mer's N. Y., John F. Butterworth, Esq., N. Y., G. O. Williams & Co., Detroit, Mich., Capt. D. Tyler, Norwich, Conn., Kittlinghouse, Pant & Co., Bankers, Washington, D. C. Particular attention given to Lake Superior business.

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STOCK AUCTIONEER AND BROKER,
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AUCTION SALES OF STOCKS and BONDS every TUESDAY, at 12 o'clock, at the Merchant's Exchange, RAILROAD BANK, INSURANCE and other SECURITIES bought and sold at the Auctioneers' Board, at Private Sale, or at Auction. All dividends payable in New York collected, and prompt remittances made.

NOTE SET DOWN FIVE QUOTATIONS FURNISHED THE PRESS. THE MARKET VALUE OF SECURITIES WILL NOT BE SUPPRESSED OR ALTERED, AND DECEPTIVE OR IRRESPONSIBLE CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES:—Messrs. Wm. and Geo. O'Brien, Thos. Denny & Co., Horace Grooley & Co., Cragin & Co., Todd & Co., J. & C. Herrin, Geo. F. Nesbitt & Co., Eugene Thummet, Esq., (President Excelsior Ins. Co.), John E. Storm, Esq., (President Lenox Ins. Co.), L. G. Irving, Esq., (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Griem, M.D., Rev. Edwin F. Hatfield, D.D., Rev. Theo. L. Cuyler, John Canverdon, Esq., Benj. F. Manierre, Esq., New York; Otis Allen, Esq., Albany N. Y.; Messrs. Gorham & Co., Providence, R. I.

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Stocks, Bonds, Mortgages, & Commercial Paper Bought & Sold.

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Citizens' Bank, N.Y. Hon. E. D. Campbell, Lt. Gov.,
Messrs. Thompson Bros., " Via
Bankers. " Hon. Judge L. rd. La Crosse, "
Messrs. Sewal, Ferris & " Hon. M. L. v. Banker, "
Co. " Hon. Franklin Steele, Minn-
Geo. P. Rogers, Esq., " soia.
A. Gridley, President McLean Co. Bank, Illinois. A. & W. A. Saunders, Bankers,
Mt. Pleasant, Iowa.

ALBERT H. NICOLAY,
STOCK AUCTIONEER,
BROKER AND BANKER,
No. 53 WILLIAM STREET,
Near WALL STREET, NEW YORK.

REGULAR AUCTION SALES OF
STOCKS and BONDS,
NOTES and other SECURITIES,
EVERY MONDAY AND THURSDAY,
(Which have been the regular established days of sale for
many years.)

Or EVERY DAY (whenever required)
AT 12 O'CLOCK P. M.
At the STOCK SALES ROOM, No. 52 WILLIAM ST.
Or at the MERCHANTS' EXCHANGE as desired.

STOCKS AND BONDS BOUGHT AND SOLD AT
Private Sale and at the Brokers' Board on Commission. In-
terests allowed on Deposits and Dividends collected.

SALES also made of

REAL ESTATE

AT PUBLIC OR PRIVATE SALE WHEN DESIRED.

A large variety of CITY, BANK AND IN-
SURANCE STOCK constantly on hand at
PRIVATE SALE.

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STOCK AND BOND BROKER,
No. 43 EXCHANGE PLACE,
NEW YORK.

MORSE & CO.,
BANKERS and DEALERS in Stocks, Bonds, Exchange
and Commercial Paper, on commission, No. 49 Wall
street, and 41 William street, NEW YORK.
Orders for the purchase and sale of Stocks and Bonds, at the
Brokers' Board, by letter or otherwise, promptly executed.
Cash advanced on sound saleable securities.

REFER TO
G. VAN BAUR & CO., N. Y. CONTINENTAL B. K. N. Y.

CINCINNATI STOCK EXCHANGE.
KIRK & CHEEVER,
STOCK BROKERS and RAILROAD AGENTS,
No. 83 WEST THIRD STREET,
CINCINNATI, OHIO.
Railroad Stocks, Bonds, etc., bought and sold, on COMMISSION.
Regular sales at public auction at the MERCHANTS' EXCHANGE.

DUNCAN, SHERMAN & CO.,
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CIRCULAR NOTES AND LETTERS OF CREDIT,
FOR TRAVELERS,
AVAILABLE IN ALL THE PRINCIPAL CITIES OF THE WORLD.
ALSO, MERCANTILE CREDITS,
For use in EUROPE, CHINA, etc.

H MEIGS, Jr. & SMITH,
BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)
STOCKS and BONDS Bought and Sold on Commission.
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH.
New York, May 11, 1888.

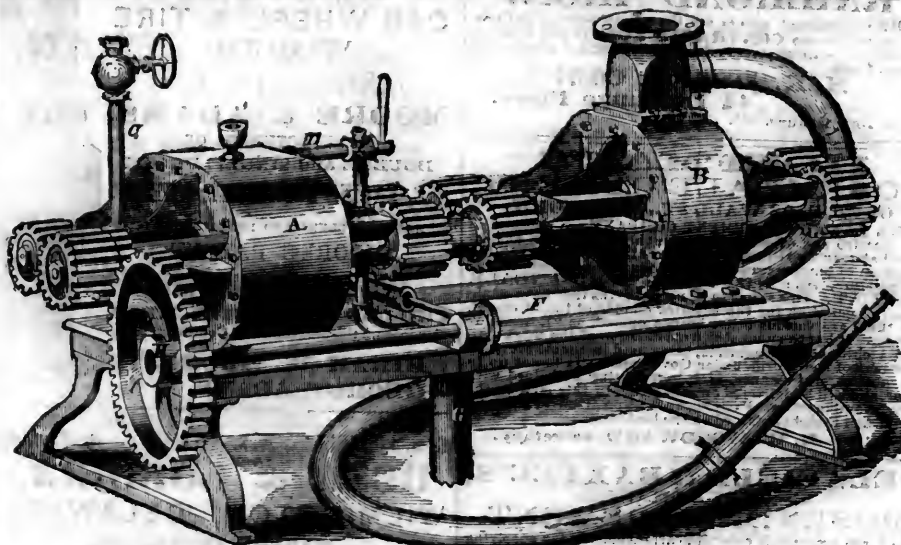
METALS for RAILROAD COMPANIES.
LUCIUS HART,
IMPORTER and DEALER IN METALS,
4 and 6 Burling Slip, NEW YORK.
BLOCK TIN. SPELTER. HABBITT METAL.
ANTIMONY. FIG LEAD. INGOT COPPER.

A GENTLEMAN who has upwards of 20 years experience
in conducting an extensive machine manufacturing busi-
ness (as principal) writes a good hand and has a thorough
knowledge of accounts and general business routine, wishes
an engagement with some established concern where his ser-
vices would command a fair compensation.

Satisfactory evidence of business capacity and integrity will
be furnished.

Address S. box 992 Baltimore Post Office.

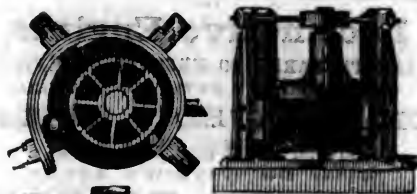
RAILROAD STEAM PUMPS.



HOLLY'S PATENT ROTARY PUMP and ENGINE, the most simple, durable and reliable
PUMPING APPARATUS, yet introduced. Adapted for Steam Fire Engines, Railroad Stations and Factories, and arranged
to be driven by Steam, by Power or by Hand.

C. W. COPELAND, 122 Broadway, New York.

HENRY BURDEN'S PATENT REVOLVING SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this
Machine for the United States, now offers to make transfers
of the Right to run said Machine, or sell to those who may be
desirous to purchase the Right for one or more of the States.

This Machine is now in successful operation in ten or twelve
Iron Works in and about the vicinity of Pittsburgh, also at
Phoenixville, and Reading, Pa., Covington Iron Works, Md.,
Troy Rolling Mills, and Troy Iron and Nail Factory, Troy,
N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are nu-
merous:

Considerable saving in first cost; saving in power; the entire
saving in shingler's, or hammerman's wages, as no attendance
whatever is necessary.

It being entirely self-acting; saving in time from the quan-
tity of work done, as one machine is capable of working the
iron from sixty puddling furnaces; saving of waste, as nothing
but the scoria is thrown off, and that most effectually; saving
of staffs, as none are used or required.

The time required to furnish a bloom being only about six
seconds, the scoria has no time to set, consequently is got rid
of much easier than when allowed to congeal, as under the
hammer.

The iron being discharged from the machine so hot, rolls
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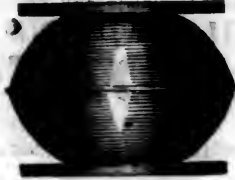
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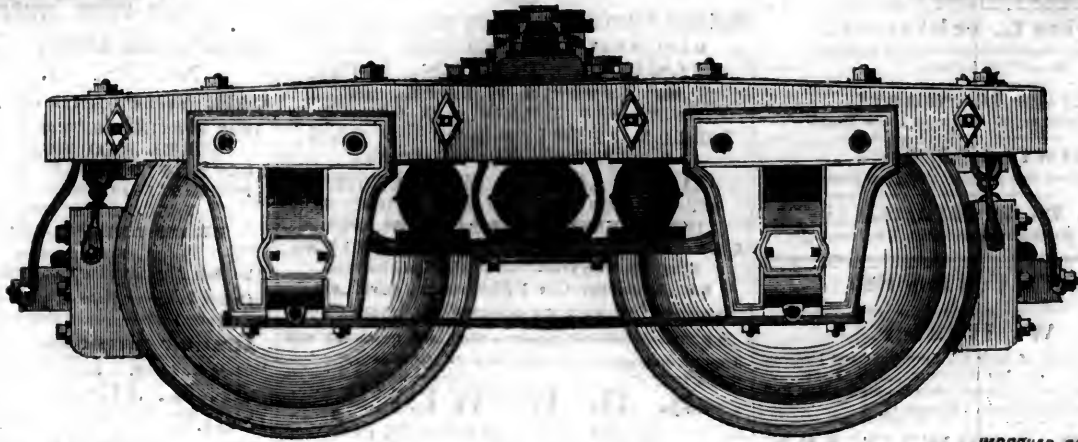
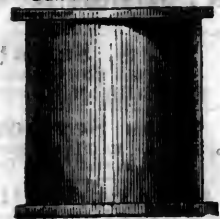


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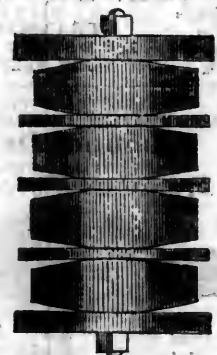
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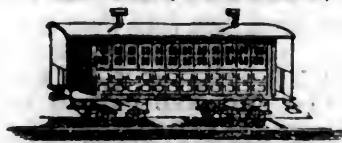
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STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 46.]

SATURDAY, NOVEMBER 12, 1859.

[WHOLE No. 1,230, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, November 12, 1859.

RAILROAD SHARE LIST.

We have prepared a full and elaborate *Share List* of American Railroads for the columns of the JOURNAL, embracing about 400 roads. It will contain such information as will enable our readers to form a pretty correct idea of the value and condition of each road. Accompanying it will be a *Bond List*, the whole covering six pages, for which provision will be made by adding eight pages to the reading matter of the JOURNAL. We give this week the third page for the purpose of sending the same to the several companies for verification of our figures, and the necessary additions thereto. Only a few reports contain all the information we desire to give. As soon as the corrections are completed, we shall publish the full list, with the necessary changes, from week to week.

Railroad Companies are respectfully solicited to return to us the additional copy of the JOURNAL sent to them, with our figures properly verified, and the blank spaces filled.

Cost of Transportation over the Erie Canal Route.

Nothing more strikingly illustrates the commercial progress of this country, than the steady reduction in cost of transportation over the Erie Canal, and the regular increase of the merchandise passing over it, coming from the Western States. Below we give tables from the late report of the Auditor of the Canal Department, illustrating those two points.

Charges on up freight, per ton, from Albany to Buffalo.

Year.	Average per year.	Tolls deducted.	Leaving freight.
1830.....	\$20 00	\$10 22	\$9 78
1831.....	19 80	10 22	9 58
1832.....	20 00	10 22	9 78
1833.....	14 80	8 76	6 04
1834.....	16 40	6 57	9 83
1835.....	16 00	6 57	9 43
1836.....	21 00	6 57	14 43
1837.....	18 60	6 57	12 03
1838.....	17 80	6 57	11 23
1839.....	17 80	6 57	11 23
1840.....	16 60	6 57	10 03
1841.....	12 20	6 57	5 63
1842.....	13 20	6 57	6 63
1843.....	11 20	6 57	4 63
1844.....	13 00	6 57	6 43
1845.....	9 60	6 57	3 03
1846.....	8 90	4 80	3 20
1847.....	7 80	4 80	3 00
1848.....	7 80	4 80	3 00
1849.....	7 80	4 80	3 00
1850.....	7 20	4 80	2 40
1851.....	6 20	4 40	1 80
1852.....	5 20	2 92	2 28
1853.....	5 60	2 92	2 68
1854.....	5 00	2 92	2 08
1855.....	5 00	2 92	2 08
1856.....	5 40	2 92	2 48
1857.....	4 80	2 92	1 88
1858.....	2 80	1 46	1 34
Total, 29 years...	336 60	165 64	170 96
Aver. for 29 y's...	11 61	5 71	5 90

Average from to		
1830-1834, incl. 5 y.	\$18 20	\$9 20
1835-1839, do.	18 24	6 57
1840-1844, do.	13 24	6 57
1845-1849, do.	8 20	5 15
1850-1854, do.	5 84	3 59
1855-1858, 4 years,	4 60	2 55

Down-freight, per ton, from Buffalo to Albany.

Year.	Average for year.	Tolls deducted.	Leaving freight.
1830.....	\$9 07	\$5 11	\$3 96
1831.....	8 89	5 11	3 78
1832.....	9 26	5 11	4 15
1833.....	8 15	3 65	4 50
1834.....	7 68	3 28	4 40
1835.....	6 29	3 28	3 01
1836.....	7 13	3 28	3 85
1837.....	7 50	3 28	4 22
1838.....	6 76	3 28	3 48
1839.....	6 94	3 28	3 66
1840.....	7 50	3 28	4 22
1841.....	6 57	3 28	3 29
1842.....	6 02	3 28	2 74
1843.....	5 56	3 28	2 28
1844.....	5 56	3 28	2 28
1845.....	6 57	3 28	3 29
1846.....	5 92	2 92	3 00
1847.....	7 13	2 92	4 21
1848.....	5 37	2 92	2 45
1849.....	5 18	2 92	2 26
1850.....	5 48	2 92	2 56
1851.....	4 71	2 19	2 52
1852.....	4 90	2 19	2 71
1853.....	5 18	2 19	2 99
1854.....	4 81	2 19	2 62
1855.....	4 81	2 19	1 62
1856.....	5 56	2 19	3 37
1857.....	4 26	2 19	2 07
1858.....	3 14	1 46	1 68
Total, 29 years...	\$181 90	89 73	92 17
Yearly Av. 29 y's	6 27	3 09	3 18

Average from to
1830-1834, incl. 5 y. \$8 61 \$4 45 \$4 16
1835-1839, do. 6 92 3 28 3 64
1840-1844, do. 6 24 3 28 2 96
1845-1849, do. 6 03 2 99 3 04
1850-1854, do. 5 02 2 34 2 68
1855-1858, incl. 4 y. 4 44 2 01 2 44

When the Erie Canal was opened, and for some years thereafter, it enjoyed to a great degree the monopoly of the commerce between tide-water and the interior. But rival works in time followed, enforcing a gradual reduction of rates. Such a reduction was facilitated by improvements in the canal, and by other economies effected a transportation. The reduction on western bound freight has been from \$20 to \$2 80; and on eastern, from \$9 07 to \$3 14 per ton, for the whole distance between Buffalo and Albany. The rate of reduction

in one case has been 86 per cent., and in the other 66.

For the past year, the total cost of transportation on the canal was 8 mills per ton per mile. Assuming that the charges on the lines of improvement connected with it are at a similar rate, the reduction of 8 mills a ton from Buffalo to Albany enlarges the area or circuit from which the canal draws its trade one mile. Assuming this circuit to have a radius of 750 miles, the reduction of 8 mills per ton on the canal, adds two thousand square miles to the area it influences. This view is fully confirmed by the steady increase of freight from Western States passing over the whole length of the canal. This increase from 1836, a period of 23 years, has been as follows:

Year.	From west'n States.		Total tons.
	Tons.	State.	
1836.	54,219	364,906	419,125
1837.	56,255	331,251	387,506
1838.	83,233	336,016	419,249
1839.	121,671	264,596	386,267
1840.	158,148	309,167	467,315
1841.	224,176	308,344	532,520
1842.	221,477	258,672	480,149
1843.	256,376	378,969	635,345
1844.	308,025	491,791	799,816
1845.	304,551	655,039	959,590
1846.	506,830	600,662	1,107,492
1847.	812,840	618,412	1,431,252
1848.	650,154	534,133	1,184,337
1849.	768,659	498,068	1,266,724
1850.	773,853	598,001	1,371,859
1851.	966,993	541,684	1,508,677
1852.	1,151,978	492,721	1,644,699
1853.	1,213,690	637,748	1,851,438
1854.	1,100,516	602,167	1,702,693
1855.	1,092,876	327,839	1,420,715
1856.	1,212,550	374,580	1,587,130
1857.	919,998	197,201	1,117,199
1858.	1,273,099	223,588	1,496,687
Totals..	14,232,182	9,945,606	24,177,788

From Western States the rate of increase of Eastern bound freight has been very nearly 2,400 per cent., while at the same time there has been a falling off of freights from this State equal to 40 per cent.

The canal has gained its present position, and retains its freights by its capacity for cheap carriage. Any considerable increase in rates would tend to throw this vast commerce, so valuable to New York, upon other routes. The low rates adopted by the canal and the railroad competitors with it, are not a matter of choice, but of absolute necessity. No increase can be anticipated unless produced by much higher prices than at present prevail.

Quincy and Palmyra Railroad.

This road connects Quincy, the western terminus of the Chicago, Burlington and Quincy Railroad, with the Hannibal and St. Joseph Railroad at Palmyra. It is but 12 miles in length; but its completion is a matter of some importance not only to the companies whose roads are thus brought into close connection, but also to the traveling public. Since the opening of the latter road in February last, passengers have been conveyed a distance of 20 miles by steamer between Quincy and Hannibal. The completion of a link now in progress, will give the Great Western line of Illinois a terminus at Hannibal, and so bring the Ohio and Mississippi and Indianapolis and Cincinnati routes in direct line with the great road through Missouri.

Statistics of Paterson Industry.

This active and prosperous city, now containing nearly 25,000 inhabitants, may be regarded as one of the industrial suburbs of New York, from which it is only sixteen miles distant, and can be reached by a dozen trains daily on the New York and Erie Railroad. Its existence may be said to date from 1791, when an association of persons in the Middle States, prominent among whom was ALEXANDER HAMILTON, obtained a charter for the establishment of a great emporium for the manufacture of cotton and other materials. This charter granted by the Legislature of New Jersey and signed by Gov. WM. PATERSON, then in office, was very liberal, leaving the grantees at liberty to select such locality as they might prefer, and commence operations at their own convenience, while no limit was imposed to the period of duration. The capital stock was fixed at one million dollars in shares of \$100 each; but real estate might be held to four times that amount. The Company were also authorized to improve navigation by the erection of locks, dams, etc., and charge tolls on the same. Their property was exempted from taxation for county and township purposes, and the sum of \$100,000 might be raised by lottery. The inhabitants within a district six miles square might at any time be incorporated and form a municipal government with the usual powers and privileges.

In May, 1792, the Great Falls of the Passaic were selected, in preference to half a dozen other localities, and "The Society for Establishing Useful Manufactures" having obtained a stock subscription of \$200,000, authorized the construction of a raceway, cotton mill, machine shop, bleach works, and buildings to accommodate their workmen. In the summer of 1793 operations were commenced and prosecuted until 1796, when the employees, about 125 in number, were discharged. Among the causes assigned for this step were the extravagance of engineers, losses abroad, and the want of communication with the domestic markets. The Society, however, did not go into bankruptcy, designing to resume at some future day. PETER COLT had had for some months entire control of the works; but all his efforts proved insufficient to stand the tide of disaster that had for some time been setting in against them.

After lying idle for a number of years, the factory was leased to private individuals, who carried on cotton-spinning and machine making until 1807, when it was burned down. This was the first establishment of the kind erected west of the Connecticut river, and the third, if not the second, in this country. SAMUEL SLATER's celebrated attempt was made only two years previously.

From 1801 to 1812 several small concerns went into operation; the second war with Great Britain gave a powerful impetus to the manufacturing interest, and numerous factories were put up along the canals which had, meantime, been greatly enlarged. At that time, the late ROSWELL L. COLT purchased the stock at a depreciated price, and re-animated the Society. With the return of peace a second prostration of business took place; but in a few years the tide again turned.

Similar visitations were experienced in 1837 and 1857, when, with two or three exceptions, all the works were obliged to suspend operations, and many of the residents obliged to seek a livelihood elsewhere. The Society at various times have

put up and leased factories with water rights to private individuals; but never resumed manufacturing operations since 1796.

The total fall of the Passaic within half a mile, is about 75 feet. A short distance above the Fall, a dam of the most substantial character has been thrown across the river, and the stream diverted across a deep ravine and through an opening in the rocks to the upper canal. From this point it is made to turn in succession three tiers of factories, each having an average fall of 24 feet. The canals are double and about three-quarters of a mile in length. The factories are mainly built of brick; though a few of the older kind are of dressed stone or wood. Those that have been erected during the last dozen or fifteen years, are mainly very substantial edifices, while not a few have other attractions to boast of. The Ivanhoe (paper), the Murray (silk), and the Waverly (bleach), factories, are considered models of their kind.

Machine Making was commenced as early as 1795, by JOHN CLARKE, Sr., who is believed to have built the first wool cards ever run in the United States. With various successes and reverses, the business has continued to increase until nearly twenty establishments, large and small, have found a steady demand. Among those who have distinguished themselves in this line, may be mentioned—THOMAS ROGERS, the eminent locomotive builder; CHARLES DANFORTH, inventor of the celebrated frame bearing his name; JOS. C. TODD, improver of rope machinery; T. C. SIMONSON and others. The products of the Paterson machine shops have not only gone to all parts of this country, but to Cuba, Mexico, South America, the Canadas, Great Britain, and Russia.

Locomotive building was started, in 1837, by Mr. Rogers, by whom it was successfully prosecuted until his decease, in 1856. Mr. R. was a native of Connecticut, and removed to Paterson about 1812, shortly after which he commenced making machinery, in company with JOHN CLARKE, Jr., and ABEL GODWIN, Jr., with whom he continued until 1830, when he withdrew and laid the foundation of the Rogers' Works. The first engine built was named "Sandusky," for the Sandusky and Mansfield Railroad, in Ohio. She was furnished with a truck, a single pair of drivers, and cylinders 11 inches in diameter. Her weight was about 15 tons. About a thousand others have since been turned out from this establishment, more than 100 being for the Illinois Central road alone. The company has since been incorporated, and is now under the superintendence of WM. S. HUDSON. Number of employees, about 550, who are building seven engines per month besides other machinery.

The New Jersey Locomotive Works, superintended by H. UHRY, employs 170 hands, who complete 25 engines per annum, together with boilers, lathes, and other railroad machinery.

The establishment of DANFORTH, COOKE & Co. employs 230 persons, and at present are turning out from 30 to 35 locomotives annually. JOHN COOKE, who has the oversight of this department, was formerly Superintendent of the Rogers' Works. The Machinery department is under the charge of MAJOR JOHN A. EDWARDS, and the Cotton factory under that of EDWIN T. PRALL, members of the same firm. Including the foundry, about 600 employees are steadily engaged at this establishment.

The sales have for several years averaged half a million dollars per annum.

The total number of employees who are engaged in the locomotive and machine shops of Paterson, number 2,000, nearly half of whom are on locomotives alone. The number of these finished annually is about 135; but the shops have capacity sufficient to turn out 200 every year, and in 1856 approached closely to that figure. The value of work executed annually can scarcely fall below two million dollars, of which it has been estimated that one-third is spent for wages and salaries. In connection with this may be mentioned the building of stationary engines, which has recently been introduced with much success; also the manufacture of forgings, flues, brass works, &c., &c., for many of which the reader is referred to our advertising columns. The drawing and tempering of steel for hoop skirts has, for some time, formed no inconsiderable item of business in Paterson.

Cotton Spinning has been one of the leading industrial pursuits since 1793. Sixteen of these factories, containing 48,000 spindles and 210 looms of various kinds, are at present actively engaged. Most of the yarns made are sent to the Philadelphia market for sale; but a portion is woven into duck, sheetings, &c., on power looms. Mr. JOHN COLT was the first to introduce the cotton duck manufacture, on power looms, which he accomplished in 1824. Since that time the demand for it has been extensive for sail cloth and other purposes. These works are owned by E. BODINOT COLT, who is making some half a million yards annually, in addition to yarns for export. The total consumption of raw cotton per annum is six million pounds, from which are manufactured about five million pounds of yarns. The number of employees is nearly 1,200, whose wages will average \$3 50 per week for each, or \$225,000 per annum in the aggregate.

The Silk Manufacture (winding, doubling, twisting, dyeing, &c.,) properly dates from 1840, since which time Paterson has become its principal place of production. The pioneer in this business, and still the leading manufacturer, is JOHN RYLE, at whose establishment 500 operatives are employed. HAMIL & BOOTH, and about a half a dozen other concerns, are similarly engaged. Several of these have gone into operation within the past three years; but from an over abundant supply, the demand has for some time been less than usual. The total number of operatives employed, when in full operation, is about 1,000; weekly consumption of raw silk, about 4,500 lbs., the loss averaging about eight per cent. in going through the various processes. The rate of wages paid will average \$3 per week to each employee, or \$125,000 annually in the aggregate, allowing for loss of time. Mr. Ryle for some carried on the *weaving* of silk, and abandoned it only because the demand for thread in its various forms was now abundant and steady.

The Linen and Woolen Manufactures have been started at various times, but subsequently abandoned. The Dolphin Manufacturing Co. employ about 140 hands in spinning and weaving jute and other descriptions of hemp.

Bleaching, Dyeing and Printing have for ten years been successfully carried on by D. G. SCOTT, who has already two large establishments in successful operation, and is preparing to erect a third

The number of employees is 300. JOHN MURPHY and two or three other parties have since embarked in the bleaching or dyeing business.

Paper Making was introduced as early as 1804 by CHARLES KINSEY, who invented a machine for making it in a continuous roll some years after. H. V. BUTLER & Co. have brought this out to perfection, and, in their magnificent Ivanhoe Mill, employ 140 operatives, who turn out some 33,000 lbs. per week of the finest quality.

The manufacture of flues and ornamental work for locomotives employs from 75 to 100 hands. N. LANE has for years carried on a very considerable business in this line, and his work has deservedly obtained a high reputation.

Beside those pursuits already enumerated, numerous others might be mentioned, mainly dependent upon or connected with the leading branches of industry. Among the number may be mentioned, bobbin and bone turning; the manufacture of mouldings, sashes and blinds; the distilling of bleaching liquors; the tobacco manufacture; the roasting and grinding of coffee; tanning; the weaving of counterpanes, table-covers, &c.; carriage and harness making; in addition to the trades and avocations ordinarily existing in such a community.

The number of employees engaged in productive industry usually exceeds five thousand, who receive in wages from \$1,000,000 to \$1,250,000 per annum. Within the last twelve years the products of Paterson have more than doubled in amount, and the growth of manufacturing industry is steady, despite the recurrence of disasters. Its contiguity to New York, its healthy and indeed picturesque neighborhood, and above all the fact that most of the pursuits carried on have been *established*, must contribute to make its future prosperity keep pace with the past.

Terre Haute, Alton and St. Louis Railroad.

At a recent meeting of the Terre Haute and Alton, Belleville and Illinoistown, and Terre Haute, Alton and St. Louis Railroad creditors, the following general plan was proposed:

1. The immediate surrender of the road to the Trustees under the second mortgage—the property to be sold and company re-organized upon the following series:

The First mortgage upon the Terre Haute and Alton, and Belleville and Illinoistown, to remain intact, but one year's interest beyond the now current coupons to be deferred until 1861 and 1862.

The Second mortgage bonds to be exchanged for new bonds maturing in 1892, and the new bonds to be given for the coupons on the seconds up to March, 1862. The present second mortgage bondholders are also to pay 10 per cent. in cash, receiving new bonds to exchange, as above, for principal and interest to 1862.

The Third mortgage and Fourth mortgage bondholders to be made preferred stockholders, at par, upon condition of advancing 10 per cent. in cash, for which they get second mortgages. Failing to do this they are to have but 30 per cent. of preferred stock.

The general creditors to be made preferred stockholders by paying 10 per cent. to the second mortgage trustees, as above, and failing to make a cash advance to get 30 per cent. in stock. Stockholders to be new stockholders at the rate of 40 per cent. new for each 100 old, provided they are not debtors to the company for bonds. No dividend of over 7 per cent. to be made upon common stock until all the floating debt is paid; and all over 7 per cent. shall form a sinking fund to pay the First mortgage.

Upon this re-organization the committee think

the new company can, by February 1, pay a dividend upon all its stock and bonds.

St. Louis and Iron Mountain Railroad.

We publish herewith a letter addressed to the St. Louis and Iron Mountain Company, by V. K. Stevenson, Esq., President of the Nashville and Chattanooga Railroad, and now President, we believe, of the Nashville and North-western Railroad, and John A. Gardner, former President of the Alton road, upon the route of the proposed extension, southward of the Iron Mountain road.

DEAR SIR:—The undersigned, a Committee appointed at the Internal Improvement Convention, held at St. Louis in September last, here beg to give their views relative to the great advantage to the State of Missouri, of connecting the Iron Mountain Railroad with the Tennessee system of railroads at Hickman, Kentucky.

As the Iron Mountain road has been finished to the Pilot Knob, we take that as a starting point, from which the distance to Hickman, Ky., is about one hundred miles, all in the State of Missouri, passing through the Counties of Madison, Wayne, Bolinger, Stoddard, Scott, New Madrid, Mississippi, with populations as follows:

Names of Counties.	Population.	Farms.	No. of Negroes.	Industrial Establishments.
Madison.....	6,003	515	696	19
Wayne.....	4,518	478	360	2
Bolinger.....	3,062	280	220	
Stoddard.....	4,277	418	50	2
Scott.....	3,182	208	392	9
New Madrid.....	5,541	407	1,481	30
Mississippi.....	3,123	271	746	
	29,706	2,557	3,945	62

The value by the United States return for 1850 of the farms in the above

Counties, was:\$1,691,627
And of negroes, valuing each at \$1,000. 3,945,000

Total value of farms and negroes...\$5,636,627

This embraces only the Counties on the air line from Pilot Knob to Hickman.

As the object is to compare the two prominent lines claiming your attention, we will now add the farms, population, &c., on the line from Hickman, Ky., to Grand Junction, a point 52 miles east of Memphis, at the Mississippi line, and about as near to St. Louis as Memphis is. We then take:

Names of Counties.	Population.	Farms.	No. of Negroes.	Industrial Establishments.
Fulton, Ky....	4,446	361	943	9
Obion, Tenn....	7,683	953	1,057	6
Weakly, ".....	14,608	1,487	3,070	13
Gibson, ".....	19,548	2,160	4,104	48
Madison, ".....	21,470	1,408	8,552	49
Haywood.....	17,259	967	8,498	13
Tipton.....	8,567	631	4,192	16
Fayette.....	26,714	1,172	15,264	29
	120,185	8,839	45,770	183

Value of the above farms, as per census

of 1850\$11,712,468

Value of negroes 45,770,000

Add. value in Missouri on this Hickman

line as above..... 5,636,627

—showing sixty-three millions of value (\$63,119,095) of farms and negroes alone on this line to Grand Junction, a point opposite Memphis, and about the same distance from St. Louis as Memphis, and directly on the way to New Orleans from St. Louis, or say 300 miles from St. Louis, which is the distance from St. Louis to Memphis.

There are then the road from Hickman to Paducah, Ky., about 80 miles long, with wealth on this route nearly equal to that to Grand Junction, above given. Then take the road to Nashville and all points on the Memphis and Ohio road, each side of the crossing of the two roads, and on both roads within 300 miles of St. Louis, and you embrace a

country reaching to the Tennessee river, on each road, with an amount of property and trade in value equal to that on the line, as above given, from Hickman, Ky., to Grand Junction. Taking all on the different lines of railways in Tennessee and Kentucky, from Hickman back within 300 miles of St. Louis, the same distance as to Memphis, and you have an aggregate of one hundred and twenty millions in value of land and negroes alone, at the value of lands in 1850, to which add other articles of value, and you would have at least \$200,000,000 of property on the several lines connecting at Hickman, and on that line from the Iron Mountain to Hickman, all within 300 miles of St. Louis.

We will now take up the line in Missouri and Arkansas, to Memphis, from Pilot Knob:

Names of Counties.	Farms.	Population.	Slaves.	Industrial Establishments.
Madison, Mo.	515	6,003	696	19
Wayne	475	4,575	360	2
Butler	143	1,616	53	—
	1,133	12,174	1,109	21
Value of farms in Madison County				\$370,767
" " Wayne				221,975
" " Butler				38,365
				\$631,107
Value of slaves, at \$1,000 each				1,109,000
				\$1,740,107

Number of farms, negroes, population, and industrial establishments in Arkansas, on the line from Pilot Knob to Memphis:

Names of Counties.	Farms.	Population.	Slaves.	Industrial Establishments.
Green, Ark.	345	2,593	53	—
Mississippi	170	1,958	865	2
Crittenden	192	2,648	801	—
	707	7,199	1,719	2
Value of farms in Green County, Ark.				\$78,587
" " Mississippi County				327,415
" " Crittenden County				481,217
				\$887,219
Value of negroes				1,719,000

Value of farms and slaves on the Memphis line in Arkansas	\$2,606,219
do. do. in Tennessee	1,740,107
Total	\$4,346,326

Thus showing the total value of farms and negroes within 300 miles of St. Louis, beyond the Pilot Knob, on all the lines connecting towards Memphis, is four millions three hundred and forty-six thousand three hundred and twenty-six dollars, and all this country opened by this line accessible by water from St. Louis. While on the Hickman route, within 300 miles of St. Louis, taking the Paducah, the Nashville and North-western, the Mobile and Ohio, the Mississippi Central and the Memphis and Ohio roads, all open or amply provided with the means for their completion, and you have an aggregate of value of land or farms and negroes of over one hundred and twenty million dollars against four millions three hundred and forty-six thousand three hundred and twenty-six dollars worth of the same description of property on the Memphis line.

The next question to be considered is as to which route leads most directly to the largest markets beyond the 300 miles above valued.

As there is no market to be reached from Memphis westwardly except by water, we will leave that direction out of the question.

Then we take up the populated and rich country lying east of the Mississippi river.

By the Hickman route you meet the Mississippi Central road at Hickman, Ky., and by it reach New Orleans by as short a time as by Memphis, and have one less transshipment than by Memphis.

Without this disadvantage the Memphis route would be equal, if it were not for the great disparity in wealth and ability to buy and trade with your State as shown above.

To all points east of the Mississippi Central road, say the Mobile and Ohio road, the roads all connecting at Nashville, and all roads crossing and meeting with the eastwardly tending lines, the Hickman route brings St. Louis and Missouri 100 miles nearer, with fewer transshipments, no drayages, and consequently no delays in transit; while at Memphis the depots of the several roads are placed back from the river, and at points so remote from each other, as to make the cost of transit through that city about equal to the carriage from New Orleans or St. Louis to Memphis. At Hickman, the railroad is laid to the water's edge, and in Nashville all roads are required to run into a common track, so as to save storage, drayage, backage and delays. The same at Chattanooga and all points in this direction.

The value of property in Tennessee (which is accessible in all directions by reaching Hickman by railroad directly) is \$100,000,000; that of Georgia, \$500,000,000; South Carolina, \$200,000,000; Alabama, \$300,000,000; eastern half of Mississippi, opened by the Mobile and Ohio Railroad, \$200,000,000, making in all, \$1,660,000,000 of property, and annual productions in cotton and rice of over \$100,000,000. To reach these great States, the Hickman line is one hundred miles nearer, and fewer transshipments than by Memphis. To reach the south part of Mississippi, St. Louis and Missouri, now have the Mississippi river as they have always had, and the railroad route by Memphis, or by Hickman, equally distant by either, with the disadvantage in going by Memphis of double drayage, storage, &c., &c., equal to 100 miles railroad transit, which places Hickman, with the railroad running to the water's edge, at great advantage, and makes this route 100 miles cheaper, even to reach South Mississippi from Missouri or St. Louis.

If the Memphis route should be adopted, the whole of Tennessee, Georgia, South Carolina, Alabama, Florida and East Mississippi, in short, all the South and South-eastern trade, and all reached by any southern road, would be reached at such a disadvantage, when compared with Louisville and Cincinnati, the trade having to pass by, and then return into this vast country, that St. Louis, with all her mineral advantages, could not compete successfully with Louisville and Cincinnati; and the object of building the extension of the Iron Mountain road would be defeated. The territory passed in reaching Memphis from Pilot Knob beyond that tributary to the Hickman line, is either unreclaimed swamps or flat highlands—wet, poor and sickly; so that there is little hope for early settlement.

The trade of Memphis is now reached by river, and will be by the Hickman route, through a rich country.

The extent of country, wealth and products above described, is so great as to require but to be named to be appreciated by the great State of Missouri.

Respectfully submitted,
V. K. STEPHENSON, } Committee.
J. A. GARDNER, }

Raleigh and Gaston Railroad.

The annual report of this road shows receipts during the year ending Sept. 30, 1859, of \$258,268 24, and the expenditures of \$168,289 21, leaving net earnings of \$89,979 03, from which a dividend of six per cent. is declared.

Orange and Alexandria Railroad.

The report of the President and directors of this road shows that the total receipts of the year, arising from transportation of passengers, freight, &c., amount to \$288,797, against \$258,895 37 of the year before, exhibiting an increase of \$29,901 63. The net receipts are \$157,571 61, against \$151,692 46 of the year preceding.

Journal of Railroad Law.

DAMAGES—ACTION BY BRAKEMAN FOR NEGLIGENCE OF ENGINEER.

The case of Wright vs. The New York Central Railroad Company, recently determined, illustrates the legal obligation of a Railroad Company to employ skilful and competent men in running their trains; and shows how far a company may be held liable to one of their employees, for an injury resulting from the incompetency of another one.

The plaintiff in this case, Wright, was a brakeman employed on the defendant's road. He was injured by a collision between two trains of the company. He was himself upon one of these trains, in performance of his duty as brakeman. The accident resulted from the negligence and unskilfulness of the engineer of the other train. This engineer had been appointed by Mr. Upton, who was the company's managing agent of engineers, and was authorized to appoint engineers.

On the trial the judge charged the jury among other things that it was the duty of the defendant to use reasonable care in order to employ an engineer of competent skill and experience; and if the jury should find that Upton did not use ordinary care in that respect in providing the engineer on the occasion in question, and the injury was occasioned by such negligence, the defendant was liable for the consequences.

The following is the opinion of the Court on appeal, so far as relates to this point:

MARVIN, J.—It is settled law in this State, that a principal is not liable to a servant for injuries sustained by reason of the negligence of another servant, when both are engaged in the same general business, in the service of the principal. (*Coon vs. The Syracuse and Utica Railroad Co.*, 1 *Selden*, 492.) This principle was conceded in the present case, by the plaintiff, who claimed to recover on account of the negligence of Upton, its managing agent. If the servant is injured by reason of the negligence of the master, the latter is undoubtedly liable.

As the general business of managing a train of cars upon a railroad requires the co-operation of many persons, and as they are supposed to know the risks incident to the business, they voluntarily take these risks at the time they enter into the employment of the railroad company, and the compensation paid them may be affected by the character of the business. As one servant may be injured by the carelessness of a fellow-servant, he takes this risk. The business requires all the servants; and some one or more of them, though possessed of sufficient skill and capacity, may, on some occasion, be careless and negligent, and a fellow-servant may be injured in consequence. In such a case, the master or principal is not responsible. But it may be that one of the servants, employed by the master, to co-operate with the other servants, is incompetent, and lacks the requisite skill to perform his part of the work. He may be a careful, prudent servant, but from ignorance of his duties, or from the absence of the necessary skill, may be unable to perform them, and a fellow-servant may sustain injury in consequence of his incompetency. Is the principal then liable? It is, I have no doubt, the duty of the master, to all the servants, to use reasonable care in providing them with careful and competent fellow-

servants, and he is liable for injuries to any servant arising from his neglect to use such care, in the absence of proof that the injured servant was aware of the incompetency of his fellow-servant.

If the injured servant has knowledge of the incompetency and want of skill of his fellow-servants, a presumption may arise that he consents to take upon himself the risk of any injury which may result from such incapacity. He may, if the master employs an incompetent co-laborer, quit his employment; unless the master will, upon notice, discharge the incompetent servant.

As the master or principal has the sole right to employ all his servants, each servant has the right to rely upon the master's using reasonable care and diligence in employing none but competent servants. The power to employ servants may be delegated by the principal, and this must generally be so, when the principal is a corporation. When the principal thus acts by an agent, he will, upon general principles, be liable for the negligence of the agent. This agent will not be regarded simply as a fellow-servant of those whom he employs in the general business. (*See Pierce on Am. Railroad Law, ch. 13, and the cases there cited; Keegan vs. The Western Railroad Corporation, 4 Selden, 175.*)

In the present case Upton had authority to employ the engineers. He was the managing agent. He employed Adams. There can be no reasonable doubt that the injury to the plaintiff was caused by the carelessness and negligence of Adams. He left the bridge at 9 o'clock 30 minutes, and ran to Pekin, $8\frac{1}{2}$ miles, in a fraction over 10 minutes. He failed to arrest the progress of the train in time, and the collision occurred before the up train could run upon the switch. He must have run east beyond the east end of the switch. But the liability of defendant does not depend upon the negligence of Adams. The questions presented are, 1st. Was Adams incompetent? 2nd. If so, was there negligence in Upton in employing him, and putting him in charge of that train, as engineer? Waving the question arising out of the time-tables, both of the questions here presented, must have been found in the affirmative before the plaintiff could recover. The defendant did not warrant that Adams was competent. If Upton, as the managing agent of the defendant, used proper care in employing Adams, and placing him in charge of the train, the defendant is not liable. As I understand the charge, it was in accordance with the views here presented. The learned judge instructed the jury that it was the duty of the defendant to use reasonable care in order to employ an engineer of competent skill and experience; and if the jury found that Upton did not use ordinary care, in that respect, in providing the engineer on the occasion of the collision in question, and the injury was occasioned by such negligence, the defendant was liable for the consequences. It may be said that the proposition does not include the question of the competency of Adams; or rather, perhaps, that it assumes that he was incompetent, and makes the question turn upon the care and diligence of Upton in employing him. The duty of Upton is properly stated; and then follows the proposition that if such duty was not performed, and the injury was occasioned by such negligence, then the defendant was liable for the consequences. The duty was to use

reasonable care in order to employ an engineer of competent skill and experience. If, in fact, Adams was competent, skilful, and experienced, then there was no want of proper care on the part of Upton. The jury must have found that Adams was incompetent, and that Upton did not use reasonable care in employing him. If the charge failed to present, fully and clearly, the principles involved, the defendant should have requested further instructions. In my opinion, we cannot say that the charge, as it is, was erroneous.

The Colonial Trade of Great Britain.

It may be desirable to group together a few facts illustrative of our trade with our colonial possessions. It appears that the imports from and exports to the colonies have been as follows during the last five years:

Year.	Imports.	Exports.
1854	£34,149,499	£33,852,198
1855	33,583,311	26,552,875
1856	43,026,586	33,300,439
1857	46,183,196	37,151,688
1858	38,375,610	40,224,994

It thus appears that the colonial trade, although exposed to considerable vicissitudes, is, on the whole, steadily advancing, the reports in 1858 showing an increase of nearly 12 per cent, as compared with 1854, while the increase of the exports in the five years has been rather more than 21 per cent. The imports increased from the foreign colonies in 1858 as compared with 1854: Channel Islands, £111,890; Ionian Islands, £156,716; West Indies, £721,446; Australia, £953,819; East Indies, £4,300,000; Ceylon, £182,787; the Cape of Good Hope and Natal, £1,022,462; possessions on the River Gambia, £4,040; and other possessions, £91,480. On the other hand, there was a decrease at the following points: Gibraltar, £34,139; Malta, £239,508; British North America, £2,537,600; Honduras, £230,200; Singapore, £49,305; the Mauritius, £174,501; possessions on the Gold Coast, £39,586; and Sierra Leone, £13,571. It will be seen that the increase has been most marked in the case of Australia, British India, and the Cape Colony, while the decrease has been most serious as regards the North American colonies; and it is certainly a fact of some significance that while nearly 110,000 emigrants departed from their fatherland for the Canadas and the other dependencies in their vicinity from 1854 to 1858 the value of the British American export trade with the mother country was only £4,654,534 in 1858 as compared with £7,192,134 in 1854. On the other hand, the advance of British India from £10,672,862 in 1854 to £18,650,223 in 1857, and £14,972,952 in a year of fierce convulsions, proves that the resources of the vast regions of the sun have not been altogether undeveloped by their new rulers. The West India trade seems to have somewhat recovered itself, but the Mauritius has retrograded, especially as compared with 1857.

With reference to the export of British produce from the United Kingdom to the colonies an increase appears in the following cases: Channel Islands, £28,104; Gibraltar, £99,381; Malta, £19,694; Ionian Islands, £209,036; West Indies, £383,025; Hong Kong, £678,279; East Indies, £7,651,959; Singapore, £444,897; Ceylon, £158,424; the Mauritius, £218,689; Cape of Good Hope and Natal, £781,420; Sierra Leone, £25,611; and other possessions, £16,067. As a set-off to these satisfactory results, the following colonies have fallen off to the extent of the sums named: British North America, £1,821,821; Honduras, £1,000; Australia, £1,467,154; possessions on the Gold Coast, £22,277; and on the Gambia, £5,967. The ephemeral trade with the ports occupied by us is the Crimea in 1854-5 6 is also of course at an end. The retrogression of British America and Australia will be observed with regret. In the latter case, however, there is not much cause for surprise, considering the recklessness shown in exporting goods to Australia immediately on the gold discoveries becoming known, the exports to the settlement on the "great south land" having

jumped up from £4,222,205 in 1852, to £14,513,700 in 1853. In 1844 the total exports of British produce to the colonies were only £18,524,973; last year they advanced to £40,225,924—a total never before exceeded, and a gratifying proof of the advantages we are deriving from the onward march of British colonization.—*London Times.*

Pittsburg and Erie Railroad.

This road, which commences at Girard, a point on the Lake Shore road, 15 miles west of Erie City, will soon be in operation to Jamestown, Mercer County, 41 miles from Girard and 56 miles from Erie City. The opening of this road will secure to Erie and Buffalo the coal trade and rich products of the Shenango and Conneaut Valleys. During the last two years over the Cleveland and Mahoning Railroad an extensive trade has sprung up between those valleys and the city of Cleveland, which will be lost unless a shorter and more direct line of communication be had to Cleveland, than now exists over the Cleveland and Mahoning. This can be remedied by the completion of the Clinton Railroad from Hudson, Ohio, to Jamestown, Pa., a distance of 53 miles, which is already more than half graded. The Clinton Railroad connects at Jamestown with the Erie and Pittsburg Railroad, opening north a direct line to Erie and Buffalo, and also with the Pittsburg and Erie Railroad south to the Ohio river and Pittsburg.—*Buffalo Courier.*

The Cincinnati Enquirer of 2d inst., says: "The new freight tariff adopted at the Convention of Freight Agents, recently held at Dayton, went into effect yesterday. The rates between Cincinnati and New York were fixed as follows:

	4th Class.	Flour.
All rail	55	\$1 05
Rail and water	50	95

The New York Central road, however, refuses to pro-rate with the roads west of Lake Erie, insisting upon eighty cents for flour from the lake ports, which would leave but fifteen cents to the roads which carry to those points. In consequence of this course, the Cincinnati, Hamilton and Dayton, the Sandusky, Dayton and Cincinnati, the Springfield, Mount Vernon and Pittsburg, and the Cleveland and Columbus, (the roads in the new business combination just formed,) have made a contract with the New York and Erie road to take all the freights they send forward at the rates made at the Dayton Convention. The rail and lake freights by these roads will, therefore, go to Sandusky, and thence to Dunkirk by propeller, and the all rail by Delaware to Cleveland and thence to the Erie road."

New York and Erie Railroad.

At a meeting of the Board of Directors of the New York and Erie Railroad Company, held November 1, 1858, SAMUEL MARSH, President, in the chair, the following resolutions were unanimously adopted:

Resolved, That in the future management of the affairs of this company no floating debt for any purpose whatever be sanctioned beyond the requirements for the three months' purchase of materials and supplies for the road.

That it is expedient, in the future Charter of the company, that a clause be inserted prohibiting the creation of floating debt beyond the amount expressed in the foregoing resolution, unless sanctioned at a public meeting of the Preferred and other stockholders, to be called by the Board, one month's notice of which being given in the public papers.

That a return be made and published of each three months' receipts and expenditures of the company.

That the 1,500,000 dollars of Fourth Mortgage bonds, now placed as collateral security for the advances of 320,000 dollars and interest shall, when redeemed, be cancelled, unless applied in payment of other Mortgage bonds.

That no mortgage shall be created in excess of the present mortgage debt of the company.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending November 8, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6 1/2	85
Covington and Lexington, 2d Mortgage	7 1/2	65
Do. do. Income	10	10
Ohio & Miss., E. D., Construction	7 1/2	25
Cinc. Ham. and Dayton, 2d Mortgage	7 1/2	84
Indianapolis & Cincinnati, do. do.	7 1/2	80
Do. do. Dividend	6 1/2	65

STOCKS.

Cincinnati, Hamilton & Dayton	Ex Div.	65
Columbus and Xenia		83
Indianapolis & Cincinnati		49
Little Miami		85

Boston, Concord and Montreal Railroad.

The business of this road for the six months ending October 1, 1859, was as follows:

Earnings.	Expense.	Net.
1859.....\$141,455 73	\$72,018 45	\$69,437 25
1858.....114,309 93	72,372 79	49,500 14

\$27,937 14

Gain for same period in stock account. 8,637 96

Net gain.....\$36,575 10

Railroad Earnings.

The earnings of the Hudson River Railroad, for October, 1859, were.....\$170,157 48
Do. 1858.....140,782 87

Increase.....\$29,374 61

The earnings of the Galena and Chicago Railroad, for the month of October, were:

	1858.	1859.
Freight.....	\$87,674 13	\$155,261 41
Passengers.....	49,332 62	39,063 50
Mails, etc.	4,646 13	4,500 00

Total.....\$141,652 88 \$198,824 91

Increase.....\$57,172 03

Corrected earnings for the previous month.....\$203,803 45

The earnings of the Chicago, Burlington and Quincy Railroad for October were as follows:

	Chicago & Burlington.	Galesburg & Quincy.
Freight.....	\$117,494 90	\$17,357 51
Passengers.....	37,334 37	12,350 30
Mails and miscellaneous	2,013 87	858 48

Total.....\$156,843 14 \$30,575 29

156,843 14

Total earnings, 310 miles.....\$187,418 43

Total earnings for October, 1858.....159,271 95

Increase in October, 1859...\$28,146 48

Gross earnings per mile.....604 58

The earnings of the Detroit and Milwaukee Railroad for the week ending July 1, 1858, were \$6,460. The corresponding week this year they were \$11,277. Since then they have been:—

Week ending July 14.....	\$9,395
Do. July 21.....	8,967
Do. July 28.....	9,894
Do. Aug. 4.....	10,874
Do. Aug. 11.....	10,332
Do. Aug. 18.....	11,472
Do. Aug. 25.....	11,490

This was the week in the beginning of which the new steamers were put on, and the difference in traffic they created was at once apparent.

Week ending Sept. 1.....	\$14,214
Do. Sept. 8.....	15,279
Do. Sept. 15.....	15,286
Do. Sept. 22.....	14,469
Do. Sept. 29.....	17,332
Do. Oct. 6.....	19,658

The traffic on the Illinois Central road the first week of Nov. shows a gain of \$26,000 over the corresponding week of last year.

The earnings of the Lehigh Valley Railroad for the month of September, 1859 were..\$17,546 58
September, 1858.....42,062 46

Increase.....\$5,484 12

The traffic of the Great Western Railway of Canada for the week ending Oct. 28, 1859, was as follows:

Passengers.....	\$25,158 33
Freight and live stock.....	19,560 66
Mails and sundries.....	1,526 06

Total.....\$46,245 05

Corresponding week of last year.....46,097 69

Increase.....\$147 36

The earnings of the Milwaukee and Mississippi Railroad for the month of October were in—

1859.....	\$122,000
1858.....	92,000

Increase.....\$30,000

The earnings of the Little Miami and Columbus and Xenia Railroads, for October, were—

1858.....	\$108,690 22
1859.....	103,030 90

Decrease.....\$5,659 32

The earnings of the Illinois Central Railroad Company for October were as follows:

Traffic Department.

Receipts from passengers.....	\$77,886 78
Do. freight.....	147,000 00
Do. mails.....	6,358 33
Do. rent of road.....	5,871 33
Do. other sources.....	5,231 88

Total receipts in October, 1859.....\$242,348 32

Do. do. 1858.....184,776 09

Increase.....\$57,572 23

Do. since Jan'y 1, 1859.....\$1,070,313 97

Do. do. 1858.....1,666,542 19

Increase.....\$3,771 78

Land Department.

Acres sold since Jan'y 1, 1859.....	23,526.06	for \$352,472 65
Acres sold prev'ly.....	1,229,835.33	" 15,637,148 95

Total.....1,252,361 39 for 15,989,621 60

Construction Bonds canceled in Oct., 1859.....\$41,000 00

Free Land Bonds canceled in Oct., 1859.....6,000 00

Total Bonds canceled up to Sept., 30, 1859.....1,363,000 00

Total Bonds canceled up to Oct. 31.....\$1,410,000 00

Cash receipts in Oct., 1859.....\$56,674 25

Do. since Jan'y 1, 1859.....475,177 34

Total cash and bonds received to Oct. 31, 1859.....\$3,150,074 87

The following are the October earnings of the Cincinnati, Hamilton and Dayton Railroad, compared with the corresponding month of previous year:

October, 1859.....	\$46,050 50
" 1858.....	43,221 21

Increase in 1859.....\$2,829 29

The earnings of the Michigan Central Railroad for the month of October were:—

	1858.	1859.
Passengers.....	\$103,603 29	\$89,198 15
Freight.....	100,262 86	131,386 17
Miscellaneous.....	6,001 88	5,492 15

Totals.....\$209,868 03 \$226,077 07

Increase in October, 1859.....\$16,209 04

The following is a statement of the earnings of the Buffalo, New York and Erie Railroad (Buffalo to Corning), for the month of October, 1859, compared with the same month of last year:

	1858.	1859.
From passengers.....	\$17,301 62	\$14,561 75
From freight.....	39,821 96	40,155 74
From other sources.....	1,337 81	1,540 17

Totals.....\$58,541 40 \$56,257 66

The Norwich and Worcester Railroad earned in October, 1859, about.....\$35,000
October, 1858.....31,000

Increase.....\$4,000

The receipts of the Grand Trunk Railway of Canada for the week ending Oct. 22d, were.....\$60,046 16

Week ending Oct. 23, 1858.....54,877 89

Increase.....\$5,168 27

Total traffic from July 1st.....\$785,397 13
Same period last year.....707,969 44

Increase.....\$77,427 69

The earnings of the Chicago and Rock Island Railroad in October, 1859, were.....\$122,640
October, 1858.....85,647

Increase, 30 per cent.....\$36,993

The following is a statement of the earnings of the New York Central Railroad, for the month of October, 1859, compared with its earnings for the corresponding month of the previous year:

1859.....	\$720,202 16
1858.....	653,660 81

Increase.....\$66,541 35

The earnings of the Michigan Southern Railroad company, during the month of October were:

	1858.	1859.
Freight.....	\$96,578 48	\$74,313 24
Passengers.....	93,753 40	128,313 71
Mails.....	4,635 14	4,583 71
Miscellaneous.....	3,248 91	7,258 00

Total.....\$198,215 93 \$214,468 66

Increase in 1859.....\$16,253 73

The receipts of the Cleveland and Toledo Railroad for the month of October were:—

October, 1859.....	\$78,300
" 1858.....	79,400

Decrease.....\$1,100

The receipts of the New York and New Haven Railroad for October, 1859, were:—

Passengers.....	\$100,179 59
Freight.....	15,775 00

Total.....\$115,954 59

Less dues other roads.....30,103 97

\$85,850 62

Receipts for Oct., 1858.....72,849 93

Increase.....\$13,000 69

The net receipts of the New York and Harlem Railroad Company for October are as follows:

1858.....	\$85,302 64
1859.....	97,857 39

Increase.....\$12,554 75

The earnings of the Toledo, Wabash and Western Railroad for October, were as follows:—

From passengers.....	\$22,484 23
From freight.....	48,858 76
From mails and express.....	3,316 66

Total.....\$74,659 65

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (.....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected.	Cars.				Property and Assets.					Liabilities.					Gross.	Net.	Dividends.		
					Engines.	Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling Stock.	Invested in other works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	p. c.			p. c.		
	M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.	
NEW YORK.																							
30 Sep. '58				140.0		5	12	53	Albany and Susquehanna	227,856			275,793			8,697							
30 Sep. '58	32.0		3.3						Albany, Vermont and Canada	1,557,502	136,038		439,005	1,575,099		50,000							
30 Sep. '58	38.3		34.0						Albany and West Stockbridge	2,289,334			1,000,000	1,289,934									
30 Sep. '58	84.9	2.6			73.6	4	6	39	Black River and Utica	1,153,909	81,405		604,648	662,500	52,570								
30 Sep. '58	14.8		1.6						Blossburg and Corning	496,661			250,000	220,000									
30 Sep. '58	142.0	78.0	13.6		26	32	353	Buffalo, New York and Erie	2,975,325	*		680,000	2,490,598	164,938									
30 Sep. '58	68.3		18.0		28	34	312	Buffalo and State Line	2,460,251	312,736		1,913,000	1,049,000	172,378									
30 Sep. '58	24.6		38.1						Cayuga and Susquehanna	1,010,058	79,542		687,000	426,000	7,042								
30 Sep. '58	17.4		2.1						Chemung	400,000			850,000	70,000									
30 Sep. '58	46.8		2.9		10	8	83	Elmira, Canandaigua & N. Falls															
30 Sep. '58			63.2						Erie and New York City	283,735			350,072	14,000	27,411								
30 Sep. '58			15.0						Genesee Valley	91,889			59,274	58,500	23,404								
30 Sep. '58	17.3		0.5						Hudson and Boston (West'n)	148,000	27,000		175,000										
30 Sep. '58	144.0		106.5		57	107	537	Hudson River	10,146,617	1,182,372		3,758,466	8,842,000	455,003									
30 Sep. '58			73.8						L. Ontario, Auburn & N. York	74,203			75,771										
30 Sep. '58			182.0						L. Ontario and Hudson River	3,497,538	178,320		2,715,186	870,000	115,856								
31 Mar. '59	84.0	2.5			8.5	19	34	185	Long Island	2,211,659	354,611	1,000	1,852,715	639,497	144,566								
30 Sep. '58	207.8	258.1	313.8		218	258	2,869		New York Central	25,475,490	5,257,077	8,193,000	24,182,400	14,402,635	43,079	40,635,635	555.9	3,669,194	6,528,412	3,941,120			
30 Sep. '58	446.0	19.0	282.5		210	183	2,684		New York and Erie	29,909,749	4,148,885	973,083	11,000,000	26,371,611	1,707,575	39,079,086	496.0	3,000,239	5,151,616	1,086,575			
30 Sep. '58	330.8	21	30.9		33	89	430		New York and Harlem	7,303,239	694,777		6,717,100	5,151,287	147,640								
30 Sep. '58	118.0	8.8	17.7		28	8	417		Northern (Ogdensburg)	4,086,712	702,079		1,494,000										
30 Sep. '58	35.9		2.2		7	6	4		Oswego and Syracuse	660,919	100,462		396,340	197,000	16,415								
30 Sep. '58	75.4		2.0		6	4	33		Potsdam and Watertown	1,523,646	63,382		663,077	818,500	180,138								
30 Sep. '58	25.2		2.1		5	13	70		Rensselaer and Saratoga	743,977	156,573		610,000	140,000									
30 Sep. '58	18.4		1.3	32.6					Rochester and Genesee Valley	653,539			555,450	150,000	30,417								
30 Sep. '58	18.0		1.0						Sackett Harbor and Ellisburg	371,656	17,714	*	167,485	278,400	56,810								
30 Sep. '58	21.0		1.6						Saratoga and Schenectady	490,884			300,000	86,500									
30 Sep. '58	40.9	6.6	3.9		9	12	84		Saratoga and Whitehall	820,518	74,904		500,000	395,000	5,456								
30 Sep. '58			13.2						State Island	40,000			40,000										
30 Jun. '59	11.0								Brooklyn and Jamaica	369,856			284,500	85,000									
30 Sep. '58	61.3		7.1		13	12	117		Syracuse, Binghampt. & N. Y.	2,557,607	*		1,200,130	1,500,000	59,418								
30 Sep. '58	27.2		7.7		7	4	65		Troy and Boston	1,296,302	125,887		668,297	797,500	231,083								
30 Sep. '58	6.0		0.1						Troy and Greenbush	258,658	36,073		275,000										
30 Sep. '58	2.1		0.1						Troy Union	732,114			30,000	680,000									
31 Dec. '58	96.8		11.0		7	11	298		Watertown and Rome	2,150,295	*	28,000	1,498,500	690,000	85,071	2,278,611	96.8	215,605	397,712	157,000			
NORTH CAROLINA.																							
30 Sep. '58	95.2	2.0							Atlantic and North Carolina	1,850,000	*		1,600,000	400,000									
30 Sep. '58	223.0								North Carolina	4,235,000	*		4,000,000										
30 Sep. '58	97.0								Raleigh and Gaston	1,240,241	*		973,200	129,200									
30 Sep. '58	161.0				22	22	166		Wilmington and Manchester	2,548,263	*	223,150	1,125,315	973,000	259,621	2,890,239	171.0						
30 Sep. '58	161.9				24	32	144		Wilmington and Weldon	2,776,404	*	107,000	1,340,213	916,222	104,948	3,156,474	171.0	296,996	446,583	225,442			
15 Mar. '59					43.0				Western North Carolina	190,793	*	4,700	290,212			70,860	364,072						
OHIO.																							
31 Dec. '58	118.2				17	12	208		Atlantic and Great Western	613,231	*		666,039		77,294								
1 Aug. '58	137.0				41	39	508		Bellefontaine and Indiana	3,008,919	*	11,000	1,879,370	1,274,828	39,028	3,370,281	118.2						
31 Mar. '59	60.3				22	28	432		Central Ohio	5,575,515	806,633	106,133	1,627,906	3,869,300	1,252,440	6,894,557	141.0						
30 Sep. '58	37.0				62.1				Cine., Hamilton and Dayton	2,648,266	504,892	26,500	2,155,800	1,411,000	82,618	3,650,710	60.3						
1 May, '59	131.8				31.0	10	10		Cine. and Indianapolis June.		*		2,441,176	3,032,000	228,973								
31 Dec. '58	135.4	5.8			42	31	439		Cine., Wilmington and Zanesv.	6,250,847	*		4,746,100	38,000	8,242	5,343,275	141.2						
31 Dec. '58	67.0				18.0				Cleveland, Columbus and Cine.	4,087,571	654,955	67,422	2,441,176	1,202,300	161,200	1,943,500	67.0						
31 Dec. '58	95.4	1.2	37.9		31	39	453		Cleveland and Mahoning	1,920,953			580,000	1,202,300	161,200	1,943,500	67.0						
30 Nov. '58	101.0	102.5			42				Clev., Painesville & Ashtabula	3,383,114	620,532	523,000	3,000,000	1,367,099	119,512	4,588,932	96.6						
30 Apr. '59	109.2	79.4			32	52	430		Cleveland and Pittsburgh	9,820,288	*		3,942,868	4,918,325	653,821	9,661,102	203.5						
31 Dec. '58	61.4				53.0	6	99		Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720	358,605	7,588,918	188.6						
31 Dec. '58	72.0				31.0	6	9		Cine., Zanesville and Cincin.	1,574,693	*		390,673	575,250	632,486								
30 Nov. '58	54.5	10.4							Columbus and Indianapolis	2,555,000	*		750,000	1,600,000	205,000								
31 Dec. '58	72.0				72.0				Columbus and Xenia	1,376,250	392,900	112,734	1,490,000	290,700	50,509	1,965,559							
31 Aug. '58	36.6					5	3		Dayton and Michigan	3,746,000			1,620,000	2,126,000									
31 Aug. '58	16.0				47.0	3	87		Dayton and Western	800,262	104,912		289,692	700,000	90,482	1,080,174	36.6						
31 Dec. '58	45.0				6	5	72		Dayton, Xenia and Belpre	860,496	*		437,838	422,658									
30 Sep. '58	36.0				84.0				Eaton and Hamilton	1,101,744	79,022	62,630	469,762	728,553	152,094	1,358,867	43.0						
31 Aug. '58	32.0				6	5	68		Fremont and Indiana	888,000	*		300,000	473,000	75,000								
30 Nov. '58	13.0				34.0	1	2		Greenville and Miami	172,830	*		118,865	50,000	3,965								
30 Nov. '58	82.5	37.8			39	32	602		Iron	3,451,179	785,817	438,857	2,981,239	1,399,000	34,196	4,709,137	138.0						
31 Dec. '58	173.8	2																					

Extract from Messrs. Weston, Dortic & Co's Money Circular for the European Steamer of Nov. 9th.

[TRANSLATED.]

NEW YORK, Tuesday, Nov. 8th, 1859.

The following is a translated extract from Messrs. Weston, Dortic & Co's semi-monthly European Circular, prepared for steamer "Persia."

There continues to be but little animation in the dealings on our Stock Exchange. During the last fortnight prices of Railroad Bonds have generally improved, whilst the market has been quite irregular for other descriptions of securities. A marked decline in quotations for Illinois Central Railroad Shares, and a further advance on Erie Railroad Bonds and Shares, have been the leading features. Yesterday and to-day the market generally has evinced symptoms of weakness, attributable, in a measure, to the unsatisfactory tenor of the political advices from Europe.

There has been no decrease in the supply of money, rates for which remain about the same. The arrangement proposed by the Directors of the Erie Railroad Company has been favorably received, and the agents of the English bondholders have subscribed to it to the extent of about \$800,000. We understand that some of the leading bondholders here have likewise assented to the same, while many others are waiting in order to ascertain the views on the subject of the Continental European bondholders. Money is very abundant—call loans 5a6; prime endorsed paper, 6a7½ per cent. per annum, according to maturity. Exchange on London is weaker, the principal sales having been at 110a110½; on Paris the rates are unchanged, 5.13¾a5.13½.

American Railroad Journal.

Saturday, November 12, 1859.

Covington and Ohio Railroad.

An adjourned meeting of the citizens of Kanawha City and County was held at Kanawha, Va., on the 16th ult., at which a preamble and series of resolutions were adopted, the purport of which is as follows: That the completion of this road to the Ohio River has been an object of anxious solicitude for years past; which, thus far, has been doomed to disappointment; that the true interest of the State will be best promoted by the energetic prosecution of the work on a scale of operations that will secure its speedy completion; that the road occupies the most eligible route for connecting the east with the west; that its completion is essential to the success of other works of internal improvement in which the State is largely interested; that it will be of incalculable value to the central west, by opening up to actual and profitable use, the immense mineral treasures lying along the line of its route, which alone would supply a tonnage sufficient to afford remunerative employment to the road; that it would be economy on the part of the State to make an annual appropriation of not less than \$2,000,000 until it is completed, and fully equipped, to the Ohio River; that it would have a most beneficial influence in binding together the affections and interests of the eastern and western portions of the State; that it would build up in Eastern Virginia a large commercial emporium, by carrying to the waters of the James River and Chesapeake an immense trade that now seeks other lines of transit, while at its western terminus a city could not fail to be built up, at which capital, enterprising citizens and large manufacturing interests would concentrate; and that, regarding this work as an obvious instrumentality in renovating the State, and of re-

storing her to her ancient position in the confederacy: the Senator of the district and delegates of the county should be instructed to press upon the consideration of the legislature the importance of the work, and the great interest of the State which are involved in it, and to use all proper means to secure a liberal appropriation to the road during the approaching session, and thus reassure its friends of the determination of the State speedily to complete it to the Ohio River.

Sunbury and Erie Railroad.

This great work is rapidly approaching completion. Its nominal southern terminus is at Sunbury, a small but growing city on the Susquehanna, about two miles below the junction of the West branch with the main river. In the angle formed by the junction of the two rivers, is situated Northumberland, a town which many years since was thought to be destined to a rapid growth, but which, on the contrary, has been at an entire stand still, if not positively retrograding. At present it is mainly supported by the lumber interest. Opposite Sunbury is the village of Shamokin. Not far above Northumberland is Louisburg, but on the opposite side of the river from the railroad track. This is a thriving place, and most beautifully situated. The road passes up the West Branch to Williamsport, through a section of country most of which is very fertile and beautiful. Williamsport is a thriving business place; large quantities of lumber are manufactured there, and an immense amount of capital and labor is employed in its numerous extensive mills. From Williamsport to Lock Haven is a distance of about 30 miles. Lock Haven contains some three or four thousand inhabitants, and is rapidly increasing. Above Lock Haven are coal mines, somewhat extensively worked—those on the Tangascootac Creek employing a steamboat to tow their canal boats to and from Lock Haven. Considerable beds of ore exist near Farrandville, about seven miles above Lock Haven. Probably these mines, and many others rich in iron ore, which are known to exist in this region, will be opened and worked after the completion of the railroad. To the mouth of the Sinnemahoning Creek the line follows the course of the West Branch through a valley some of which is good farming land. About 40 miles above Lock Haven, it leaves the West Branch and passes up the Sinnemahoning Creek a distance of about 12 miles. Here the Creek ends, and is divided into two streams, called the Bennets and Driftwood branches. The line passes up the latter branch, through a country similar to that on the main stream. Large quantities of excellent pine timber are found here. Coal has also been discovered in considerable quantities, and iron also abounds—so that this region, after the completion of the road, will be a valuable portion of the State. Leaving the Driftwood Branch, the line passes through Ridgeway, the County seat of Elk Co., and through St. Mary's, a considerable town, to Warren City. The road is already completed, and the cars running as far as the Sinnemahoning. From Erie, east, it has been finished to within 22 miles of Warren. When completed, it will open the most direct communication yet established between Philadelphia and the Northwest. The country through which it passes is exceedingly rich in internal wealth. That the road will pay excellently, there seems no doubt. Con-

siderable difficulty was experienced in obtaining the necessary funds to build it, but it will eventually compensate its owners for all their investments and expenditures, though made on the most liberal scale. Pennsylvania will soon rank for internal improvements, as she already does for mineral wealth, as the very first State in the Union.

Parkville and Grand River Railroad.

We have received a pamphlet, purporting to be an address of the Board of directors of this road to the citizens along its contemplated route. From this we learn that steady and uniform progress has been made from the beginning. The books show \$225,000 of stock, mostly private subscriptions of wealthy farmers, made chiefly in Platte county and vicinity. At Smithville and beyond, the subscriptions are conditional, and the books have not been returned.

The grading and masonry of the first five sections is being steadily done. This is the most difficult portion of the line. An assessment of five per cent. on the capital stock has been made. Parkville paid her city assessment in cash at once. The work will be pushed as fast as subscriptions are made and assessment paid up, it being the policy of the company to progress as fast only as circumstances will permit.

Along the divide from Cameron, southwest, the road can be graded for \$1,000 per mile, for 25 or 30 miles. The grading and masonry of the first five miles from Parkville will cost \$6,000 per mile. The balance of the way it will cost between \$3,000 and \$4,000 per mile. To lay the track and have it ready for the cars, will cost \$10,000 per mile, and the Hannibal and St. Joseph Railroad Company have signified their willingness, for the present, to run their rolling stock over the line, on reasonable terms. The company could then finish up with the profits of the roads, and purchase the rolling stock at their leisure. With equipment and fixtures complete, the road would cost about \$16,000 per mile, in cash or its equivalent.

The subscriptions south of Smithville, without including that point, are more than enough to grade and tie the road ready for the iron, the entire length from the Missouri river to the Hannibal and St. Joseph Railroad. The reason the whole line is not under contract, and in process of rapid construction, is the supineness of the northern portion of the line. The location can only be based upon subscription, and the road will be located when the subscriptions are made to build it.

The Platte Co. Railroad is being constructed from the terminus of the Pacific Railroad at Kansas City, via Parkville and St. Joseph, to the Iowa line, in the Northwest. The preliminary survey of that road runs an easterly course from Platte City along the divide, into the prairie; thence southerly to Parkville. From this point in the prairie, the Parkville and Grand River road will leave the Platte Co. road; and if arrangements are made to use the road jointly between Parkville and that point of departure in the prairie, the entire subscription can be applied from the junction northward, which with suitable subscriptions in Clay and Clinton counties will enable the company to complete the road through. By this result Atchison, Iatan, Weston, Fort Leavenworth, Leavenworth City and Platte City will have equal benefit of the road, with Parkville, Kansas City, Quindaro and Wyandotte. All would unite in a

common trunk through to the St. Joseph Railroad.

Parkville is the centre of the richest section of upper Missouri. At this point will be centrated two great natural and artificial arteries of commerce—the Missouri, navigable to the far northwest, more than 4,000 miles, and southward to St. Louis, New Orleans and the Gulf of Mexico; and the Pacific Railroad from St. Louis, and the Platte Co. Railroad, extending to Council Bluffs and to Sioux City, open for traffic at all seasons.

Opposite the terminus of the Parkville road, the Kansas Valley opens a level route to the mountains, and a company is organized, and a route surveyed to Manhattan and Fort Riley.

Another great route from Parkville is projected southwest, down the Neosho, in the direction of Fort Gibson, to Texas, there connecting with the Texas Central Railroad, now being constructed to Galveston and the Gulf of Mexico.

The Parkville and Grand River Railroad touches the Missouri river where it bends to the east, opposite the outlet of the Kansas Valley. It will eventually be extended northward through Gallatin to the Iowa line, connecting with the roads projected through Iowa and Minnesota to Lake Superior. It will connect with St. Louis through the Hannibal and St. Joseph and North Missouri Railroads; with Chicago through the Quincy and Palmyra and the Chicago, Burlington and Quincy Railroads; and through the Great Western and Wabash and Toledo roads, with all the great eastern lines to the Atlantic seaboard. Such is the great system inaugurated by building this central link from the Missouri river to the Hannibal and St. Joseph Railroad, a distance of 47 miles.

New Developments.

Chicago and St. Louis must forever retain their pre-eminence as commercial centres. They are not, however, destined to retain the monopoly, the spirit and determination of their citizens in pressing forward works of improvement, have hitherto given them. Incited by their example and eminent success, other localities have entered the arena, and loom up to a future, which, in the nature of things, was not their own. Quincy, and the city which must eventually spring up on the opposite shore of the Mississippi, are here specially alluded to; and to these, the recent opening of the Palmyra branch of the North Missouri Railroad, and the straight line between Logansport and the Peoria road, has directed the eyes and thoughts of commercial men. Who could ever have attributed to Quincy anything more than the "eclat" of a good steamboat landing? And yet, what do we now see? A few miles (268) of railroad from Chicago has already concentrated within its limits 20,000 inhabitants, and given it a name among the interior marts of trade; and now it has the additional facilities above alluded to. In this connection we may also name the growing cities of Hannibal in Missouri, and Douglass in Illinois, which the no-distant completion of the Pike (Ill.) County Railroad (43 miles) will bring into that consequent activity which has so universally attended the enterprise of our Western trading marts.

Flint and Pere Marquette Railroad.

Eight miles of track on this road, from East Saginaw to Cass river, are already laid, and the grading is all finished up but about a mile.

Sacramento Valley Railroad.

This road is 18 miles long, extending in a northern direction from Sacramento, Cal., to Folsom. It is the only one in the State, and the first on the North Pacific coast. It is well constructed, quite straight and perfectly level—involving scarcely any expense for grading. It is in process of construction northwardly towards Marysville. A considerable amount of freight business is done on the road; and still more in the carriage of passengers for the Upper Mines, at and beyond Grass Valley, Auburn, Nevada, etc. Folsom is quite a populous mining town. Here the railroad will cross the American river, and a long and excellent bridge is already erected; alongside of it is a very handsome and well constructed wire suspension bridge for ordinary travel.

Covington and Richmond Railroad.

The *Piqua Inquirer* says that the project of building a branch road from Covington, Ohio, to Richmond, Ind., to connect with the Indiana Central Railroad, is being actively canvassed through that region. The route lies over a very level country—the grade not exceeding 25 feet to the mile. There are but few streams that will require bridging. About \$150,000 will suffice to put the road in running order. If built, it will prove of incalculable value to both Piqua and Richmond, and be of much more advantage than any other route running through either of these important towns; as it will at once open direct eastern and western connections for the immense trade and travel that this section of country is fairly entitled to.

Iron Railroad Bridges.

We learn from the *Portland Advertiser* that the iron bridge across the Presumpscot, on the Portland section of the Grand Trunk Railroad, has been completed. It was constructed by the Portland Company, is 300 feet long, and cost \$25,000. This is the fourteenth iron bridge put upon that section of the road, and is said to be one of the handsomest and most substantial bridges on any line of railway in New England, if not in the whole country. It was built under the direction of Mr. SPARROW, Superintendent of the Portland Co., and Mr. CORSER, Superintendent of the road, to whom great credit is accorded for having executed so acceptable a work of such magnitude.

Logansport and Peoria Railroad.

This road, which has just been completed, runs from Logansport, through the counties of White, Cass and Jasper, in Indiana, to Peoria, in Illinois, where it connects with a line to Oquawka and Burlington, which is met at the latter city by another line having its western terminus at Council Bluffs, on the Missouri. About one-third of the Iowa road is finished, and it is expected that the remainder will be completed at no distant day.

Dubuque and Pacific Railroad.

We learn from the *Dubuque Times* that the trains are now running on this road as far as Masonville, 16 miles beyond Nottingham. Beyond that point the track is graded to Independence, and track-laying proceeding at the rate of three-fourths of a mile per day. The travel and freight business has greatly increased during the past month, the earnings for the week ending Oct. 22d having been \$2,148.88, exclusive of materials carried for the road.

Brooklyn Central Railroad.

This road is based on the Old Brooklyn and Jamaica Railroad, now being abandoned by the Long Island Company, which has operated it since its opening in 1843. The share capital of this company is \$500,000; and this is estimated to be sufficient for the commencement of operations. The Brooklyn and Jamaica Railroad will be purchased; and other portions of the line are now in progress. The line to be occupied by this company will run from Wall St. Ferry through Furman street to Atlantic, and through Atlantic street and Atlantic avenue to East New York and Jamaica, with branches through Fifth avenue to Greenwood and Flatbush, and also through Lexington, Bedford and Gates avenue to a junction with the Broadway Railroad. A portion of the road is already in operation through Atlantic street and avenue to Bedford. Already \$300,000 have been subscribed.

Western Railroads.

There is cheering news from the West. The railroads from Chicago, Eastward, were never before so laden with business. The Central and Southern roads of Michigan are doing a business fully up to their capacity; and everything promises a large return to capitalists. The increased rates of fare appears to be no drawback. And thus ends the depression under which we have labored for the two years past.

Michigan Southern Railroad.

The *Detroit Tribune* says that the freight business is largely increasing. All the cars of the company are in use, and some have been borrowed from the Wabash road. An additional propeller has been put on the Dunkirk line, one being now daily loaded at the dock. The elevators at Toledo work night and day to keep the grain from accumulating. No less than forty-eight loaded freight trains passed over the road last week.

Grand Trunk Railroad.

We learn that this road has been completed to Detroit, and connected with the Michigan Central Railroad. Passengers and freight can now go through from Portland to Chicago, Cincinnati, St. Louis and Cairo, with a single change of cars. In this connection, we learn that WALTER SHANLY, Esq., an eminent and influential railway manager, has recently returned to the office of General Manager of the entire line.

Western Missouri Railroads.

We learn that there are over 400 men employed on the various railroads now under process of construction centering at St. Joseph. The work of laying the track on the Atchison road is being pushed ahead very rapidly. About four miles are already laid, and the prospect of its being completed this winter is very favorable. The work on the Platte Country and Maryville roads is also progressing finely.

St. Mary's River and Mackinac Railroad.

The contract for the construction of this road was let to Wm. S. SPAULDING, Esq., of Sault Ste. Marie, on the 2d of Oct. This is a State work, is 53 miles in length, and was let for \$40,000. Mr. Spaulding is represented to be one of the most upright and enterprising business men in the upper Peninsula. We have no doubt he will execute his contract faithfully.

Mississippi and Tennessee Railroad.

The fiscal year of this corporation closed, with September. We have the report of the company, giving in detail the operations of the completed portion, together with the progress made upon that part under construction. At the date of the previous report, October 1, 1858, 59 miles of the road were in operation, and contracts for the graduation of 12 additional miles had been given out. These 12 miles are now completed, making 71 miles of operative road, and bringing the track to a point about two miles south of the Yokona, where it is proposed for a time to receive and deliver passengers and freights. This point is accessible to the planting community of the Yokona valley, and country around and south of Oakland. In January last, a favorable contract was closed for the construction of the remaining portion of the road to Grenada, a distance of about 28 miles—the entire work to be completed by the 1st of March, 1861. Of this distance, $7\frac{1}{4}$ miles, to Oakland, will be opened for traffic by the 1st of January next.

The receipts from operations of the road for the past year, has been as follows:

From passengers	\$65,394 24
" freights	106,648 55
" mails	4,425 00
	<hr/> \$176,462 79

And the expenses were:

For conducting transportation	\$24,804 37
" maintenance of way	18,002 35
" motive power	12,700 97
" maintenance of cars	4,521 80
	<hr/> 60,029 49
	<hr/> \$116,433 30

—being $9\frac{1}{2}$ per cent. on the actual cost of the road and its outfit; or $14\frac{1}{2}$ per cent. on the capital stock paid in.

Compared with the previous year, with the same length of road in operation, the earnings show an increase of

increase of	\$15,461 30
And the operating expenses a decrease of	1,133 67

Making an increase in net earnings of

increase of	\$16,594 97
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The operating expenses being entitled to a credit of \$1,800 for trucks made in machine shop for new cars, will leave only \$58,229.49 chargeable to this account, which is but $33\frac{1}{3}$ per cent. of the gross receipts:

If to the pure operative expenses of	\$58,229 49
Be added salaries of officers, office rent, stationery, etc.	7,300 00
Interest on funded and floating debt, exchange, etc.	48,852 98

The aggregate expenses will be

aggregate expenses	\$109,382 47
Which deducted from gross receipts ..	176,462 79

Leaves

leaves	\$67,080 32
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—which have been paid on construction account during the year—equal to a dividend of $8\frac{1}{2}$ per cent. on the capital stock.

By advancing to the contractors \$100,000 in anticipation of work to be done by them, the Directors have obtained from them terms of payment deemed highly favorable to the company, and which can be readily met out of the surplus earnings of the road. No money is to be paid until the completion of the road, and then only 10 per cent., less the amount advanced, and thereafter 20 per cent. per annum, until the extinguishment of the debt—the company paying 8 per cent. in-

terest on the indebtedness. Thus everything is provided for, except the iron and bridging for 20 miles; and the additional equipment required on its completion, and consequent connection with the railroads to New Orleans. For the bridging and equipment, the company rely upon the surplus earnings of the road. But to purchase the iron, they rely upon the sale of their income bonds. For this purpose, the Board recommend the issuance of \$300,000 of income bonds, bearing 10 per cent. interest, and to mature in 10 years from their date; and that a sinking fund of \$30,000 a year be set aside out of the net earnings of the road for the redemption of these bonds, before or at maturity. The sinking fund to commence the first year after the completion of the road. This rate of interest is deemed preferable to a lower rate, provided the bonds can be disposed of at par.

The net cost of construction and equipment of the 59 miles, including discount on bonds sold, amounts to \$1,209,539 12.

Of the \$600,000 of first mortgage bonds, \$200,000 have been deposited with the State of Mississippi, as collateral security for the School Fund Loan—leaving only \$400,000 on the market. Of these, \$250,000 have been disposed of, leaving \$150,000 yet unsold. These bonds are deposited with certain South Carolina banks, as collateral security for the loan of \$100,000, advanced to the contractors, and which the company expect to pay by the sale of the bonds. The further issue of \$300,000 of income bonds, will make the entire amount of first mortgage and income bonds issued \$900,000. This, the directors think, is not disproportionate, upon a railroad 100 miles in length, and costing, when completed, two millions of dollars.

Since the last annual report, estimates to the amount of \$199,903 10, mainly for work done south of Panola, have been returned. Of this amount, \$27,118 20 is for the purchase of iron on four and six months' credit. Two freight engines have also been purchased at a cost of \$18,600, to be paid for in six, nine and twelve months. Two new passenger cars, one baggage car, and eleven box cars have also been purchased on credit. These credit purchases, added to the \$100,000, have increased the floating indebtedness of the company from \$170,622 99, (the amount at date of the previous report) to \$319,518 06. To meet which, the company rely upon the \$150,000 of first mortgage bonds unsold, \$118,782 98 of bills receivable and the earnings of the road the coming season. Having in the future no more money to pay for construction, excepting the per centage before mentioned, the earnings of the road and other resources will be appropriated mainly to the liquidation of the floating debt, the purchase of iron and equipment, and bridging, and paying interest on the funded and floating indebtedness of the company.

According to the engineer's report, the general construction account stands chargeable with the sum of \$1,493,936 09. At the date of the previous report it was \$1,223,732 59—showing an increase during the year of \$270,203 50; to which should be added for discount on sale of first mortgage bonds, \$26,072 61—making an aggregate increase of \$296,276 11.

The equipment of the road consists of 7 engines, 5 passenger, 4 baggage and express, and 104

freight, gravel and hand cars.

CONDENSED BALANCE-SHEET.

Capital stock, paid in	\$798,285 40
Bills payable	275,060 46
Tennessee bonds due 1858	98,000 00
First mortgage bonds due 1876	250,000 00
Mississippi State loan	206,909 07
Earnings of road	173,272 50
Profit and loss	115,800 17
Ledger balance	57,576 87

	<hr/> \$1,974,444 47
Construction, including iron	\$1,254,894 76
Equipment	159,018 11
Maintaining and operating road, 1858-9 ..	59,484 34
Bills receivable	118,782 98
General and contingent expenses ..	62,451 38
Interest and discount	292,566 70
Depot grounds	11,961 30
Loss and damage	867 49
Ledger balances	13,154 59
Cash	1,762 72

\$1,974,444 47

The officers are:

F. M. WHITE, *President*.

C. F. VANCE, *Treasurer*.

N. MERIWETHER, *Chief Engineer*.

M. W. NEWELL, *Superintendent*.

The Glendale Extension.

At a recent meeting of the Directors of the Cincinnati, Lebanon and Xenia Railroad Company, it was agreed to unite with the Cincinnati, Wilmington and Zanesville Railroad, and proposed to sell that portion of their line which is available to the latter company, at a price to be governed by the report of the engineer as to the amount of work already done upon it. The distance is about seven miles. Subscriptions to the amount of \$30,000 were pledged by persons residing upon the line of the road. The work will probably be commenced as soon as the report of the engineer is made.

Grand Trunk Railroad.

The following letter has been issued by the Directors of the Grand Trunk Railway Company to the Shareholders:

21 Old Broad Street,
LONDON, E. C., Sept. 30, 1859. }

SIR:—I am desired by the London Directors of the Grand Trunk Railway Company of Canada to forward you herewith the accounts for the half-year, ending respectively the 31st of December, 1858, and the 30th of June, 1859. The balance to the credit of revenue for the former period, has been £20,678 12s. 9d., and for the latter £20,867 14s. 11d. The Directors can assure the proprietors that these comparatively unsatisfactory results are attributable both to an amount of commercial depression throughout Canada and the Western States of America, following upon the panic in 1857 unparalleled in their history, and to the non-completion of the Victoria Bridge, together with those links by which alone the Grand Trunk Railway will become a continuous line from Detroit (where the lines of railroad from the West and South-west converge) to Quebec, Portland, and Boston. It should also be stated that a considerable increase of traffic may be worked by the staff, and arrangements of the company, as at present constituted; therefore a very large proportion of any improvement in the existing receipts will consist of net revenue. The foundation of the last pier of the Victoria Bridge was successfully accomplished on the 13th of August last. The pier is now nearly completed, and there is every reason to believe that the bridge will be open for traffic in November next. The extension from Stratford to Sarnia, 75 miles long, and the railway from Detroit to Port Huron, opposite Sarnia, 55 miles in length, (promoted in the interests of the Grand Trunk, and to be worked by it,) will, it is expect-

ed, be finished in October, thus completing the connection above referred to. In conclusion, I am to convey the great satisfaction of the Directors, in announcing that a traffic arrangement has been concluded between the Great Western Railway Company of Canada and this company. By means of it, the grounds for competition will be avoided, and the traffic of the two companies will be worked and developed in the manner most likely to prove beneficial to both. I am, &c.

C. P. ROSEY, Secretary.

The "Great Republic."

It is often quite as desirable to know where we eat as to know what we eat. It matters less to a hungry man oftentimes, what his food is composed of, so that it be wholesome, than that it is furnished to him in a nice place with cleanly surroundings. There is nothing which adds so much to the relish of food as the having it neatly served up by prompt and obliging waiters. In these times it is also an item to have it at a reasonable price. Those who wish all these things combined, we advise to look in at NASH'S "GREAT REPUBLIC DINING ROOMS," 77 Nassau street.

Maysville and Lexington Railroad.

We learn from the Maysville Express that the subject of constructing this road is been revived along the line. Its necessity is conceded by all, but the means for its accomplishment are very far short of the requisite amount. The importance of a railroad between these two points should induce capitalists to come forward with greater promptness than they have heretofore manifested in more doubtful public enterprises. The Express says:

Cincinnati, the owners of the Covington and Lexington, the Lexington and Danville, and the Maysville and Lexington Railroads, the railroad companies of the South and East, and the entire South and the entire East, are all deeply interested in the completion of this great railway system. Maysville, with her large interest and deep stake in it, ought to be foremost in urging it forward—ought to co-operate actively with all these interested parties, in its advancement. But organization and system are necessary to give force and effect to our efforts. The isolated struggles of individuals, in behalf of this great work, will avail but little. The community, in its aggregate capacity, must give to the enterprise the momentum and influence of its united voice through some sort of organization.

Detroit and Port Huron Railway.

We learn that an arrangement has been made with the Chicago and Burlington Railway by which the Grand Trunk road, between Detroit and Port Huron, is to be temporarily stocked from the shops of the former company. Six locomotives are to be furnished, together with six passenger, eighty box, two baggage, and ten rack cars. The arrangement is to continue six months.

Edgefield and Kentucky Railroad.

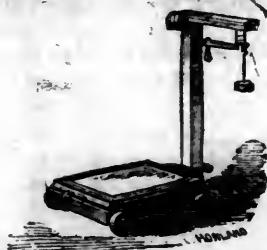
We learn from the Clarksville Jeffersonian that the track-layers on this road have reached the Red river bridge, which is about six miles from the junction with the Clarksville branch of the Louisville and Nashville Railroad.

Maysville and Lexington Railroad.

We are pleased to announce that the authorities of the City of Maysville, Ky., have, in obedience to the mandamus of the Court of Appeals of that State, in the case of the municipal subscription to the Maysville and Lexington Railroad Company, assessed a tax to pay the interest on the bonds. This puts at rest the fears that were entertained that there was not power in our Courts to enforce

their decrees, and further shows that it is only in certain quarters that citizens can be found who are not ready to comply promptly with the law.—*Phila. Press.*

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STANDARD SCALES,

Adapted to every branch of business where a correct and durable Scale is required.

SCALES FOR RAILROADS,
SCALES FOR COAL DEALERS & MINERS,
SCALES FOR HAY AND CATTLE DEALERS,
WAREHOUSE AND TRANSPORTATION SCALES,
PORTABLE AND DORMANT SCALES FOR STORES,
Scales for Grain and Flour Dealers,
Counter Scales, every variety,

BANKERS' AND JEWELLERS' BALANCES,
SCALES FOR FAMILY AND FARM USE,
WEIGH-MASTERS' BEAMS,
POST OFFICE SCALES, ETC., ETC.,

All of which are **WARRANTED** in every particular.
Call and examine, or send for an illustrated circular.

FAIRBANKS & CO.,
189 Broadway, New York.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
OSWELL & PERKINS,
Brokers, 69 Wall st.

New York, July 9, 1859.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about
250 Tons English Rails same size and weight.
M. K. JESUP & COMPANY,
New York June, 1859. 44 Exchange Place.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY,** and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.

New York, Aug. 1, 1858.

RAILROAD IRON

AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
Boston, June, 1851. 29 Central Wharf.

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STAFFORDSHIRE.

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MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS AND BARS of every variety.
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NEW YORK, No. 17 Nassau St.
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NORRIS & BROTHER, Agents.

GREAT REPUBLIC DINING ROOMS,

77 NASSAU ST.,

Between FULTON and JOHN,

NEW YORK.

CHARLES W. NASH, Proprietor.

CAR WHEELS.

1,000 STANLEY'S BEST CAR WHEELS, size to suit, for sale at a bargain for cash or approved paper.
New York, Nov. 2, 1859. 4145 47 Exchange Place.
GEO. T. M. DAVIS.

3 LOCOMOTIVES.

6 FOOT gauge, weight 27 tons. 16x20 cylinder. 138 flues, 11 ft. 2 in x 2 in diameter. Boiler, 44 in. outside connections; for sale at a bargain on 12, 18 and 24 months credit for approved paper adding interest.
New York, Nov. 2, 1859. 4145 47 Exchange Place.
GEO. T. M. DAVIS.

SUBMARINE BLASTING.

PATENT Electric Submarine Safety Fuse Train for military and civil purposes. Also.
A substitute for the Galvanic Battery for sale by
E. GOMEZ,
165 Broadway, N. Y.

TO CONTRACTORS

HAVING CAPITAL.

THE MARYLAND AND DELAWARE R. R. CO., will receive sealed proposals until the first of December for the work and materials of fifty-three miles of road; extending from its junction with the Delaware R. R. at Smyrna, Del., to Oxford Md. forming the shortest co-operation between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River. The resources of the Company (which is free of debt) consist of individual stock, State appropriations, and work already done; but they propose to make payment for the work now offered, *principally* in first mortgage bonds, which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the road are already graded, the entire line located and secured, and the nature of the work very favorable for contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst., and sent by mail on application to J. C. W. Powell, Sec. Md. and Del R. R. Co., Eason, Md.; to whom proposals will also be addressed.

TENCH TILGHMAN,
President.

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. CO.

SEAL PROPOSALS for the Graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office, until **THURSDAY NOON, DECEMBER 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of this Division may be made; but no bid for less than one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Estimate of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly as the above terms are not positively settled.

The Company having a large amount of the finest lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, on application at the Engineer's Office in Van Buren.
2m40 **JESSE TURNER, President.**

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. CO.

SEAL PROPOSALS for the Measure of the First Division of twenty miles eastward from Van Buren, will be received at this office until **THURSDAY NOON, DECEMBER 1st, 1859.** No bids for less than the amount of money upon any one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office in Van Buren.
2m40 **JESSE TURNER, President.**

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,
MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,
44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz - 25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. Y.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK

RAILROAD IRON. THE RENSSELAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS
received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:
BUSSING, CROCKER & DODGE,
32 CHURCH ST.

CAST STEEL, Of First Quality and Warranted.

BAR, TOOL, DRILL, and DIE STEEL.
LOCOMOTIVE, CAR and CARRIAGE CAST STEEL.
CAR SPRING STEEL,
Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gum Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 CHURCH ST., New York.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall st., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

WOOD, MORRELL & CO.,
HAYING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNS TOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA, NORTH PENNA. R. R. BUILDING,
OFFICE, No. 407 Walnut st.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,
13 Cliff st., N. Y.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF
MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Sperm Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer. The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.
Reliable orders filled for any part of the United States or Europe.

THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON,)

Nos. 108, 110, 112, 114, 116 & 118 Cliff St.,
NEW YORK,

For Railroads,
Machine Shops,
Steamships,
Mills, etc.

THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is much less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

6th. It will remain limpid at as low a temperature as sperm.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Eric Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE. CAR AXLES.
BOILER RIVETS. RAILROAD IRON.
CUT NAILS and SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Secy,
Wheeling, Va.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make **CONTRACTS FOR RAILS** delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COMPY,
44 Exchange Place.

New York, 1st June, 1859.

THE GUTTA PERCHA MANUFACTURING COMPANY,
165 BROADWAY, NEW YORK,

(Factory 25th street 10th Avenue.)

MANUFACTURERS
OF EVERY DESCRIPTION OF
Gutta Percha Goods,
Army, Navy, Engineers and Emigrant Equipments,
CLOTHING,
HOSE, PACKING, BELTING,
LOCOMOTIVE BUCKETS,
ENAMELED CLOTHS, ETC.

These goods are free from offensive smell, are pliable and elastic, of fine finish, and unlike India Rubber, will not become decomposed or injured by oils or acids, or affected by the hottest climates.

GEO. N. DAVIS, Treasurer.

DELAFIELD & BAXTER'S,
Late OGDEN & DELAFIELD,
ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our CEMENT for public works, or other purposes. We warrant it equal in every respect to any manufactured in this country. It attains a great degree of hardness, sets immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength. For sale in tight barrels, well packed, on application at their office, by **DELAFIELD & BAXTER, 104 Wall st.** The above CEMENT is used in most of the fortifications building by government.

THE CHEAPEST AND MOST DURABLE ROOFING IN USE.

GUTTA PERCHA CEMENT ROOFING.

Sent to any part of the country with directions for application.

SPECIMENS and references can be seen, and any desired information obtained on application, by letter or in person, at our OFFICE, 510 BROADWAY, N. Y. (Opposite the St. Nicholas Hotel).
JOHNS & CROSLLEY.

THE LAWRENCEVILLE MANUF'G CEMENT COMPANY,
OFFICE 96 WALL ST.,
NEW YORK.

THIS Company manufacture **ROSENDALE HYDRAULIC CEMENT** of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings. For sale upon favorable terms by addressing.

WM. N. BEACH, President.
CHAS. E. LAWRENCE, Sec'y.

CEMENT, PLASTER, ETC.

THE HUDSON RIVER CEMENT CO.
HAVE commenced manufacturing for the season, and can now furnish a very superior article of fresh Rosendale Cement, Calcined Plaster, Farmers' Plaster and Marble Dust. Address
HUDSON RIVER CEMENT COMPANY,
Jersey City, N. J.

Rosendale Hydraulic Cement.

THE NEWARK AND ROSENDALE CEMENT COMPANY are now receiving fresh from the Mills their approved **ROSENDALE CEMENT**, warranted pure and free from quick lime, and which has given such general satisfaction in the various government and other public works in which it has been used. Purchasers and shippers should be careful to get the genuine **ROSENDALE CEMENT**, branded "NEWARK and ROSENDALE," "H. WILDE." This Cement does not swell and burst the hoops when stored in warm climates. It is packed in tight kiln dried barrels, and is specially adapted for safe shipping on long voyages. Terms reasonable, which may be known by addressing,

JOHN H. STEPHENS, President, Newark, N. J., or
HENRY WILDE, Secretary, 90 Wall st., N. Y.

HOFFMAN'S ROSENDALE CEMENT,
OFFICE, 93 WALL ST., NEW YORK.

THE LAWRENCE CEMENT COMPANY are prepared to receive and execute orders for their Cement to an extent that may be required. They would particularly call the attention of purchasers to the distinguishing brand of their manufacture, viz.: **HOFFMAN'S ROSENDALE CEMENT.** This seems to be necessary, as they have established a reputation for the superior quality of their Cement, and there are various other brands offered, as "Rosendale" Cement. It has the unqualified approbation of the most eminent Architects and Engineers, being used in almost every department of the Works under Government. It is put up in the most careful manner, each barrel being well lined with paper, and will be delivered on ship-board, in this city, on the most favorable terms. Particular attention given to shipping orders, and Freight obtained on the best terms.

M. W. WOODWARD, Secretary.

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BANKING and COMMISSION AGENCY.

A. G. JAUDON,
No. 54 Wall street, NEW YORK.
AGENCIES of a financial nature connected with Railroads
Manufacturing and Commercial Business, and Banking
operations generally, receive special attention.
STOCKS, BONDS, NOTES and PILLS OF EXCHANGE
BOUGHT and SOLD on orders.

THOMAS GEORGE WALKER. DAVID TWEEDIE.

WALKER & TWEEDIE,
42 PINE STREET,
NEW YORK.
Business Paper and Bills of Exchange negotiated.
BONDS, STOCKS and other Securities bought and sold.

W. P. STEELE & CO.,
BANKERS,
23 WILLIAM STREET, NEW YORK.
STOCKS and BONDS Bought and Sold on Commission.
Mercantile Paper and Loans negotiated.
Advances made on all approved Securities.
COLLECTIONS MADE throughout the United States and
Canadas.

SIMEON DRAPER, Auctioneer.
By **SIMEON DRAPER,**
Office, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES
At 36 PINE ST., EVERY DAY.
STOCKS and BONDS bought and sold at private sale
Sale every day at 1 o'clock. See Catalogue.

R. H. RICKARD,
MINING AGENT & STOCK BROKER,
Office No. 21 Nassau st., NEW YORK.
BUYS and sells **MINING SHARES, MINES** and
MINERAL LANDS on commission, will examine
Mines and Mineral Lands in any part of the United States, and
report on their value, etc., etc.
REFERENCES.—P. Chouteau, Jr., & Co., New York and St. Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A. Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., Frost & Forrest, Com. Mer's N. Y., John F. Butterworth, Esq., N. Y., G. O. Williams & Co., Detroit, Mich., Capt. D. Tyler, Norwich Conn., Rittenhouse, Fant & Co., Bankers, Washington, D. C.
Particular attention given to Lake Superior business.

EUGENE THOMSON,
STOCK AUCTIONEER AND BROKER.
No. 37 William st., NEW YORK.

AUCTION SALES OF STOCKS and BONDS every
TUESDAY, at 12 o'clock, at the Merchant's Exchange.
RAILROAD BANK INSURANCE, and other SECURITIES bought and sold at the **BANKERS' BOARD, at PRIVATE SALE, or at AUCTION.** All dividends payable in New York collected, and prompt remittances made.
None but bona fide quotations furnished the press.
THE MARKET VALUE OF SECURITIES WILL NOT BE SUPPRESSED OR ALTERED, AND DECEPTIVE OR IRRESPONSIBLE CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES.—Messrs. Wm. and Jas. O'Brien, Thos. Denny & Co., Horace Greeley & Co., Cragin & Co., Todd & Co., J. & C. Berrian, Geo. F. Nesbitt & Co., Eugene Plunkett, Esq., (President Excelsior Ins. Co.), John H. Storm, Esq., (President Lenox Ins. Co.), L. G. Irving, Esq., (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Griscom, M. D., Rev. Edwin F. Hatfield, D. D., Rev. Theo. L. Chuyler, John Camden, Esq., Benj. F. Manierre Esq., New York; Otis Allen, Esq., Albany N. Y. Messrs Gorham & Co., Providence, R. I.

ALBERT H. NICOLAY,
STOCK AUCTIONEER,
BROKER AND BANKER,
No. 52 WILLIAM STREET,
Near WALL STREET, NEW YORK.

REGULAR AUCTION SALES OF
STOCKS and BONDS,
NOTES and other SECURITIES,
EVERY MONDAY and THURSDAY,
(Which have been the regular established days of sale for many years.)

Or **EVERY DAY** (whenver required)
AT 12 O'CLOCK P. M.
At the **STOCK SALES ROOM, No. 52 WILLIAM ST.,**
Or at the **MERCHANTS' EXCHANGE** as desired.

STOCKS and BONDS BOUGHT and SOLD AT
Private Sale and at the **Brokers' Board on Commission.** Interests allowed on Deposits and **Dividends collected.**
SALES also made of

REAL ESTATE
At PUBLIC or PRIVATE SALE WHEN DESIRED.
A large variety of **CITY, BANK and INSURANCE STOCK** constantly on hand at **PRIVATE SALE.**

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STOCK AND BOND BROKER,
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NEW YORK.

MORSE & CO.,
BANKERS and DEALERS in Stocks, Bonds, Exchange
and Commercial Paper, on commission, No. 49 Wall street, and 41 William street, NEW YORK.
Orders for the purchase and sale of Stocks and Bonds, at the **Brokers' Board**, by letter or otherwise, promptly executed.
Cash advanced on sound saleable securities.
REFER TO
G. VAN BAUR & CO., N. Y. CONTINENTAL BK. N. Y.

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CINCINNATI, OHIO.
Railroad Stocks, Bonds, etc., bought and sold, on **COMMISSION.** Regular sales at public auction at the **MERCHANTS' EXCHANGE.**

DUNCAN, SHERMAN & CO.,
BANKERS,
Corner **PINE and NASSAU Sts.,**
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1859
CIRCULAR NOTES and LETTERS OF CREDIT,
FOR TRAVELERS,
AVAILABLE IN ALL THE PRINCIPAL CITIES OF THE WORLD.
ALSO, MERCANTILE CREDITS,
For use in **EUROPE, CHINA, etc.**

H MEIGS, Jr. & SMITH,
BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)
STOCKS and BONDS Bought and Sold on Commission.
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH,
New York, May 11, 1859.

DINGEE & HOLDEN,
AUCTIONEERS and REAL ESTATE BROKERS,
No. 9 NASSAU STREET,
Under Messrs. DUNCAN, SHERMAN & Co.
SOLOMON DINGEE,
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Stocks, Bonds, Mortgages, & Commercial Paper Bought & Sold.

REFERENCES.
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Messrs. Thompson Bros., " Wm.
Bankers, " Hon. Judge Lord, Lt. Crosec,
Messrs. Sewell, Ferris & Co., " Jno. M. Levy, Banker, "
" Hon. Franklin Steele, Minne-
sota.
Geo. P. Rogers, Esq., " A. & W. A. Saunders, Bankers,
A. Gridley, President McLean Co. Bank, Illinois, Mt. Pleasant, Iowa.

UNION
CAR WHEEL & TIRE
WORKS,
JERSEY CITY, N. J.
MOORE & ADAMS,
 MANUFACTURERS OF
DOUBLE and SINGLE PLATE
CAR, ENGINE AND TRUCK WHEELS,
 MANUFACTURERS AND PROPRIETORS OF
MOORE'S PATENT
TRIPLE PLATE CAR WHEEL.
CHILLED LOCOMOTIVE TIRES,
 Made from the best Charcoal Cold Blast Iron.
HIRAM W. MOORE,
GEORGE ADAMS.

G. C. LOBDELL. H. S. McCOMBS. D. P. BUSH.
BUSH & LOBDELL,
WILMINGTON, DELAWARE,
 MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,
FOR RAILROAD CARS

AND

Locomotive Engines,
 ARE PREPARED TO EXECUTE PROMPTLY
 ORDERS TO ANY EXTENT FOR THEIR
CELEBRATED WHEELS,
 EITHER SINGLE OR DOUBLE PLATE,
 WITH OR WITHOUT AXLES.

WHEELS FITTED
 To HAMMERED or ROLLED AXLES,
 IN THE BEST MANNER, AT THE SHORTEST NOTICE,
 AND ON THE MOST REASONABLE TERMS.

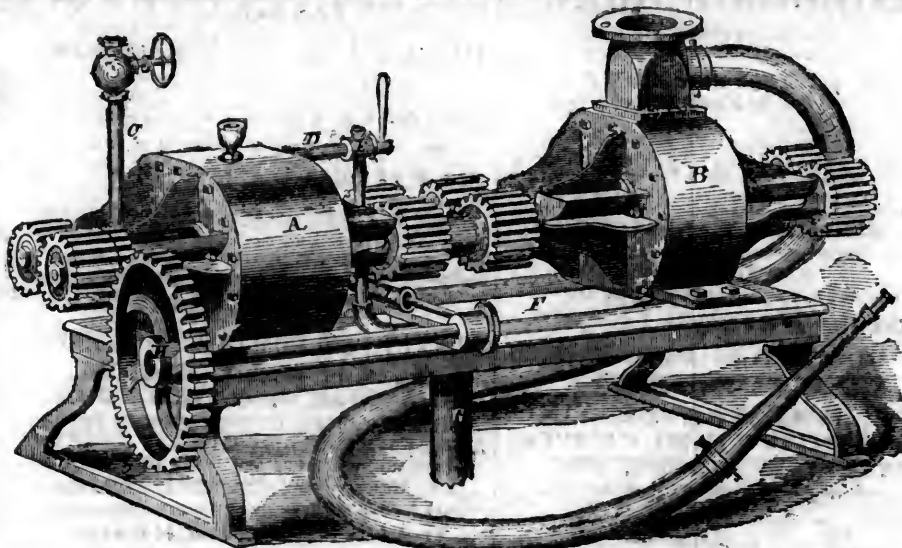
A. WHITNEY & SONS
CAR WHEEL WORKS,
 Callowhill & Sixteenth Sts.,
PHILADELPHIA, PENN.
 FURNISH

CHILLED WHEELS,
 FOR CARS, TRUCKS, and TENDERS.

CHILLED
Driving Wheels and Tires,
FOR LOCOMOTIVES.
ROLLED AND HAMMERED AXLES.
WHEELS and AXLES,
FITTED COMPLETE.

A. N. GRAY, Cleveland, O.,
 RECEIVER AND FORWARDER OF
RAILROAD IRON, CHAIRS & SPIKES.
Also Cars, Locomotives,
 AND ALL KINDS OF
MACHINERY FOR RAILROAD PURPOSES.
 Office, next door to the Custom House, Main street.

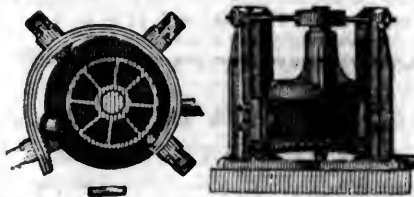
RAILROAD STEAM PUMPS.



HOLLY'S PATENT ROTARY PUMP and ENGINE, the most simple, durable and reliable
 PUMPING APPARATUS, yet introduced. Adapted for Steam Fire Engines, Railroad Stations and Factories, and arranged
 to be driven by Steam, by Power or by Hand.

C. W. COPELAND, 122 Broadway, New York.

HENRY BURDEN'S
PATENT REVOLVING
SHINGLING MACHINE.



THE subscriber having recently purchased the Right of this
 Machine for the United States, now offers to make transfers
 of the Right to run said Machine, or sell to those who may be
 desirous to purchase the Right for one or more of the States.

This Machine is now in successful operation in ten or twelve
 Iron Works in and about the vicinity of Pittsburgh, also at
 Phoenixville, and Reading, Pa., Covington Iron Works, Md.,
 Troy Rolling Mills, and Troy Iron and Nail Factory, Troy,
 N. Y., where it has given universal satisfaction.

Its advantages over the ordinary Forge Hammer are nu-
 merous:
 Considerable saving in first cost; saving in power; the entire
 saving in shingler's, or hammerman's wages, as no attendance
 whatever is necessary.

It being entirely self-acting; saving in time from the quan-
 tity of work done, as one machine is capable of working the
 iron from sixty puddling furnaces; saving of waste, as nothing
 but the scoria is thrown off, and that most effectually; saving
 of staffs, as none are used or required.

The time required to furnish a bloom being only about six
 seconds, the scoria has no time to set, consequently is got rid
 of much easier than when allowed to congeal, as under the
 hammer.

The iron being discharged from the machine so hot, rolls
 better and is much easier on the rollers and machinery.

The bars roll sounder, and are much better finished.
 The subscriber feels confident that persons who will examine
 for themselves the machinery in operation, will find it possesses
 more advantages than have been enumerated.

For further particulars address the subscriber at Troy, N. Y.
P. A. BURDEN.

VULCANIZED RUBBER GOODS,
MACHINE BELTING,
STEAM & PISTON PACKING,
HOSE OF ALL DESCRIPTIONS,
SHOE SOLEING,
LACE LEATHER,
VALVES,
FIRE BUCKETS, ETC.

THE undersigned, Wholesale Agents of the BOSTON
 BELTING COMPANY, beg to call the attention of
 DEALERS and JOBBERS to the above mentioned goods,
 which are conceded by all practical mechanics to be

THE BEST PRODUCED.
 For list of prices, and a full description of goods, terms, etc.,
 apply to

BRAMHILL & CAMPBELL,
 190 William st., near Spruce, NEW YORK.

FAY, WOOD & CO.,
 214 Pearl st., NEW YORK,
 MANUFACTURERS OF
WHITE LEAD, ZINC,
COPAL VARNISHES AND
JAPANS.
 Also, PUTTY, PAINTS and COLORS.

PROFESSIONAL CARDS.

Sylvester W. Barnes,
 Chief Engineer Watertown and Madison R.R., Madison, Wis.

Alfred W. Craven,
 Chief Engineer Croton Aqueduct, New York.

Charles W. Copeland,
 Steam Marine and Railway Engineer,
 122 Broadway, New York.

Davidson, M. O.,
 Chief Engineer Havana Railroad Company.
 HAVANA, CUBA.

C. Floyd-Jones,
 Engineer Alton and St. Louis Railroad,
 Residence, Vandalia, Ill.

Gay, Edward F.,
 Civil Engineer, Philadelphia, Pa.

Robert B. Gorsuch,
 City of Mexico,
 MEXICO.

James H. Grant,
 Civil Engineer, Christians, Rutherford Co., Tenn.

Theodore D. Judah,
 Chief Engineer, and Commissioner of
 San Francisco and Sacramento Railroad, and of
 San Francisco and Sacramento Northern Extension Railroad,
 SAN FRANCISCO, Cal.

S. W. Hill,
 Mining Eng'r and Surveyor, Eagle River, Lake Superior.

Ellwood Morris,
 Civil Engineer, Franklin Institute, Philadelphia.

Mills, John B., Civil Engineer,
 Lake Ontario and Hudson R. R. R., 20 Exchange Place, N. Y.

Osborne, Richard B.,
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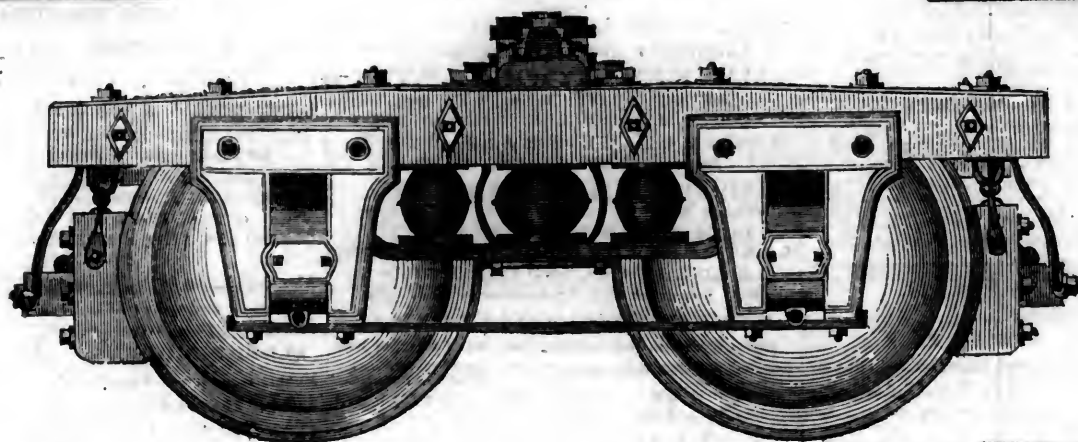
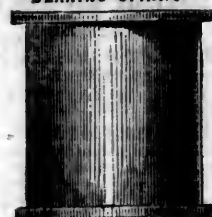


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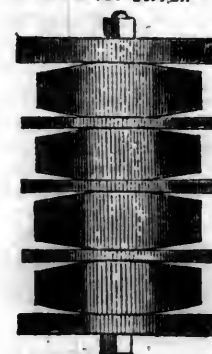
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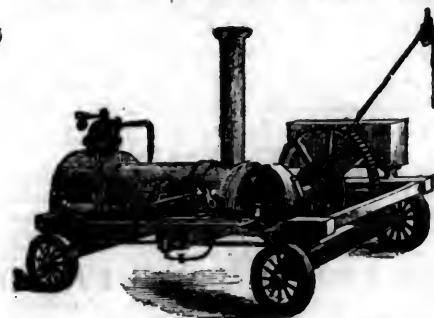
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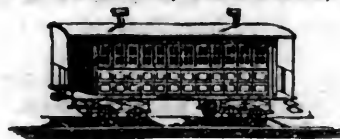


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STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 47.]

SATURDAY, NOVEMBER 19, 1859.

[WHOLE No. 1,231, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, November 19, 1859.

The Gauge Question.

We recently gave the argument of Col. Geo. W. Whistler, late Chief Engineer of the St. Petersburg and Moscow Railroad, in favor of the adoption of a gauge of five feet for that road. We here-with present the argument of H. C. Seymour, Esq., Civil Engineer, addressed to the New York and Erie Railroad Company, in favor of the six feet gauge, which led to its continuance on that road.

OFFICE OF THE N. Y. & E. R. R. }
Aug. 17th, 1847.

To Benjamin Loder, Esq., President of N. Y. & E. R. R. Co.

SIR:—In compliance with the resolution adopted by the Board of Directors of the N. Y. & E. R. R., Dec. 23d, 1846, I had the honor to submit, on the 16th of March following, a report on the subject of the Width of Gauge, wherein I advised the continuance of the present 6 feet gauge as being the most advantageous upon which to construct your road.

Under the resolution referred to, you have also had reports from Major T. S. Brown, Chief Engineer, and Horatio Allen, Consulting Engineer,

both advising a change to the ordinary gauge of 4 feet 8½ inches.

This is a subject of so grave and important a character—one on which the future prosperity of the road so much depends, that I feel fully justified in trespassing largely upon your time and attention, while conforming to your directions to reply to the arguments of the Engineers above-named.

The decision about to be made by the Board will affect not only the interests over which you now preside, but others of unknown importance and extent.

I regard the action of the Directors of this company at this time, as deciding whether railroads in the United States are to be placed in a position admitting of vastly increased capacity for profit and usefulness, or whether they are to be limited to nearly their present ability to meet the interests of stockholders and the public. They are to decide whether New York, as a city, is to be the first among her competitors to reap the advantage to be derived from a system of railways of greater capacity and economy than those extending to the interior from other cities.

I will now refer to the statements and arguments made in favor of the narrow gauge, first, those advanced by Major Brown, and afterwards, such as were submitted by Mr. Allen, of a purport different from those presented by Major Brown.

The first proposition stated by Major Brown is—"That the road can be completed with a double track, on the narrow gauge, and stocked with engines and cars, adequate to accomplish the amount of business, which, in the recent address to the Board of Directors, to the Stockholders and the Public, it is stated it will probably do, for from \$415,476.78 to \$591,025.12 less than the same can be done on the broad gauge, after deducting the expense of changing the track now in use, and making a corresponding alteration in the engines and cars at present owned by the company.

"The annual excess of cost of maintaining the wide track, and keeping in good repair the cars and engines upon it, beyond what would be required for the narrow track, would be equal to the interest at 6 per cent. per annum on \$746,401. This annual excess of expenditure would be \$44,-

784; and with reference to its effect upon the future dividends of the company and its permanent prosperity, the result would obviously be the same, whether a capital, equivalent at 6 per cent. to that yearly outlay, were paid down, once for all, in lieu of it, or the annual tax were provided for as it accrued."

In answer to this statement of Major Brown, I will remark, that if the extra cost of the wide gauge be, as he makes it, to wit: on grading, cars and engines, his highest amount.....\$591,025
And extra cost of repairs..... 746,401

\$1,337,426

—or, an annual tax of \$80,251.56, it is not a difficult task to prove that the investment would be a good one, and to this I shall address myself before leaving the subject.

But is it true that this large extra cost will be incurred by continuing the wide gauge?

Without going into detail I will adopt Major Brown's estimate of \$94,000 for the cost of altering the present track, but do not allow anything for the greater value of the new track which he puts at ¼ of the old, or \$21,212, from Piermont to Middletown.

Major Brown proposes to lay down in this case but one line of sills and the track would be but half new. It is a notorious fact that the first track on a considerable portion of the line was laid with defective timber; during the past and present seasons a very large proportion of this timber has been replaced by new sills and ties; the track cannot therefore be said to be old, and the main operation of taking out the timber will be the means of destroying a large quantity which otherwise would be used from one to three or four years, an item then, for loss of old timber might, with propriety, be added to Major Brown's estimate, and, while some deduction may be made on account of one-half the track being new, I think it fair to offset the gain in the one case, against the loss in the other.

Eighty miles of iron rails will be required in making the change, which otherwise the company would have no occasion to purchase until a double track shall be built. This item is neglected by Major Brown, as, he says, the company can borrow it from the iron purchased for other portions

of the road. This, I believe, is not very likely to happen; the iron which has thus far been contracted for, cannot be borrowed without delaying the completion of the road to Binghamton—an idea not to be entertained a moment. The company will therefore be subjected to the immediate additional expense of purchasing 3,500 tons of iron at a cost of \$280,000. The actual outlay or first cost then, of changing the track as far as Port Jervis, will be \$374,000.

Major Brown estimated the cost of altering nine engines (the number in use) at \$18,700. This estimate is quite low, and should the experiment be made, I fear the company will be disappointed in the result. It should be borne in mind that these engines cannot be used on the narrow gauge, as they are, and that several months will be required in which to make the alteration. As many as three more, or twelve broad gauge engines, must be put upon the road before a change could, by any possibility, be effected. The number to be altered will therefore be twelve. An equal amount of power must be provided and ready to operate, the moment the change is made throughout, and a purchase of not less than twelve engines more than otherwise would be wanted for sometime to come will be necessary in consequence of the change. This will increase the investment in engines, say \$100,000, beyond what it will be if the track remains as it now is.

Major Brown estimates the cost of altering eight passenger cars at \$1,200—my estimates of the loss on these eight passenger cars is, in round numbers, \$1,000 each, or \$8,000. I cannot think it would do to use cars of so wide bodies on a narrow gauge.

He also estimates the cost of changing our freight cars at \$3,595, while I am sure the expense will exceed \$5,000.

The outfit necessary to be provided to take the place of the ones to be altered, and the additional iron required, may be stated as follows:

For Iron	\$280,000
" Locomotives	100,000
" Freight cars	30,000
" Passenger cars	16,000
	<hr/>
	\$426,000

The permanent expenditure for alterations will be at the lowest estimate proper to rely upon—

For Superstructure	\$94,000
" Locomotives	25,000
" Passenger cars	8,000
" Freight cars	5,000
	<hr/>
	\$132,000

In all amounting to the sum of.....\$558,000

This is a large sum to be drawn from the Treasury of the company, at a time when all its means will be required to secure the completion of the road.

I am aware that only \$132,000 is absolutely lost, but the whole amount will, in the first instance, operate as an increased cost of the road over your estimates, and will so continue to operate until all the materials and machinery are otherwise needed, which, so far as the iron is concerned, will be after the road shall have become extended to Binghamton, and required on a double track on this position of the road. It may be noticed that the plan prepared by Major Brown, in changing the track, leaves the old iron on one side of the track, and the new on the other.

Major Brown next estimates the saving to be made by grading the road for a narrow track. He makes two estimates, based on different widths of road-bed, depending upon the width of passenger cars to be adopted.

The subject of cars is of vital importance to this company, and will be considered in another place; but I will here remark that the width of cars ought not to determine the distance between the two tracks. It is now a general rule to place tracks six feet apart on narrow gauge roads—many companies in Europe, and some in this country, place their tracks some seven feet apart—notwithstanding their cars are only 8 to 8¾ feet. A clear space between cars is given of 2 feet 4 inches where the tracks are six feet apart, and 3 feet 4 inches when seven feet apart. The objects arrived at are safety in passing, economy in repairing, by giving workmen sufficient room to make repairs, and to avoid the necessity of piling the snow all on one side of the tracks, as is necessarily the case when the tracks are laid less than six or seven feet apart.

In deciding upon the distance between tracks, other reasons than the width, proper for a car, should therefore have a controlling influence.

Major Brown's least estimate, \$132,737.66, I take to be sufficiently large for the extra cost of grading for a wide gauge for 400 miles of road.

The width to which Major Brown is having the road graded is no doubt sufficient to sustain the superstructure of 6 feet gauge, but I would by no means have it lessened if the gauge should be reduced. The road-bed is now of less width than many prominent roads in this country, notwithstanding the narrow gauge. The Baltimore and Ohio Railroad is graded from 20 to 26 feet wide, the width between tracks being 4 feet 10 inches. The Boston and Worcester is graded on embankments 15 feet for a single, and 24 for a double track. The Western Railroad is graded the same—6 feet between tracks, clear width through truss bridges, 26 feet. The Boston and Maine Railroad is graded the same as the Boston and Worcester, and New York and Erie, for 6 feet gauge, single track, embankments 12 feet, or three feet less than the New England roads named.

The Eastern Division of this road was graded 13 feet wide for a single track, instead of 15 feet, the original plan. In practice, I think that a double track embankment for either gauge should not be less than 25 feet.

I therefore think that a change of gauge would result in no immediate saving on grading, but it may be admitted that ultimately the width would be increased to a greater extent than would be the case if the grade should be changed.

Major Brown next estimates the saving in the first cost of superstructure for a double track throughout the whole line, with suitable turn-outs, depot tracks, &c., &c., at \$72,864. This estimate is made by having the cross-ties one foot and a half shorter for the narrow, than the wide gauge. I do not know of any good reason for making so much difference on the length of the ties, and besides 4 cents deduction for the 1½ foot, as at the rate of 2½ cents per foot, the price paid here for ties 9 feet long is 27 cents, and for ties 8 feet long 25 cents, or 2 cents for the foot difference; which is really more than it should be. It is, however, at the rate of 3 cents for the difference in length

stated, and three-fourths of the price named in Major Brown's estimate which is at least 25 per cent. too high on this item. The difference in cost of timber cannot exceed \$54,648.

The amount to be added for difference of cost of repairs, is estimated by Major Brown equal to an investment, at 6 per cent., of \$173,485. 25 per cent. off, for the reasons just given, reduces this sum to \$130,114.

Major Brown next estimates a large saving on cars and engines. The ground upon which he proceeds is in direct contradiction to that taken by me on this subject, and I am convinced that he has been led into serious errors in adopting the views of Builders and Engineers whose experience has not enabled them to know all the facts bearing upon this point.

He says it is a matter of observation and experience, that the narrow gauge affords the means of building the freight cars of much greater capacity than it is safe to use on loading them, and he refers to a letter from Davenport & Bridges as decisive on this subject. "They say that a car-body 28 feet long and 8 feet wide, will stow from 15 to 18 tons of merchandise as their average."

"The cars on our road are built to carry 12 tons of freight, but they are often loaded to 18 or 20 tons, and if they were any larger than they are, they would be frequently loaded so heavy as to break them down."

Messrs. Davenport & Bridges were sincere in their assertions, and believed that it was a fixed fact that the ultimatum of a judicious size for cars was 8 by 28 feet. Since the date of that letter, however, they have had orders for larger cars from narrow gauge roads. Granting that 8 by 28 feet is as large as a car need be to carry a full load; a car 9 by 25, is one square foot larger, the body is lighter, stronger, cheaper, and 3 feet shorter.

The saving of a train of 20 cars, or of a depot or warehouse covering them, is 60 feet. 9 feet width of car body on a 6 feet track, is much less in proportion, than 8 feet on the narrow gauge.

Major Brown says that—"For light and bulky articles there would be no difficulty in having cars of the narrow gauge of 9½ feet in width, but the danger would be that if such cars were built and mixed with the others of more moderate size in the ordinary traffic of the road, they would constantly be liable to be over loaded and broken down by careless and injudicious management."

I very much doubt the propriety of building any car 9½ feet wide on a narrow gauge. The great overhanging might well be found objectionable. The axle and wheels will be more liable to break; the cost of repairs of the bodies, and the resistance on curves will be increased. But 9½ feet on our present gauge is less than 8 feet on the narrow, and the difficulty complained of, if real, will be obviated by varying the length of the cars.

Major Brown does not mean to rest his proof of the truth of the assertion that the narrow gauge "affords the means of building cars of greater capacity than is safe to use on loading them," upon testimony of our car-builders alone, but he says—"Indeed so clearly is the proposition under consideration, conceded by the English advocates of the broad gauge, that the Great Western Company, in laying before Parliament certain observations on the report of the Commissioners, go to the trouble of giving drawings to show that narrow

cars can as well be made on the broad gauge, as on the narrow one."

I do not doubt that Major Brown intended to give a true representation of the views of the Great Western Company in this matter, and that he really supposed that the object of the drawing were what he states it to be; but it is notwithstanding true, that the object of the company, on presenting these drawings, was to prove facts exactly the reverse, and to show, that after long experience with small wagons on their line, they had been "induced by degrees, and long before this question of gauge arose, to increase their wagons, and at last, to most of them, as large as the gauge admit, and even to construct many of them of 6 wheels, although they retain in use a certain number of the original small wagons not larger or heavier than the present narrow gauge trucks, which facts were proved in Parliament last year."

The above is quoted *verbatim* from the very "observations" which Major Brown adduces to prove his position, and here we have the result of experience, not the opinion merely of builders, or of persons reasoning from false theoretical notions.

The fact is, as stated in my report, *that a large amount of freight, and that in direction of the greatest trade, is so bulky in proportion to its weight, that cars cannot be loaded to their full capacity in tons.*

It is then a matter of the greatest moment that your gauge should admit of cars of greater capacity than is proper in the nature of things to run upon a road of the ordinary gauge.

The economy of having the net freight as large a proportion of the gross load as possible, and of taking full loads at each movement, can hardly be realized by one who has not fully examined this subject. To reason upon this subject, it is safe to premise that there is a limit to the width of a car which the gauge determines without regard to traffic. If the width is found to be 8 feet on a gauge of 4 feet 8½ inches, then, on a gauge of 6 feet, it can be 9½ feet, and still the car will be steadier in its movements, and more durable. In the case of 8-wheeled cars, we make the trucks of equal weight with those on other roads or nearly so; our wide gauge trucks, with inside bearings, being somewhat the lightest.

We have seen that cars 28 feet long are in use on the Eastern roads. This is, I apprehend, about the extreme to which it is prudent to go, but will suppose 30 feet the maximum length. A body 8 by 30 will have an area of 240 square feet, while a car of the same area of 9½ feet wide will be only 25¼ feet long. This car-body will stow more, weigh less, and cost less, than the one 30 by 8 feet.

But the length of cars may be the same on the wide, as on the narrow gauge, and bodies on the wide gauge be made 9½ by 30, or 285 feet area, and will then take but from 3 to 8 tons of the following articles:

Tons of—	Tons of—
Cattle,	Live Hogs,
Calves,	Sheep or Lambs,
Wool,	Hay or Straw,
Dressed Hogs,	Fresh Meats,
Empty Casks,	Wooden Hollow Ware,
Garden Seeds,	Brooms and Broom Corn,
Boots, Shoes, or Hats in boxes,	Cabinet Ware, Chains, &c.
Charcoal, &c.,	

All very much within the weight admitted to be safe. Such cars will really weigh but a trifle more

than those of 25 to 30 per cent. less capacity on the narrow gauge. Nothing being increased but the width of floor, roof, and ends; and in the case of cars, not roofed, the addition is only to the floors.

That cars of different capacities will be productive of greater economy, experience has long since convinced me, and that cars of greater capacity than any now in use on narrow gauge roads, are required, the experience of other roads, as well as ours, fully proves, but all should be of equal width.

The *Great Western* has, as I have shown, made use of all the capacity afforded by a 7 feet gauge, and narrow gauge roads are having cars made wider than is good economy, having reference to the wear of the road, and durability of the car required; but as they come to appreciate the saving to be obtained by increasing the net load, they submit to the losses of wear and tear, as in the whole, a matter of economy. Yet they must stop short of such dimensions as will give the greatest advantage in net loads, and which are quite within the limits of our present gauge.

Major Brown concludes this part of his report by stating—"That more might be said on this important point, but what has been suggested is sufficient to prove very clearly that as many freight wagons must be provided for a given amount of business on a broad gauge as on a narrow one."

This conclusion rests upon the assertion that the area of cars on a narrow gauge is sufficient for full loads, which I have shown to be incorrect, and I further assert that even a 6 feet gauge will not allow, in all cases, for the desired capacity, without making the cars unduly wide in proportion to the gauge, as is now done upon some of the narrow gauge roads. If, however, cars on the 6 feet gauge may be made as wide in proportion as upon the narrow gauge; then the full width, in any case needed, may be reached; for if 9 feet is admissible on the narrow gauge, then by the rule of proportion, 4 feet 8½ inches is to 9 feet as 6 feet is to 11½ feet, the width of cars admissible on our wide gauge.

This, however, is wider than I would propose to make them. If the width of cars upon the narrow roads be adopted on our road, they will ride more smoothly, have less wear and tear, and of course greater economy in repairs of cars and road will be secured; but if, as I expect, a great advantage is found in having them wider, then it is certain that a less number of cars will be required on the wide than on the narrow gauge.

(To be continued.)

Osage Valley and Southern Kansas Railroad.

There is now under contract nine miles of this road, and the work is progressing rapidly. On the 24th of this month, the balance of the road, between the terminus of the nine mile contract and Versailles, will be let. We are advised by one of the Directors of the road that the grade from Tipton to Versailles is so favorable, that the work will not cost quite five thousand dollars per mile, the road then being in condition for laying the track.

Illinois River Railroad.

The Beardstown, Ill., *Gazette* says that nine miles of this road have been laid; and that the work is progressing steadily, with every prospect of soon being completed. The bridging and trestle work is all finished with the exception of that at "Talbot's fill" about a mile and a-half from Beardstown.

Virginia Central Railroad.

We have received the report of this company for the fiscal year ending September 30, 1859, embracing the reports of the President, Superintendent, Treasurer and Chief Engineer, each giving in detail the operations of their respective departments. From the report of the Superintendent, we learn that the receipts have been:

From passengers	\$306,312 15
" freight	311,980 45
" mails	21,633 95
" express	7,041 25
" rent of road and real estate	5,437 20
	<hr/>
	\$652,405 00

And the expenses were:

Conducting transportation	\$110,317 49
Maintenance of way	70,313 11
Repairs of engines	21,288 59
" cars	16,347 53
" shops, tools, &c.	3,266 00
New cars	10,464 00
Depreciation of engines ..	6,300 00
General expenses	23,707 52
Damages to persons	7,703 77
	<hr/>
	269,708 01

Net receipts \$382,696 99
—which is more than 7 per cent. on the whole cost of road and equipment.

Compared with the previous year the gross receipts show an increase of \$65,366 93
With a decrease in expenses of 20,348 02

Making an increase in net receipts of .. \$85,714 95

The road is 178 miles in length, and had cost, at the date of the report, including the equipment, \$5,362,910 53, or an average of \$30,118 71 per mile. The gross receipts per mile of road were \$3,340 31; and the net receipts, \$1,957 20. The current expenses were 41.3 per cent. of the gross receipts. Deducting extraordinary expenses, the net revenue might be set down at \$382,696 99. This sum has been expended as follows:

Paid interest	\$102,764 05
" dividends 4½ per cent.	139,274 22
Reduction of debt, including sinking fund	115,657 92
Tolls on Blue Ridge road, work on Blue Ridge tunnel, etc.	24,300 80
	<hr/>
	\$382,696 99

The total liabilities of the company are as follows:

Funded debt secured by mortgage ..	\$1,247,000 00
Bonds issued for dividends	238,346 00
Floating debt, after deducting present means	43,605 58
	<hr/>
	\$1,528,951 58

Of the funded debt, \$306,000 is payable in 1872 and 1880, and the balance in 1884. The bonds issued for dividends are payable in 1865, 1866, and 1875—all of which is to be provided for by annual contributions to the sinking fund. For this purpose, \$20,000 were set aside the past year. Upon this subject the President says:

There is not a doubt but all the debts of the company will be met at maturity, and unless there should be some very unexpected reverse in the prosperity of the company, the debts will not only be paid, but the stockholders may expect regular dividends, and that the road and its equipment will be well maintained.

It may not be amiss to recall the recollection of the stockholders, that not more than \$300,000 of net revenue was estimated until the year 1864, at which time it was supposed the State work from Covington as far as the White Sulphur Springs, would certainly be in operation, when \$350,000

might be expected as net revenue, and at which time, out of that sum, an addition of \$25,000 annually to the sinking fund ought to be made, for the purpose of extinguishing the last mortgage debt. Now, without any addition to the road of the company in operation last year, and no part of the State work being in use, the net revenues of the company have reached the sum of \$382,696 99.

While your road is in its present incomplete condition, not only with its terminus at a point where there is a sparse population, and a very small amount of labor and capital is employed in any of the pursuits of agriculture, with scarcely any of the resources of the country developed, and 30 miles distant from the White Sulphur Springs, if the gross receipts have reached the sum of \$650,000, and your net revenues are \$380,000, may you not, without deceiving yourselves, conclude that the prospect is a flattering one when the Covington and Ohio road is pushed through by the State? It will then be passing the White Sulphur Springs, in Greenbrier, the most valuable mineral water in the country, besides being in reach of the famous Sweet Springs and St. Sulphur, in Monroe County; and at its Western terminus, will meet the vast trade and travel which will be brought by the navigation of the Ohio, and the railroads now in course of construction from the capital of Kentucky, at which point it will be brought into connection with the whole net work of railroads from the Lakes to the Gulf of Mexico.

The present debt of the company in round numbers, is about \$1,500,000, and the amount of stock held by all parties is, say \$3,125,000; but when the railroad is in operation as far as the White Sulphur, suppose each of those sums increased, that is, the debt to the sum of \$2,000,000, and the stock to the present maximum now authorized, viz: to \$3,400,000.

6 per cent. interest on \$2,000,000 supposed debt	\$120,000
5 per cent. dividend on \$3,400,000, maximum amount of stock	170,000
Annual appropriation to sinking fund increased to \$15,000, to extinguish the last mortgage	45,000
Surplus	25,000
	\$360,000

With a view to avoid misleading the stockholders as to the future, the debt is estimated at a figure larger than it probably will be, when the road is in operation to the White Sulphur Springs; and the net revenue will probably exceed \$360,000.

If the foregoing estimate is realized, after paying interest on the debt increased to \$2,000,000, and setting aside annually \$15,000 for sinking fund, a dividend of 5 per cent. may be expected and leave a surplus of \$25,000.

The capital stock of the company is \$3,400,000—of which there has been paid by the Board of Public Works, on account of the State's subscription, \$1,878,493; and by subscribers other than the State, \$1,353,952 69—leaving unpaid, \$267,554 31.

While nearly \$7,300,000 of aid, in addition to joint stock subscription, in the form of loans and advances, secured only by preferred stock, has been furnished to the other internal improvement companies, no extra aid has been rendered this company by the State, except the simple endorsement of its own bonds to the amount of \$100,000. The Directors, however, feel assured that when the necessity arises for the completion of the unfinished portions of their work, to form a proper connection with the State work at Covington, the Legislature will extend to this company the same assistance in the form of a loan, which it has done to other companies in the State. The importance of this road to the Covington and Ohio Railroad, in forwarding supplies, must be apparent to the Legis-

lature even if the great interests of this company are overlooked. Nothing has been done on the suspended works, but estimates of the cost have been made.

The equipment of the road consists of 27 locomotives, 20 passenger, 8 mail and baggage, 3 conductors, and 209 freight and construction cars.

CONDENSED BALANCE-SHEET.

Capital stock	\$3,132,445 69
Funded debt secured by mort., viz:	
Bonds guaranteed by the State, and payable in 1880	\$100,000 00
Coupon bonds, payable in 1872	206,000 00
Coupon bonds issued, payable in 1884	941,000 00
	1,247,000 00
Bonds issued for dividends, payable in 1866-1875-1865	238,346 00
Bonds issued for temporary loans ..	135,663 94
Bonds issued to contractors	32,718 99
Interest due the State on dividend bonds	29,095 89
Dividends not applied for	12,871 00
Receipts for transportation from commencement	3,960,199 18
Receipts for rent of real estate	5,032 22
Miscellaneous receipts	658 92
Debts due by the company	22,490 69
	\$8,816,522 02

For construction of road and buildings	\$1,835,729 29
For equipment	527,181 24
Real estate	25,196 95
Per centage paid to the State for the Blue Ridge Railroad and tunnel. For work done upon the Blue Ridge Railroad and tunnel	31,677 13
Miscellaneous	41,241 94
For interest	12,121 98
Dividends since commencement	565,487 50
Conducting transportation since commencement	505,356 35
State bonds due the Co.	2,078,695 21
Bills receivable	\$61,300 00
Open accounts	19,262 91
	90,522 17
	171,085 08
Cash on hand 30th September, 1859.	18,149 35
	\$8,816,522 02

The officers of the company are:

E. FONTAINE, *President*.

J. GARRETT, *Treasurer*.

H. D. WHITCOMB, *Engineer*.

THOMAS DODAMEAD, *Superintendent*.

Eatonton and Madison Railroad.

We are much gratified to announce, that the proposition made by Mr. Cuyler in reference to this enterprise, has been approved by the Board of Directors of the Central Railroad. This settles the question as to the building of the road. The C. R. R., it will be remembered, proposes to take the road, when built, work it, and guarantee 7 per cent. to the stockholders. The construction of this link will make Milledgeville accessible by railroad to all sections of the State, and redound to the benefit of the people.—*Milledgeville Union, 5th.*

Selma and Gulf Railroad.

A convention of the stockholders of the Selma and Gulf Railroad was held at Allenton, Wilcox county, Alabama, on the 20th ult. It was ascertained that a majority of the stock was represented, and the convention proceeded to business. Col. W. T. Minter, the President, submitted his report and ordered it to be filed. He expressed the opinion that the stock list would probably amount to \$700,000, and that the road would be completed in two and a half years from the commencement of the grading. An additional subscription of \$30,000 was made forthwith.—*Columbus (Ga.) Sun.*

Journal of Insurance Law

INSURANCE POLICY—RIGHTS OF ASSIGNEES TO CLAIMS FOR INSURANCE ACCRUED AT THE TIME OF ASSIGNMENT.

In the spring of 1854, Michael McNamara insured the contents of a shop and dwelling in the New York City Insurance Company. The policy of insurance was for \$650. A total loss was claimed to have happened on the 1st of September following, and on the 31st of May of the next year, McNamara executed under his hand and seal the following assignment to the plaintiff:

"Know all men by these presents, that I, Michael McNamara, for and in consideration of the sum of \$500 to me in hand paid by Thomas Courtney, of the city of Brooklyn, the receipt whereof is hereby acknowledged, do hereby sell, assign, transfer, and set over unto the said Thomas Courtney, all debts, dues, claims, demands, actions and rights of action which I have, or which belong or accrue to me against and from the New York City Insurance Company, growing out of loss and damage by fire of the property and premises described in Policy No. 1,135, issued by said company; or growing out of any other matter or thing whatever. To have and to hold all and singular the premises hereby assigned to the said Thomas Courtney, his executors and administrators and assignees forever."

Under and by virtue of this assignment, the plaintiff claimed to recover \$650, the whole amount insured, with interest. The defendants, by their answer, alleged, among other defenses not necessary to mention, that the policy, by express condition, was not assignable, either before or after loss, and that the assignment to the plaintiff rendered the policy void.

The referee reported in favor of the plaintiff for the whole amount claimed; and judgment was entered upon his report for the amount with costs, and the defendant appealed.

The opinion of the appellate court was delivered by Judge Brown, and is as follows:

The contract of insurance was between the New York City Insurance Company and Michael McNamara. The loss by fire occurred on the 1st of September, 1854, and on the 8th of the same month the defendants were served with notice and with the preliminary proofs required by the 8th condition annexed to the policy. On the 31st day of May, 1855, after the service of the preliminary proofs of the loss, and after McNamara's right to the amount of the loss had occurred and become perfect, he assigned the claim or demand to the plaintiff by deed duly executed, of that date. Amongst the conditions annexed to the policy, and which are made a part of the contract, is one in the following words, numbered 4: "Policies of assurance subscribed by this company shall not be assignable before or after loss, without the consent of the company, expressed by indorsement made thereon. In case of assignment without such consent, whether of the whole policy or of any interest in it, the liability of such company in virtue of such policy shall thenceforward cease," &c.

Whenever the loss occurs, and the company have notice, and are furnished with the preliminary proofs required by the conditions, the amount of the loss becomes, by force of the contract, a debt payable to the insured presently or at the time appointed in the policy. If the purpose of the 4th

condition, or one of the purposes, is to prevent a sale and assignment of the debt after it had accrued, and the right to it become perfect, I very much doubt whether such a condition is valid or can be enforced, for the reason that it is repugnant to the principal object of the contract. Whenever the right of property in the debt or damages attaches and becomes perfect, all the incidents of property attach also, including the power of sale and disposition. Now this power of sale and disposition is inseparable from the absolute right of property, any condition of the kind attached to the sale of real or personal estate, when there is no reverter or revisionary estate in the vendor, is repugnant and absolutely void.

The effect of such a condition is quite obvious, whatever may have been the motive which made it a part of the policy. It is not to define, ascertain and preserve the rights of the parties, to avoid or terminate controversies, and promote the ends of justice. It evidently contemplates nothing short of resistance and litigation, and thus essays, in advance, to choose its adversary. It is a positive impediment in the way of the assured, for it forbids him to sell, assign, or hypothecate his claim, or to realize a dollar towards the reparation of his loss, and the renovation of his property, except at the pleasure of the company, or the worse alternative of a protracted and costly controversy. It puts it in the power of the insured to prescribe terms of adjustment in disregard of the rights of its weaker adversary. The business of insurance is a most commendable and useful pursuit, fruitful of the happiest and most beneficial results, when conducted with integrity and good faith, and when losses honestly and innocently sustained are promptly liquidated by a ready execution of its obligations. But when they are repudiated or evaded, when just claims are answered by doubts and delays, and technical objections, founded perhaps upon some informality in the preliminary proofs, or as in this case upon some of the numerous conditions annexed to the contract—and finally by a flat refusal to pay, and a litigation unscrupulous and protracted, then it becomes a substantial oppression, and a calamity more grievous than the conflagration in all its fury. I do not think it necessary to determine this question however. If it were, I should most readily adopt the reasoning and conclusion of Mr. Justice Allen, in *Gott vs. The National Protection Insurance Company*, published since the argument. The right of the plaintiff to sustain this action may, I think, be safely placed upon another ground.

Conditions of this kind are to be construed strictly; for they are manifestly in restraint of the free use and enjoyment of the rights of the assured under the contract, and are among the number of those almost innumerable conditions, usually inserted in contracts of this kind for the benefit of the insurers, and which not unfrequently escape the notice of the assured at the time of making the contract. It is the policy of insurance that is not assignable either before or after a loss, without the consent of the insurer. And in case of such assignment without consent, the liability of the company in virtue of such policy shall thenceforth cease. Not that its obligation to pay a debt which has occurred shall be discharged and extinguished, but that the contract of insurance and of future liability shall cease. The language

of the condition can have full effect and receive a sensible construction without destroying or impairing the right to recover a debt already accrued. And that is to regard the language as referring to the future liability of the company and its obligation to make good losses to accrue there after. The liability of the company to the holder of the policy is of two kinds, entirely different, and capable of separation, continued liability as insurers, and liability to pay damages which have accrued, and the right to which have become perfect. In the event of a partial loss, the policy does not cease. The obligation to pay such loss as has accrued exists at the same time with an obligation to make good any loss to be sustained thereafter, qualified of course by the amount of the insurance effected. In the event of a partial loss the damages which have accrued may be assigned to a third person, while the policy may still be held by the insured as security for future losses. The two kinds of liability are clearly distinguishable and severable. Upon looking at the deed of assignment, it will be seen that the subject of it is not the policy of insurance, but the debt, demand and right of action which had accrued to the assignor, in consequence of the loss by fire. The policy, and the contract to insure in future, did not pass by the assignment, but remained in its original condition.

I am therefore of opinion that the words "the liability of the company in virtue of such policy shall thenceforth cease," must be construed to mean its liability as an insurer for losses to accrue thereafter, and not for losses which have already accrued; and consequently the judgment must be affirmed.

Bridge over White River.

The bridge over White river, on the Lafayette and Indianapolis Railroad, which was destroyed by fire a few weeks since, has been replaced by a patent truss bridge, which was ready for the passage of trains yesterday. It is one of the most substantial bridges in the State of Indiana, and cost about \$11,000. The builders were the McCallum Bridge Co., of this city.—*Cin. Com., 14th.*

Competition of the Grand Trunk Railway.

The Grand Trunk Railroad Company of Canada have entered into arrangements for the direct importation of goods from Europe to this country, on account of consignees, under a tariff of freight and charges which offer great inducements for importers to avail themselves of the route. The road has its Atlantic termination at Quebec in summer, and Portland in winter. If a Western firm ships from Liverpool by this line, the goods come all the way through under one contract, the agents of the company at Portland act as the Customs agents, and bond all goods free of charge. The Grand Trunk connects with our Western lines at Detroit, and via Toledo with the Indiana lines, while it will be joined to the railway system of New England by the Victoria Bridge over the St. Lawrence at Montreal. The rate of freight per cent. on hardware and queensware will vary from \$1 to \$1.60 the cwt., according to bulk and description of goods, this sum including all ocean charges from Liverpool to Portland, and transportation by rail from the latter city all the way to Louisville via Detroit and Toledo and the other roads. By these means, the importers must make a great saving in expenses, as they are not compelled to employ the services of custom house brokers, consignees, or commission merchants in the ports of entry. Agencies in all our principal commercial cities of the interior will be established, through which orders can be forwarded and filled in about four weeks, and passengers to Europe may pay

their fare from the very place of starting and have no extras to pay until the completion of the entire voyage. The conveniences attending these arrangements will be appreciated by our business men, and lead to their ultimate adoption very extensively.—*Louisville (Ky) Journal.*

Northern Central Railroad.

The coal trains on the Northern Central Railway, says the Harrisburg Patriot, are now being run to the full capacity of the company to haul them. During the month just terminated, one of the freight engines hauled between Dauphin and Sunbury six thousand and forty-five coal cars, the half of which were loaded for the Baltimore and Southern markets. At almost all points the coal trade is active, but unfortunately there is little time remaining to make up the lack of supply of coal which it is now feared in some quarters may exist.

Debt of St. Louis.

Below we give statements showing the amount of the public debt of the City of St. Louis with the years on which portions of the same fall due.

Names of Accts.	Total issue.	Am't retired.	Am't outstanding.
General Municipal purposes	\$2,508,900	\$832,000	\$1,676,900
Water works	723,896	229,896	494,000
Wharf	168,000	1,000	167,000
Harbor	351,000	92,000	259,000
Public sewers	487,000	61,000	426,000
District sewers	328,500	188,000	140,000
Railroads	1,995,000	216,000	1,779,000
Old limit improvements	300,000	41,000	259,000

Total amounts. \$6,862,296 \$1,660,896 \$5,201,400

The dates at which they fall due are as follows:

Fiscal Months.	Fiscal year.	Am't.	Fiscal Mos.	Fiscal years.	Am't.
December, 1859	1860	\$10,000	May, 1875	1876	\$37,000
March, 1860	1861	23,000	June "	1876	229,000
			July "	1876	76,000
			Feb. 1876	1877	49,000
			Mar. "	1877	29,000
			April "	1877	20,000
May, 1860	1861	\$2,000			
June, "	1861	6,000			
Nov. "	1861	15,000	Total for 1875	1876	\$440,000
Dec. "	1861	10,000			
Jan. 1861	1862	16,000	Nov. 1876	1877	70,000
Feb. "	1862	5,000	April 1877	1878	20,000
April "	1862	3,000			
Total for 1860	1861	\$57,000	Total for 1876	1877	\$90,000
May, 1861	1862	\$6,000	May, 1877	1878	40,000
July "	1862	10,000	June "	1878	163,000
Aug. "	1862	3,000	Dec. "	1878	7,000
Oct. "	1862	1,000	Jan. 1878	1879	46,000
Dec. "	1862	5,000			
Jan. 1862	1863	3,000	Total for 1877	1878	\$256,000
Feb. "	1863	98,000			
Total for 1861	1862	\$126,000	June, 1878	1879	53,000
			Dec. "	1879	25,000
May, 1862	1863	\$41,000	Feb. 1879	1880	59,000
Nov. "	1863	500	Mar. "	1880	5,000
Total for 1862	1863	\$41,500	April "	1880	109,000
			Total for 1878	1879	\$251,000
July, 1863	1864	9,000	May, 1879	1880	5,000
Nov. "	1864	4,000	June "	1880	50,000
Dec. "	1864	1,000	Jan. 1880	1881	56,000
Total for 1863	1864	\$14,000	Feb. "	1881	50,000
			Mar. "	1881	19,000
May, 1864	1865	75,000	April "	1881	16,000
Total for 1864	1865	\$75,000	Total for 1879	1880	\$196,000
			June 1880	1881	194,000
July, 1865	1866	14,000	Aug. "	1881	35,000
Oct. "	1866	81,500	Sept. "	1881	15,000
Mar. 1866	1867	20,000	Oct. "	1881	30,000
April "	1867	50,000	Dec. "	1881	31,000
Total for 1865	1866	\$165,500	Jan. 1881	1882	118,000
			Total for 1880	1881	\$423,000

April, 1867	20,000	Sept. 1881	50,000
Nov. " "	25,000	Nov. " "	20,400
Dec. " "	25,000		
March 1868	100,000	Total for 1881	\$70,400

Total for 1867	\$170,000	May, 1882	18,000
		July " "	74,000
May, 1870	50,000	Aug. " "	97,000
June, " "	150,000	Sept. " "	20,000
Feb. 1871	151,000	Mar. 1883	20,000
April " "	125,000		
Total for 1870	\$476,000	Total for 1882	\$229,000

May, 1871	23,000	May, 1883	29,000
Sept. " "	50,000	June " "	28,000
Dec. " "	50,000	July " "	85,000
Jan. 1872	122,000	Dec. " "	13,000
April " "	50,000		
Total for 1871	\$295,000	Total for 1883	\$155,000

May, 1872	25,000	Feb. 1886	15,000
July " "	75,000		
Sept. " "	105,000	Total for 1885	\$15,000
Nov. " "	24,000	May, 1887	23,000
Jan. 1873	49,000	June " "	9,000
Feb. " "	116,000	Feb. 1888	8,000
		Mar. " "	2,000
Total for 1872	\$394,000	Total for 1887	\$42,000

May, 1873	30,000	May, 1888	18,000
Sept. " "	69,000	June " "	38,000
Nov. " "	97,000	Aug. " "	3,000
Dec. " "	94,000		
July " "	100,000	Total for 1888	\$59,000
Jan. 1874	150,000	Dec. 1890	25,000
Feb. " "	10,000		
Mar. " "	25,000	Total for 1890	\$25,000
April " "	69,000		
Total for 1873	\$644,000	July, 1895	50,000

May, 1874	54,000	Total for 1895	\$50,000
Aug. " "	98,000		
Jan. 1875	182,000	Sundries	20,400
Feb. " "	76,000		
Total for 1874	\$410,000	Total	\$5,201,400

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending November 15, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	6 1/2	
Covington and Lexington, 2d Mortgage	7 1/2	
Ohio & Miss. E. D. Construction	7 1/2	
Hillsboro' and Cincinnati, 1st Mortgage	7 1/2	
Cinc., Ham. and Dayton, 2d Mortgage	7 1/2	
Indianap. & Cincinnati, do.	7 1/2	
Do. do. Dividend	6 1/2	

STOCKS.

Cincinnati, Hamilton & Dayton	Ex Div. 6 1/2
Columbus & Xenia	84
Indianapolis & Cincinnati	49
Little Miami	76

Railroad Earnings.

The following statement shows the business of the Philadelphia and Reading Railroad Company, for the month of October, 1859, compared with the corresponding month of last year, and for the previous ten months in both years:—

1859.	1858.
Received from coal	\$204,795 67
Do. merchandise	46,842 27
Do. travel, etc.	32,007 96
Total	\$283,645 90
Transportation, road-way, dumpage, renewal Fund, and all charges	134,899 51
Net profit for the m'th.	\$148,746 39
Do. for previous 10 mos.	981,022 19
Total net profit for 11 months	\$1,129,768 58
	\$1,047,004 61

The receipts of the Grand Trunk Railway of Canada for the week ending Oct. 29, were.....\$60,484 38

Week ending Oct. 30, 1858	56,229 12
Increase	\$4,255 20
Total traffic from July 1st	\$845,881 51
Same period last year	764,198 61
Increase	\$81,682 90

The revenue of the Baltimore and Ohio Railroad, for October, 1859, was as follows:

MAIN STEM.	
Passengers	\$68,792 47
Mails	7,833 33
Express	5,258 97
Tonnage	274,682 34
	\$356,567 11

WASHINGTON BRANCH.	
Passengers	\$28,854 36
Mails	1,000 00
Express	1,300 00
Tonnage	6,767 04
	37,921 38

N. W. VIRGINIA BRANCH.	
Passengers	\$3,620 74
Mails	866 67
Tonnage	17,953 72
	22,441 12
Total	\$416,929 61

Compared with the same month in 1858, the returns show the following result:

	Oct., 1859.	Oct., 1858.
Main stem	\$332,611 77	\$356,567 11
Washington branch	43,065 41	37,921 38
N. W. Virginia branch	15,717 92	22,441 12
Totals	\$351,395 10	\$416,929 61
Increase for Oct., 1859	\$25,534 51	

The following is the comparative statement of the earnings of the Buffalo and State Line Railroad, for the month of October, 1858 and 1859:

	1858.	1859.
From passengers	\$16,059 91	\$38,364 54
From freight	40,812 87	39,954 79
From other sources	1,150 00	1,701 00
Totals	\$88,022 78	\$80,020 33
Total decrease	\$8,002 45	

The earnings of the Watertown and Rome Railroad in October were:

	1858.	1859.
Passengers	\$14,715 71	\$14,271 23
Freight	31,509 16	26,263 61
Other sources	1,278 26	1,809 88
Total	\$47,503 13	\$42,344 72
Decrease	\$5,158 41	

The earnings of the Milwaukee and Mississippi Railroad for October were—

	1858.	1859.
Freight	\$55,963 17	\$101,025 90
Passengers	34,635 64	20,060 77
Mails	1,877 61	1,835 47
Total	\$92,476 42	\$122,922 09
Increase in 1859	\$30,445 67	

The receipts of the Norwich and Worcester Railroad for the months of October were as follows:

October, 1859	\$31,811 89
" 1858	27,310 64
Gain in 1859	\$4,501 25

The receipts for ten months for 1858-59 were:

1859—Jan. 1 to Oct. 31	\$291,978 79
1858—do.	236,090 10
Gain in ten months of 1859	\$55,888 69
—or 23.6 per cent.	

The earnings of the Macon and Western Railroad for October, 1859, were:

Through	\$1,020 80
Local	12,815 36
Mail	866 45
Freight	27,024 66
Total	\$41,727 27
October 1858	41,494 25
Increase	\$233 02

The following is a comparative statement of the earnings of the North Pennsylvania Railroad Company, for the month of October, 1858 and 1859:

Earnings in October, 1859	\$34,622 42
Do. do. 1858	31,217 22
Increase	\$3,405 20
Earnings in 11 months, ending Oct. 31, 1859	\$315,466 49
For same time last year	270,353 36
Increase	\$45,113 13

The road is 66 miles long, including the Doylestown Branch of ten miles.

The traffic of the Great Western Railway of Canada for the week ending Nov. 4, 1859, was as follows:

Passengers	\$23,461 65
Freight and live stock	17,942 21
Mails and sundries	1,504 12
Total	\$42,907 98
Corresponding week of last year	41,793 16
Increase	\$1,114 82

The earnings of the Erie Railroad for the month of October, 1859, were

Do. 1858	\$465,959 39
Do. 1858	457,924 36
Increase	\$8,035 03

The traffic of the Great Western Railway of Canada, for the week ending November 11, shows:

Passengers	\$23,933 74
Freight and live stock	18,408 63
Mails and sundries	1,758 24
Total	\$44,100 61
Corresponding week of last year	40,855 73
Increase	\$4,000 00

Main Trunk Railroad.

The cars are now running on this road 110 miles from Savannah; and it is expected that the rails will be laid to the Alapaha river by the 1st of February next. Thence to the Withlacoochee, the work is under contract, and progressing rapidly. Rails to reach this point have been purchased, and will be delivered during the ensuing winter. A meeting of the Directors was held at Savannah on the 1st inst., to consider proposals that had been made for the construction of the road from the Withlacoochee to Bainbridge. Every section of the road was bid for. A large portion of the track was immediately awarded, and the prospect is that the entire line will be under contract to Bainbridge at an early day. Its further extension west also received attention, and a resolution was passed directing a survey to be made of the line from Bainbridge to a point on the western boundary of Georgia, at or nearly opposite Columbus, Ala., where the line of the Savannah, Albany and Gulf Railroad approaches the Chattahoochee. This latter road has already been surveyed from Mobile to that point, and is soon to be located and prepared for letting.

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.			
	Main Line.	Lateral and Branch Lines.	2d Track and Sidings.	Road in progress or projected.	Cars.				Property and Assets.		Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with train.	Earnings.		Dividends.	Price of shares.	
					Engines.	Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.				Gross.	Net.			
	M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.	
PENNSYLVANIA. (Continued.)																						
31 Dec. '58	28.0							Philadelphia and Trenton	1,000,000			1,000,000			1,000,000	28.0	oper. by	Cam. & Amboy	7			
30 Nov. '58	98.0				31	60	487	Phila., Wilmington and Balt.	7,235,522	762,225	70,081	5,000,000	2,547,379	198,961	8,782,996	194.0		1,068,847	344,152	5		
31 Oct. '58	48.0							Pittsburg and Connellsville	2,285,006	*		1,031,173	1,100,000	513,403	2,644,756	48.0		46,586	4,318			
31 Dec. '58	10.3							Pittsburg and Erie		*						10.3						
31 Dec. '58	467.0				94	96	1,130	Pittsburg, Ft. Wayne & Chicago	14,631,110	*	91,100	6,260,555	9,029,765	1,755,932	17,046,252	467.0		1,567,232	601,658			
30 Sep. '57	31.0				11.0			Pittsburg and Steubenville	1,947,462	*		1,221,277	250,000			25.0						
1 Jan. '59	25.0				230.9			Schuylkill Valley	5,517,841	37,933		3,903,843	527,000	309,591	8,570,132	40.3						
31 Mar. '59	78.0							Sunbury and Erie	1,093,293													
								Tioga	3,650,682	380,847		1,500,000	2,361,973	161,277	4,145,920			191,970	96,305		133	
RHODE ISLAND.																						
31 Aug. '58	50.0		2.0		9	13		N. Y., Providence and Boston	2,153,000	*		1,508,000	306,500		2,158,000	50.0	147,231	208,439	96,571	5		
30 Nov. '58	13.6		0.5		3			Providence, Warren & Bristol	434,098	1,588		287,917	109,037	36,136		13.6	23,514	23,005	1,278			
SOUTH CAROLINA.																						
31 Dec. '58	13.2	1.5			182.4	2		Blue Ridge	2,126,539			1,916,515	217,577		2,134,092	13.2						
31 Dec. '58	51.9				50.4	4	3	21 Charleston and Savannah	801,615	34,372	250,000	706,365	195,266	197,908	1,099,539	51.9						
31 Dec. '58	109.6				13	9	170	Charlotte and South Carolina	1,719,045	*		1,201,000	384,000		1,585,000	109.6		283,263	151,536	6		
1 Jan. '59	40.3							Cheraw and Darlington	600,000	*		400,000	200,000			40.3						
31 Aug. '58	143.2	21.3						Greenville and Columbia	2,439,769	324,161		1,429,008	1,145,000	545,546	2,919,554	143.2		341,106	125,871			
31 Aug. '58	22.5							Kings Mountain	196,230	*		200,000			200,000	22.5				5		
31 July '58	32.0							Laurens	543,403	*		400,000	106,218		575,729	32.0		27,568	8,527			
28 Feb. '59	102.0							North-Eastern	2,011,652	*		985,743	960,410	108,173	2,057,325	102.0		220,014	96,145			
31 Dec. '58	136.0	106.0			62	59	790	South Carolina	5,517,384	1,103,130	374,000	4,179,475	2,770,463	193,086	7,701,337	136.0		1,501,008	820,511	7		
31 July '58	23.1				41.9			Spartanburg and Union								23.1						
TENNESSEE.																						
31 Dec. '58	30.0							Cleveland and Chattanooga	867,210							30.0						
31 Dec. '58	46.7							Edgefield and Kentucky		*												
30 Jun. '58	110.8				10	12		East Tennessee and Georgia	3,370,943			1,289,155	1,910,688	278,319	3,501,197	110.8		264,950	156,195			
30 Jun. '58	130.3							East Tennessee and Virginia	2,529,418	117,512		926,800	1,968,956	406,658	3,041,940	130.3		191,198	95,231			
30 Jun. '58	271.0	28.0						Memphis and Charleston	5,276,573	609,776	100,000	2,258,115	2,594,000	837,997	6,354,752	271.0		1,530,812	778,036			
30 Jun. '58	82.0				48.3			Memphis and Ohio	3,300,000							82.0						
30 Jun. '58	73.0							Memphis, Clarkesv. & Louisv.	195,364	*												
30 Apr. '59	48.1				24.8	4	3	45 Mississippi Central and Tenn.	1,023,470	*		309,562	624,506	118,655	1,052,721	48.1				43,430		
30 Nov. '58	34.2				2	3	21	McMinnville and Manchester	565,459	*		140,097	406,000		565,459	34.2	run by	Nash. & Chatt.				
30 Nov. '58	151.0	8.0			38	20	323	Nashville and Chattanooga	3,733,472	*	100,000	2,262,405	1,674,000	85,944	4,121,557	151.0		641,552	270,267	3		
30 Jun. '58	43.6				68.3			Nashville and Northwestern	1,000,000							43.6						
30 Jun. '58	15.0				9.5			Tennessee and Alabama	935,697	*		309,754	628,889	83,037		15.0	operated by	Nash. & Chatt.	55,776	29,405		
TEXAS. (all aided by State)																						
31 Dec. '58	32.0				158.0			Buffalo Bayou, Braz. & Col'do								32.0						
31 Dec. '58	56.0				184.0			Galveston, Houston & Henderson								56.0						
31 Dec. '58	43.0				31.0			Houston and Brazoria								43.0						
1 May '58	50.0				306.0	2	3	67 Houston and Texas Central	1,132,747	*		1,270,125	385,000	128,205	1,691,445	50.0		76,958				
31 Dec. '58	25.0				110.0			San Antonio & Mexican Gulf								25.0						
31 Dec. '58	28.0				756.0			Southern Pacific								28.0						
VERMONT.																						
31 Aug. '58	90.7				19.6	7	7	181 Connect. & Passumpsic Rivers	2,345,724	185,421		1,200,000	800,000		90.7	95,256	171,625	67,563				
31 Aug. '58	119.9	13.0			26	18	548	Rutland and Burlington	3,959,708	556,275	92,859	2,233,376	3,145,001	1,013,764	6,392,141	119.9		843,265	332,214	41,667		
31 Aug. '58	62.0		3.4		10	6	201	Rutland and Washington	1,771,683	*		950,000			1,780,683	62.0		154,997	174,426	1.66		
31 Aug. '58	122.0		20.0		42	28	885	Vermont Central	8,402,055	*		5,000,000	3,853,000	1,423,299	10,276,299	122.0		569,323	705,837	127,381		
31 Aug. '58	47.0							Vermont and Canada	1,380,695	*		1,350,000			1,380,695	47.0		oper. by Vt. Central				
31 Aug. '58	23.7		0.7		4	4	52	Vermont Valley	1,212,274	89,612		515,664	793,200		1,308,864	23.7		47,324	43,998	10,491		
31 Aug. '58	64.0	10.5						Western Vermont	1,083,500	*		332,000	700,000		1,083,500	64.0		oper. by Troy & Boz.		55,558		
VIRGINIA.																						
31 Aug. '58				163.4				Alex., Loudoun & Hampshire	902,787	*		844,653		58,134	902,787							
30 Sep. '58	75.6			63.5	9	8	216	Manassas Gap	3,262,990	209,901		3,038,500	418,000	292,956	3,539,729	75.6		125,509	65,564			
31 Mar. '58	79.2							Norfolk and Petersburg	1,096,907	64,027	10,500	1,346,876	456,893		1,803,769	79.2						
30 Sep. '58	103.5				8			Norfolk and Petersburg	5,322,160	*		468,605	5,719,229		103.5		345,427	248,004	loss			
30 Sep. '58	112.5	9.1	4.5	36.0	12	10	101	Orange and Alexandria	4,339,375	*		1,899,829	1,480,500	371,590	5,134,475	97.6	150,558	258,875	151,872			
30 Sep. '58	123.3	10.1			18	21	317	Petersburg and Lynchburg	3,008,798	362,263		1,371,800	2,039,000	97,274	3,508,074	123.3		375,297	183,242			
31 Dec. '58	59.2	2.3			14	17	131	Petersburg and Roanoke	985,791	192,940		883,200	127,427	34,344	1,313,057	80.5		310,988	186,085	6		
30 Sep. '58	140.5	1.8			23	18	370	Richmond and Danville	3,588,653	*		1,981,017	1,126,407	25,153	4,424,671	140.5		263,893	491,674	267,197		
31 Mar. '58	75.1							Richm., Frederick & Potomac	1,985,579	*	52,800	1,033,000	680,115	116,550	2,183,232	75.1		209,126	145,656	7		
30 Apr. '59	22.2	2.7			10	16	192	Richmond and Petersburg	1,087,949	*		836,100	201,408	34,681	1,250,186	24.9	79,921	157,542	82,482	6		
30 Sep. '58					38.3			Richmond and York River	469,281	*		643,000		13,771	657,671							
31 Aug. '58	80.0				10	11	169	Seaboard and Roanoke	1,360,988	*	33,700	644,000	478,940	59,776	1,449,037	80.0		240,817	105,728			
30 Sep. '58	178.0		202.2		11.2	20	220	Virginia Central	4,835,729	527,181		3,132,445	1,485,346	401,222	6,816,522	178.0		652,405	382,696			
31 Aug. '58	204.2	10.7			24	14	412	Virginia and Tennessee	5,307,817	599,367		3,503,200	2,540,000	1,084,216	7,127,416	214.9		408,181	223,231	4 1/2		
30 Sep. '57	32.3							Winchester and Potomac	573,998	*		300,000	120,000	18,592	573,998	32.3		69,009	10,513			
WISCONSIN.																						
31 Dec. '58	28.0				41.0			Kenosha and Rockford								28.0						
25 Mar. '59	109.8							Milwaukee and Minnesota				10,872,000	10,414,066	996,557	22,282,653	109.8						
31 Dec. '58	40.0				5	10	75	Milwaukee and Chicago	1,820,073	*		1,000,000	600,000	308,555	1,908,555	40.0	74,243	159,456	82,181			
31 Dec. '58	42.0							Milwaukee and Horicon	919,757	*		1,101,200				42.0	10 mos.	60,0				

RAILROAD SHARE LIST.

We give this week the fourth and last page of our new RAILROAD SHARE LIST. Next week we shall publish them entire. In order not to encroach upon the space usually allotted to reading matter, we shall print four additional pages hereafter. We also propose to commence, next week, the publication of our new BOND LIST. This will occupy two pages more—making in all six pages. These tables will be corrected weekly. As only a few reports contain all the information we desire to give, we have sent a duplicate copy of the JOURNAL to each of the companies for the verification of our figures, and the necessary additions thereto.

Railroad Companies are respectfully solicited to return to us the additional copy of the JOURNAL sent to them, with our figures properly verified, and the blank spaces filled.

American Railroad Journal.

Saturday, November 19, 1859.

Concord and Portsmouth Railroad.

The capital stock of this company now amounts to \$228,900. The amount provided for by its act of incorporation was \$250,000. As the whole amount is not wanted, the Directors recommend fixing the capital at \$230,000. Stock to the amount of \$228,900 has been issued, leaving 211 shares on hand.

The road under its present organization has been leased for a period of five years to the Concord Railroad, at a rental of \$15,500 annually.

The receipts and expenditures of the year have been as follows:

RECEIPTS.	
From late Treasurer	\$8,102 49
" Lessees of road	15,500 00
" Assessment on stock	45 00
" Materials sold	2,357 85
	\$26,005 34
EXPENDITURES.	
Paid for sleepers bought prior to lease.	\$121 30
" Balance due for freight cars bought prior to 1858	1,712 90
" Sundry persons for land damages	2,393 13
" Discount on rent rec'd in advance, &c.	195 23
" Damages and injury to person prior to October, 1858	797 51
" Law expenses, printing, &c. do.	312 41
" Expenses Candia Branch do.	198 52
" Iron between Epping & Raymond	13,262 58
" State tax 1858, assessed prior to lease	946 45
" Expenses of organization	493 05
	\$20,433 08
Bills receivable	\$142 00
Cash on hand	5,430 26
	\$26,005 34

On the first of October a dividend of two and a quarter dollars per share was declared on 2,289 shares, leaving a balance of cash, \$280 01.

The lessees of the road are obliged by the contract to expend the sum of \$2,500 per annum in permanent repairs in addition to the rent. They have expended to the 31st August last, the sum of \$6,231 94.

The company, it is believed, owes no debt of any kind which can prevent the future payment of regular semi-annual dividends of 3 per cent. during the continuance of the lease.

Mt. Vernon Railroad.

This company was incorporated by an act of the Legislature of Illinois passed Feb. 16, 1855. It has since been duly organized, the capital stock subscribed, and all the conditions of the charter fully complied with. The road runs through Jefferson and Wayne counties, Ill., and is part of the great Air Line Railroad from Louisville to St. Louis, now in course of construction. It is 57 miles in length; and by its junction with the Illinois Central Railroad at Ashley, on the West, and with the Evansville and Terre Haute road on the east, will form connections which will secure to it a traffic quite sufficient for its support, independent of the through business which it will enjoy upon the completion of the whole road. This portion of the line has been surveyed and located, and 17 miles are already graded. The ties for 60 miles have been cut, and are partly delivered; and it is estimated that, at least, 25 miles will be ready for the iron by the 15th of July next.

To defray the cost of construction and equipment, it is proposed to issue bonds for \$800,000, bearing 7 per cent. interest, payable in 1874, with coupons payable semi-annually in this city—the principal being secured by a mortgage upon the road, buildings and equipment, valued at \$1,055,000, together with 75,000 acres of land in Wayne Co., valued at \$10 per acre. The security for the interest will be: the income of the road and 25,000 acres of land specially appropriated and secured in the mortgage.

The Company further hold over 40,000 acres of land, donated by other counties; also, town lots, and other donations, of an aggregate value of at least \$500,000, and which will be first appropriated to repairs of the road, rolling stock, etc., and to cover such annual depreciation as shall maintain the rolling stock equal to its original valuation.

The above valuation of land is far below the amount that can, undoubtedly, be realized on the completion of the road, and before the maturity of the bonds, as they are at the present time estimated at from \$8 to \$10 per acre, by persons the most competent to judge among whom are Gov. Bissell, Ex-Gov. Casey, Judge Scates, and others.

Southern Mississippi Railroad.

"We understand" says the *Mississippi Meridian*, "that this company are advertising for proposals for the grading, masonry, cross-ties, etc., for this division of the road. It will be let out in a few weeks, and be required to be finished up for the iron by the 1st of May. We have a private letter from Dr. EMANUEL, Vice President of the company, in which everything we have said about the completion of the road is verified. He says the steam horse has to be here by the 1st of October next."

Dalton and Jacksonville Railroad.

We learn from the *Daltonville Times*, that ground was broken for this road at that place on the 24th ult. This road is designed to connect the East Tennessee and Alabama Railroads, and will form a complete link in the chain of railways from the North to the Gulf. According to the figures of the *Times*, this road, when finished, will offer the shortest route from New York to New Orleans. The contractors for building the new road are on the ground, and the work will be pushed forward with vigor.

Grand Trunk Railroad.

The Detroit branch of this road is to be formally opened on the 21st inst. Produce from the East, West and South will then go through with one transshipment, at Sarnia, the terminus proper of the branch, which is built under a separate management from the main line. The branch is sixty miles in length, and is to be amalgamated with the main road, so as to form a complete route by rail from Detroit to Portland. The transshipment at Sarnia is occasioned by the break of gauge at that point—the gauge of the branch being 4 feet 8 inches, while the main line is 5 feet 5 inches. The rails are so laid, however, that they can be moved back so as to conform to the gauge of the Grand Trunk.

Baltimore and Ohio Railroad.

At the meeting of the Board of Directors on the 9th inst., the annual report of this company for the fiscal year ending Oct. 31st, was read and approved. It will not be made public, however, until submitted to the stockholders at their annual meeting. The report is said to be larger than usual. It gives the fullest information in relation to the operations of the road during the past year, and discusses many interesting questions in relation to the sources from which its business is derived, its present and future connections, etc. The accompanying reports of the heads of departments are also very complete, exhibiting and analyzing the cost of transporting and the revenue derived from each department of the company's business. The financial result of the year's operations is understood to be exceedingly favorable.

Georgia and Alabama Railroad.

The citizens of Rome, and Floyd Co., Ga., seem to be entering with earnestness into the project of constructing a railroad from Rome to some point on the Alabama line, where a connection can be best made with the Selma and Tennessee River Railroad. For this purpose, a meeting was held on the 18th ult. On the following day books were opened, when \$125,000 were subscribed by parties living in Rome, and its immediate vicinity, and who are able and willing to pay every dollar they have subscribed. In addition to this, the *Rome Courier* says: "It is understood that the Rome Railroad Company, and three wealthy citizens who have not yet subscribed, will take \$50,000 more. An election is to be held on the 22nd, to decide whether or no the County shall subscribe \$50,000 to the capital stock."

North Missouri Railroad.

We learn from the *St. Louis Republican* that the grading and masonry of five miles of the extension north of Hudson City are completed, and it is expected that before the Legislature meets, seventeen miles in all will be graded, and the most of the mason work finished. The counties of Schuyler and Adair have each paid to the contractors 30 per cent. of their subscriptions, amounting together to \$30,000.

Boonton Railroad.

The *Paterson Guardian* says that this road has been located on the Fairfield, Pine Brook and Hook Mountain route. The last surveys having proved that to be the best and cheapest route. It will end at Denville, where it intersects the Morris and Essex. It will go through Little Falls and by the Great Notch to Bloomfield.

Orange and Alexandria Railroad.

We learn that the work upon the Lynchburg Extension of this road is progressing rapidly, though not sufficiently so, it is feared, to have it in full operation by the 1st of January. Gordonsville is the present terminus of the road; thence to Charlottesville, the company use the track of the Virginia Central. At this point commences the *Lynchburg Extension*, upon which the track has been laid to Faber's Mills. It is also laid from Lynchburg up to Amherst Court House—leaving but 20 miles unfinished. The bridges on the unfinished portion, however, are numerous and costly; and it is these that cause the delay. When the track reaches a water course, the materials have to be brought up and the bridge built before another advance can be made. The heaviest structures are at Tye and James rivers. The ruling or maximum grade on the extension is 66 feet to the mile, the same as on the upper end of the road; but the cutting and filling will cost more than double, making the aggregate cost about \$50,000 per mile. The company will, however, have an excellent, well constructed and durable road. The rails are well laid; and the use of the improved chairs keeps the ends of them so firmly together, that the blow of the wheels is almost imperceptible. The completion of this link in the great chain, will be hailed with great satisfaction, not only by the citizens of Alexandria and Lynchburg, but by the people upon the whole line from Alexandria to New Orleans.

Cumberland Valley Railroad.

The earnings of this road for the year ending September 30, 1859, were:—

From passengers	\$67,886 34
From freight	96,039 63
From mails	5,200 00
Total	\$169,125 97

And the expenses were:

For repairs of road	\$20,271 85
Do. engines and cars	7,025 64
Do. build'g's, t'ls, m'chin'ry, etc.	767 15
Do. Harrisburg bridge	3,125 71
For conducting transport'n	23,182 02
For salaries	5,899 92
For new passenger cars	935 16
For office expenses, taxes, etc.	841 67
Total	62,049 08
Renewal of Harrisburg bridge	12,765 32
Total	\$94,311 57

The work of covering the bridge over the Susquehanna with galvanized iron, has been completed. During the year 100 tons of new iron, and 14,000 cross-ties have been laid upon the road, which, together with the rolling stock, is in proper condition for the winter's business. Excepting the above amount paid for covering the bridge, the expenses of operating the road, have not exceeded 37 per cent. of the gross earnings. No renewal or construction account is kept, except for the rebuilding of the bridge in case of its accidental destruction.

During the year \$27,000 of first preferred stock, and \$5,000 of second preferred stock, have been converted into bonds.

The Franklin railroad, which is virtually an extension of this road, is now being relaid in a very substantial manner from Chambersburg to Hagerstown. When completed it will add somewhat to the revenues of the company.

The receipts and expenditures of the company during the year have been as follows:

RECEIPTS.	
Cash and cash items, Oct. 1, 1858	\$51,883 43
Receipts from tolls, rents and interest	170,509 30
Materials sold	2,105 47
Total	\$224,498 20
EXPENDITURES.	
Dividends on stocks	\$61,520 00
Interest on bonds	18,780 00
State tax on do.	3,136 70
Ordinary expenses	62,049 08
Covering bridge	12,765 32
Materials	3,583 32
Tolls due	9,057 98
Cash on hand, Oct. 1, 1859	50,605 80
Total	\$224,498 20

GENERAL STATEMENT.	
Cost of road and equipment	\$1,225,971 72
Materials for use	10,915 44
Do. sale	1,343 42
Cash and bills receivable	60,963 78
Total	\$1,299,194 43
First preferred stock	\$259,400 00
Second do.	250,500 00
Common do.	472,000 00
First mortgage bonds	143,500 00
Second do.	102,000 00
Interest and dividends	42,743 50
Profit and loss	25,971 20
Other liabilities	3,079 73
Total	\$1,299,194 43

The officers are:

FREDERICK WATTS, *President*.
EDWARD M. BIDDLE, *Treasurer*.
O. N. LULL, *Superintendent*.

Western and Atlantic Railroad.

The gross earnings of this road for the fiscal year ending September 30, 1859, were—

From passengers	\$298,703 38
" freight	489,694 48
" mails	22,750 00
" miscellaneous	21,195 17
Total	\$832,343 03

And the expenses were—

Conducting transportation	\$86,631 58
Maintenance of way	145,559 18
" cars	33,369 88
Motive power	101,302 27
General expenses	10,938 59
Total	379,801 50

Net profits

Total	\$451,541 53
The amount received for the carriage of passengers, freight, mails, etc., during the year was	\$1,001,563 19
Balance from previous year	59,820 74

Total receipts from all sources

Total	\$1,061,483 93
Disbursed as follows:	
Working expenses	\$377,780 50
Do. prior account	6,358 40
Equip't and pass. depot	27,326 40
Bonds and coupons	24,865 00
Paid other roads	144,078 12
" State Treasurer	402,000 00
Total	982,429 42

Leaving a balance of

Since January 1, 1858, there have been purchased and laid down 2,040 tons of heavy T rail,

which, with new rails taken from sidings, covers about 27½ miles of road. This new iron, together with other permanent improvements; such as ballasting, new bridges, bridge repairs, deep ditching, new timbers in road-bed, and the improved condition of the machinery, rolling stock, etc., make the road, in the opinion of the Superintendent, worth at least \$200,000 more than it was two years ago.

In addition to the \$402,000 paid into the State treasury the past year, there were also paid \$20,000 of bonded debt which became due in January last, together with the coupons upon the remaining outstanding bonds, and certain unadjusted claims, amounting in the aggregate to \$28,243 53. But for this, and the purchase of so large an amount of iron, the road would have paid into the treasury very easily \$450,000, and left on hand an excess sufficiently large to meet any probable contingency; and but for the heavy additional expense for bridging, this sum would have been still further increased.

The road-bed, and all the superstructure and machinery are kept in good repair. No new debts are contracted which are not promptly paid monthly, and no agent has been appointed or retained in office known to be a defaulter to the amount of a single dollar.

No statement is given of the cost of the road; for this we are obliged to refer to the message of the Governor. He says:

Regarding it as a matter of interest, I have endeavored, at the expense of considerable labor, to ascertain the original cost of the State road; but I find it impossible to arrive at a conclusion with entire accuracy. It is believed that the report of Col. C. F. M. Garnett, then Chief Engineer, made in 1847, of the amount expended to that time, is about correct. He estimates the whole cost to the date of his report, at \$3,305,165 88. Since that time there has been appropriated to the construction of the road, its equipment, &c., in cash, and in the bonds of the State, to the sum of \$1,136,366 27. Add these sums together, and we have \$4,441,532 15, as the total amount appropriated by the Legislature, and paid out of the State Treasury for the construction and equipment of the road. This, in my opinion, is a very near approximation of correctness.

Estimating the original cost therefore, at \$4,441,532 15, the road during the past fiscal year (ending 20th October last) has paid into the treasury of the State nearly nine and a half per cent. upon the original investment. And it should not be forgotten in this connection, that it was built at a time when railroading was not well understood, and that it was built as a public work, at a cost greatly more than would have been expended in its construction, even at that time, by a private company.

Had the same economy been used which is usually practiced by private companies, the whole cost of the road would not probably have exceeded, if it even had amounted to \$3,000,000.

The sum paid into the treasury during the past year is fourteen per cent. upon that sum. In comparing the present management of the road with company management, it is certainly just to the present officers, who did not build it, to count the per cent. upon such sum only as the road should reasonably have cost had it been built by a company, and not upon such sum as it may have cost under the extravagant system which is sometimes practiced in the original construction of public works.

The officers of the road are—

JOHN W. LEWIS, *Superintendent*.

B. MAY, *Treasurer*.

EUGENE LEHARDY, *Chief Engineer*.

Cattawissa, Williamsport and Erie R. R.

A meeting of the holders of the first mortgage bonds of this company was held in Philadelphia on the 11th inst. The committee appointed at the previous meeting made the following report:

In view of an amicable and equitable arrangement, by which the affairs of the company may be adjusted without the interposition of law, it is the opinion of the committee that the company should be re-constructed by a foreclosure and sale under agreement; and that in the said re construction there should be issued two classes of stock—one preferred the other common—and that the company should re enter on business entirely free from debt.

That the preferred stock should be issued to the First Mortgage Bondholders for their bonds and unpaid coupons; and to the claimants of the confidential debt, being the money loaned or obligations issued by the friends of the company without profit to themselves beyond the interest, and which has been expended for the payment of coupons or for the immediate benefit of the property of the company, such claims to be admitted after investigation by the committee of bondholders.

That the Preferred Stock shall be entitled to all the net profits of the road until the said profit reaches seven per cent. per annum—after which the net profits beyond seven per cent. shall be divided among holders of the common stock, until said holders receive a like amount. After which any further profit which may arise, shall be divided *pro rata* to all stockholders. That all classes of claimants shall receive their several claims in stock at par.

That the common stock shall be issued to the Second Mortgage Bondholders, and to the claimants of the unsecured indebtedness at par, and to the present stockholders in the ratio of one share for every four shares now held of equal amount.

After the reading of the report, resolutions were read and adopted approving the plan proposed, and authorizing the committee, in conjunction with the trustee, to take all necessary measures to re-construct the company upon the above basis. The title of the company to be organized is to be the "Cattawissa Railroad Co." This company is to be constituted by the creation of a sufficient number of shares of \$50 each for that purpose. All needful expenditures to be refunded by the new company when organized. The trustee of the mortgage is also requested to effect by sale or otherwise a legal transfer of the property and franchises of the old to the new company when formed, and to obtain a surrender thereof by the discharge of the receivership—the new company being pledged by him to carry out in good faith the present existing order of the court in equity, appointing said receiver. In case of sale, the trustee to be instructed by the committee as to the sum he may bid for the property.

Iron Mountain Railroad.

The following gentlemen were elected Directors of this company on the 7th inst.: John Simonds, S. D. Barlow, Geo. Partridge, H. T. Blow, Jules Valle, Isidore Bush, S. C. Hunt, F. Gotschalk, D. G. Taylor, J. L. McBride, John Deane, — Miller, — Lindsay.

Petersburg and Lynchburg Railroad.

At a recent meeting of the stockholders of this corporation, the following gentlemen were elected Directors for the ensuing year: President, Thomas H. Campbell, Esq.; Directors, Messrs. Lemuel Peebles, of Petersburg, and John W. Wilson, of Prince Edward; Committee of Examination, Messrs. F. N. Watkins, Andrew Kevan, Joseph E. Venable, Clem. C. Reid, and James Venable.

Tennessee—Her Debt and Taxable Property.

The whole indebtedness of this State is \$16,643,666 66. The State debt proper is \$3,844,606 66. The balance is for State bonds loaned to Railroad Companies, etc. The former can be redeemed at any moment; and for the latter there is ample security, as will be seen by reference to the following extract from the recent report of the Comptroller:

The material prosperity of the State, her taxable property having increased more than \$150,000,000—from \$210,011,047 to \$377,208,641—since the completion of her first road in 1854—the statutory lien upon the roads and fixtures in favor of the State—the certainty of the payment of interest through the Bank of Tennessee, and its compulsory payment to the bank by the roads, by removal of its officers and directors if not paid promptly—the wise provision of the Legislature, creating a sinking fund for the ultimate redemption of the bonds, requiring two per centum per annum upon the amount loaned, with prompt process to collect; a sum so small as not to embarrass the operations of the roads, but large enough to redeem every bond issued before its maturity—the prosperity of the finished roads, their actual profit and comparatively small bonded debt—are material and ostensible guarantees, without appealing to State pride, that these bonds will be paid. If the railroads were worthless the debts would still be paid. The annual interest upon this railroad debt is \$763,720—the two per cent. added for a sinking fund would make it \$1,018,705. To pay this the present State tax would be about doubled—a tax much lighter than many of the States now pay. But the roads themselves have thus far shown an ability to pay the interest and the sinking fund, which secures the ultimate redemption of the bonds by their profits as well as dividends to the stockholders. It does not matter to the State or to the bondholder whether the roads make profits for the stockholders or not, so long as the interest and the sinking fund are certainly made. The stockholders might feel compensated for their entire loss of stock by the enhancement in the value of their lands through which the roads pass. The State lends to the companies \$10,000 of its bonds for each mile of railroad, and additional for bridge aid, making about \$11,000 for each mile. The cost of the finished roads, fixtures and equipments averages about \$27,000 or \$28,000 per mile. The State and bondholders being interested in the profits only to the extent to cover the interest and sinking fund upon the \$11,000, would always be safe as long as the road made 8 per cent. upon that amount, or about 3 per cent. upon the whole cost of the road.

The value of the property of this State, as assessed for taxation last year, is as follows:

East Tennessee	\$64,186,514
Middle Tennessee	188,867,004
West Tennessee	124,155,641
Total	\$377,208,641

The following table will show the increase in value of the taxable property of the State for the last eleven years:

	Value of Prop'y.
1848	\$129,510,940
1850	159,558,183
1852	186,621,119
1854	219,011,047
1856	260,310,611
1858	320,398,012
1859	377,208,641

QUANTITY AND VALUE OF THE LAND.

East Tennessee, 8,970,240 acres, valued at	\$16,126,012
Middle Tennessee, 10,471,163 acres, valued at	114,058,549
West Tennessee, 6,522,259 acres, valued at	52,640,482
Total	\$212,825,093

Town lots are not included in the above. Their aggregate value is \$40,000,000.

NUMBER AND VALUE OF SLAVES.

	Number.	Value.
East Tennessee	13,085	\$10,470,926
Middle Tennessee	67,934	55,850,579
West Tennessee	48,812	44,638,752
Total	129,831	\$110,960,257

Sanford's Patent Portable Heater.

Is a combination of stove and heater, for warming with one fire not only the room in which it is placed, but also, by means of a hot air pipe, and a single register in the floor, above, the parlors, halls, and, indeed, the upper rooms—all of which it will readily accomplish, even in the coldest weather. There has never been anything invented which answers the purpose so well. It occupies a small space—but little more than an ordinary stove; it consumes but little more fuel than a stove; is no more trouble than a stove; and though its first cost may be twice or three times as much as a stove, yet the saving in fuel alone, will more than repay the extra outlay in one season. Probably with less coal than would be consumed in one grate, and which would *not* warm one room alone, the entire house may be rendered comfortable. No family should be without a heater of some kind. The portable heater is, in our judgment, the least trouble, and the most economical; and where the doors can remain open throughout the house during the day and evening, it is far preferable to a stationary one placed in the cellar. The same principle is, however, adapted to furnaces of brick for that purpose, and a large number have been put up in various parts of the country.

Messrs. SANFORD, TRUSLOW & Co., 239 Water street, N. Y., have for sale the Heaters and Furnaces above alluded to. They will send, free by mail, upon application, a neatly printed pamphlet of some 66 pp., containing an engraving of each pattern, with a description of each; the names of hundreds of persons who have used them; and any quantity of certificates, testifying to their economy, efficiency, durability, etc., etc.

Lackawanna and Bloomsburg Railroad.

This road extends from Northumberland to Scranton, through a section of country unsurpassed in magnificent river and mountain scenery, and abounding in coal, iron and limestone. We understand that the work is being pushed forward—a large number of workmen being engaged upon it between Danville and Northumberland. The latter place is situated at the confluence of the two branches of the Susquehanna, and will be accessible to Philadelphia and New York via the Northern Central and Pennsylvania, as well as the Lebanon Valley and Reading road, and to Elmira, Buffalo and other points in the Northwest via the Sunbury and Erie Railroad and its connections.

Columbia and Reading Railroad.

We learn from the Reading *Democrat* that a meeting for the election of Directors of this contemplated road was held at Ephrata, a few days since, and the following gentlemen elected:

President—JOSEPH KÖNIGMÄCHER.

Directors—M. E. Lyons, Frederick Lauer, E. Billingsfeld, Sebastian Miller, Adam Kœnig-macher, Nathan Worly, Joseph Hostetter, Samuel Shock, A. S. Green, C. S. Kauffman, S. Lichten-thaler, Levi Hull.

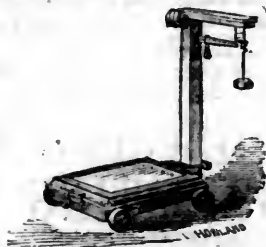
Progress of Lieut. Beale's Wagon-Road Route.

A correspondent of the Philadelphia *Press* writing from the Indian Territory, says:

"Six bridges are being constructed upon the eastern end of Lieut. Beale's route to the Pacific Ocean, under an appropriation of money made by Congress for that purpose at its last session. The general supervision of the work is in the hands of Henry B. Edwards, Esq., of Chester, Penn. The bridges are of iron. They were manufactured in Philadelphia. One is to cross the Poteau near Fort Smith, Arkansas; the second, Red Bank Creek, near Skullyville; the third, the Little Sans Bois; the fourth, the Big Sans Bois; the fifth, Longtown, or Frenchman's Creek; the last four in the Choctaw Nation, and the sixth, Little river, in the Creek Nation. Upon a plan which the people here have, the latter is called Little river, because it is one of the largest, steepest-banked, and fastest running. It is about one hundred and eighty miles from Fort Smith. The abutments of all the bridges are built with the exception of those for the Poteau. Red Bank bridge is completed, and that at Little river will be in a few days, when the flooring has been put down.

Fort Valley and Brunswick Railroad.

The committee having in charge the survey of the above project, met at Perry, recently, to receive the report of Mr. F. P. Holcomb, Chief Engineer of the survey. Mr. H. made a very interesting report—the distance to the junction is 134 miles, route very favorable. The estimated cost, including equipments, &c., is \$1,766,572 94, or an average of \$13,183 38.—*Pulaski Times*.

FAIRBANKS'**STANDARD SCALES,**

Adapted to every branch of business where a correct and durable Scale is required.

**SCALES FOR RAILROADS,
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WAREHOUSE AND TRANSPORTATION SCALES,
PORTABLE AND DORMANT SCALES FOR STORES,
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**FAIRBANKS & CO.,
189 Broadway, New York.**

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AND COMMON BARS.**

THE undersigned, sole Agents to Messrs. GREST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

B. & J. MAKIN, 70 Broad st.

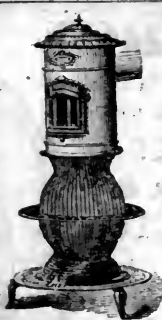
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PATENT Electric Submarine Safety Fuse Train for military and civil purposes. Also,

A substitute for the Galvanic Battery for sale by
**E. GOMEZ,
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**SANFORD'S
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Extensively used in
**Railroad Depots,
WORKSHOPS,
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Hotels, Stores,
AND ALL
EXPOSED PLACES**

REQUIRING A
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LITTLE FUEL
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PORTABLE
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**Most powerful
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KNOWN:**
Burning the
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No Clinkers.
Send for
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**CHARLES W. NASH,
PROPRIETOR.**

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"SPECIFICATIONS AND CONTRACTS" by PROFESSOR DONALDSON, Architect, and the first English and French Architects and Engineers have contributed their "SPECIFICATIONS," with Elevations, Plans, etc., lithographed by V. Brooks and others: also the **Law of Contracts**, by W. G. GLEN, Barrister, all in 2 vols. Price 2s. ATCHLEY & Co., 106 Great Russell Street, LONDON. 3m47

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ENGLISH and AMERICAN Railroad Iron for delivery in New York and other markets in the United States and England. For sale by

**S. W. HOPKINS, Broker,
72 Beaver st., New York.**

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets. For sale by
**CASWELL & PERKINS,
Brokers, 69 Wall st.**

New York, July 9 1859

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about
250 Tons English Rails same size and weight.

New York June, 1859 **M. K. JESUP & COMPANY,
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THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,

Boston, June, 1851. **29 Central Wharf.**

**ROUND OAK IRON WORKS,
STAFFORDSHIRE.**

LORD WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES, SHEETS, HOOPS and BARS of every variety. Address **RICHARD SMITH, Esq., Dudley.**

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THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, **RAILS OF SUPERIOR QUALITY,** and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,

**9 South William st.
New York, Aug. 1, 1858.**

METALS.

**S. W. HOPKINS,
METAL BROKER,
72 BEAVER ST., NEW YORK.**

**INGOT-COPPER, PIG LEAD, BLOCK TIN, SPELTER,
Sheet Zinc, Antimony, Tin Plates, Roofing Plates, Pig,
Bar, Hoop, Sheet and Boiler Iron.**

REFERENCES.

HOB. DANIEL F. TIEMANN, Mayor, New York.
WM. A. COLE, Esq., First Fulton Fire Insurance Co., N. York.
Messrs. T. H. CORDINGTON & Co., New York.
" P. & J. P. HAWES & Co., Boston.
" FARRAR, FOLLETT & Co., Philadelphia.
" E. J. ETYING & BROTHER, Philadelphia.
" NATHAN TROTTER & Co.,
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" THOMPSON & OUELLETS, "

3 LOCOMOTIVES.

6 FOOT gauge, weight 27 tons. 16x20 cylinder. 138 flues, 11 ft. 2 in x 2 in diameter. Boiler, 44 in. outside connections; for sale at a bargain on 12, 18 and 24 months credit for approved paper adding interest.
New York, Nov. 2, 1859. **GEO. T. M. DAVIS,
4445 47 Exchange Place.**

CAR WHEELS.

1,000 STANLEY'S BEST CAR WHEELS, size to suit, for sale at a bargain for cash or approved paper.
New York, Nov. 2, 1859. **GEO. T. M. DAVIS,
4445 47 Exchange Place.**

TO CONTRACTORS**HAVING CAPITAL.**

THE MARYLAND AND DELAWARE R. R. CO. will receive sealed proposals until the first of December for the work and materials of fifty-three miles of road; extending from its junction with the Delaware R. R. at Smyrna, Del., to Oxford Md., forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always unobstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt) consist of individual stock, State appropriations, and work already done; but they propose to make payment for a work now offered, principally in first mortgage bonds, which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the road are already graded, the entire line located and secured, and the nature of the work very favorable for contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst, and sent by mail on application to J. C. W. Powell, Sec. Md. and Del. R. & Co., Easton, Md.; to whom proposals will also be addressed.

**TENCH TILGHMAN,
President.**

6143

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859.

SEALED PROPOSALS for the Graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office, until **THURSDAY NOON, DECEMBER 1st, 1859.** The work is divided into twenty sections of about one mile each, and proposals for either a part or the whole of this Division may be made; but no bid for less than one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Estimates of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent of all estimates will be retained until the completion of the contract. Contractors desiring other terms of payment may bid accordingly, as the above terms are not positively settled.

The Company having a large amount of the best lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, President.

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until **THURSDAY NOON, DECEMBER 1st, 1859.** No bids for less than the amount of Masonry upon any one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payments, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, President.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,
MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

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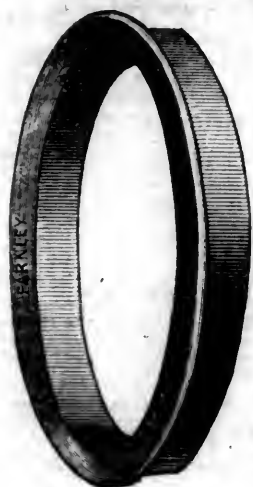
Manufactured at these celebrated Works,
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A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

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SOLE AGENTS for the UNITED STATES and CANADAS.



RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

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LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. York.

Address J. H. SCRANTON, President,
Scranton, Pa.
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46 Exchange Place,
NEW YORK

RAILROAD IRON. THE RENSSELAER IRON COMPANY, TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS
received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
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New York Agency:
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CAST STEEL, Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.
Far superior to the ordinary kind.
FROG PLATES, POINTS.
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ORDERS FILLED PROMPTLY AND AT LOW PRICES.

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CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

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500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

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THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH PORT.

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RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF
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WILL NOT GUM

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Reliable orders filled for any part of the United States or Europe.

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For Railroads,
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Steamships,
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THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is much less than that of any Oil in use, of known merit or acknowledged worth.

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3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

6th. It will remain limpid at as low a temperature as sperm. CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

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LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 3 inches bore, with Screw and Socket Connections.
T's L's Stops, Valves, Flanges, etc., etc.

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Established 1821.

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RAILROAD EQUIPMENTS
upon favorable terms.

JOHN W. HULL & CO.,
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IRON AND STEEL

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CUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
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WHEELING, VA.,

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New York, 1st June, 1859.

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THIS Company manufacture **ROSENDALE HYDRAULIC CEMENT** of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings. For sale upon favorable terms by addressing.

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CEMENT, PLASTER, ETC.

THE HUDSON RIVER CEMENT CO.
HAVE commenced manufacturing for the season, and can now furnish a very superior article of fresh **Rosendale Cement, Calcined Plaster, Farmers' Plaster and Marble Dust.** Address

HUDSON RIVER CEMENT COMPANY,
Jersey City, N. J.

Rosendale Hydraulic Cement.

THE NEWARK AND ROSENDALE CEMENT COMPANY are now receiving fresh from the Mills their approved **ROSENDALE CEMENT**, warranted pure and free from quick lime, and which has given such general satisfaction in the various government and other public works in which it has been used. Purchasers and shippers should be careful to get the genuine **ROSENDALE CEMENT**, branded "NEWARK AND ROSENDALE," "H. WILDE." This Cement does not swell and burst the hoops when stored in warm climates. It is packed in tight dried barrels, and is specially adapted for safe shipping on long voyages. Terms reasonable, which may be known by addressing.

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THE LAWRENCE CEMENT COMPANY are prepared to receive and execute orders for their Cement, to any extent that may be required. They would particularly call the attention of purchasers to the distinguishing brand of their manufacture, viz. **HOFFMAN'S ROSENDALE CEMENT.** This seems to be necessary, as they have established a reputation for the superior quality of their Cement, and there are various other brands offered, as "Rosendale" Cement. It has the unqualified approbation of the most eminent Architects and Engineers, being used in almost every department of the Works under Government. It is put up in the most careful manner, each barrel being well lined with paper, and will be delivered on ship-board, in this city, on the most favorable terms. Particular attention given to shipping orders, and Freight obtained on the best terms.

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Locomotive Engines,
ARE PREPARED TO EXECUTE PROMPTLY
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EITHER SINGLE OR DOUBLE PLATE,
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To HAMMERED or ROLLED AXLES,
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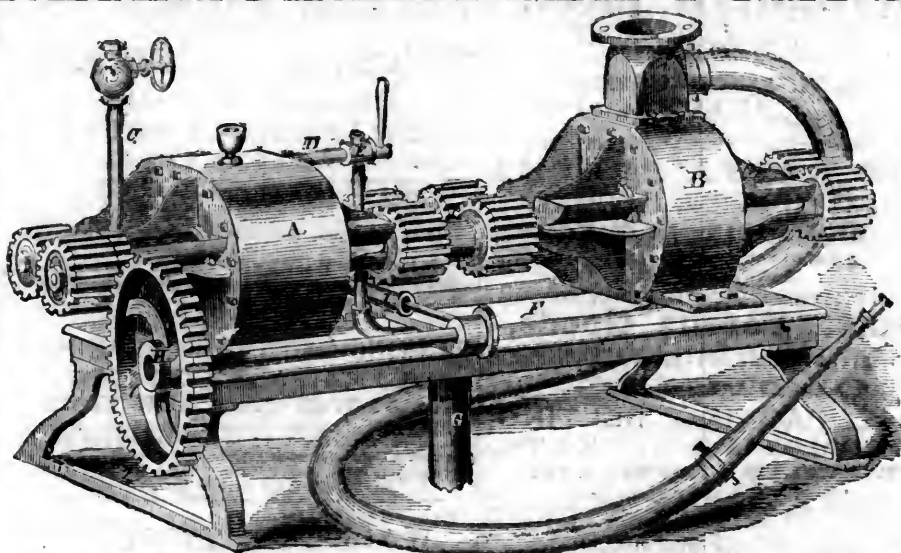
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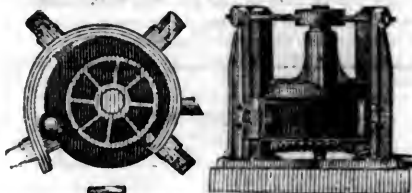
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HOLLY'S PATENT ROTARY PUMP and ENGINE, the most simple, durable and reliable
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Its advantages over the ordinary Forge Hammer are num-
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The iron being discharged from the machine so hot, rolls
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The subscriber feels confident that persons who will examine
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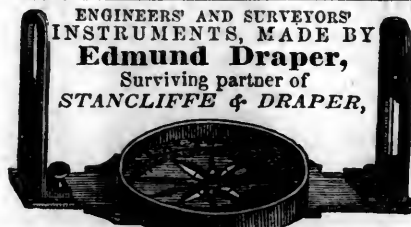
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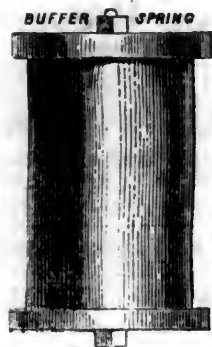
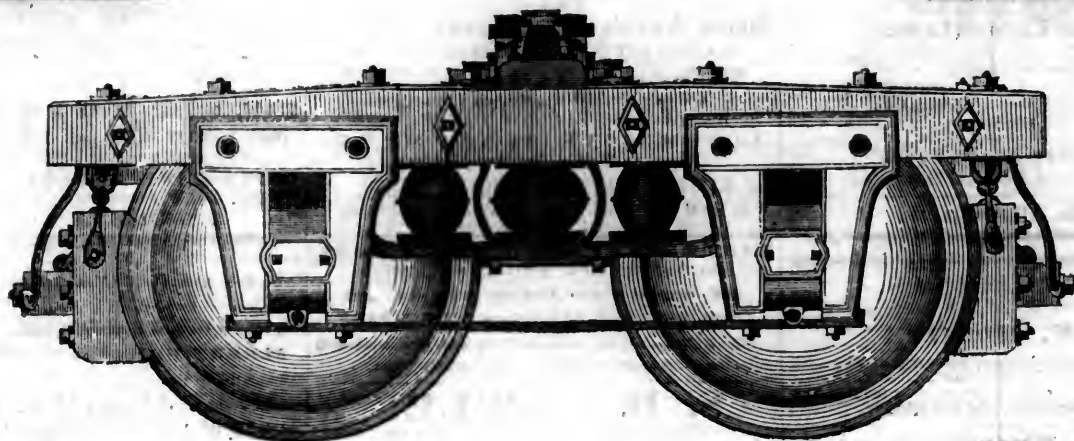
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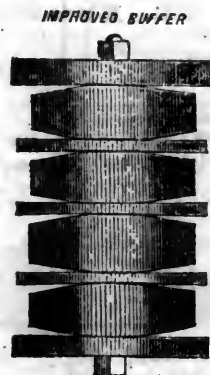
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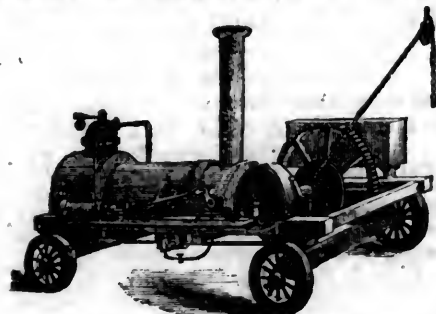
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STEAM NAVIGATION, COMMERCE, FINANCE,
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HENRY V. POOR, *Editor.*

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SATURDAY, NOVEMBER 26, 1859.

[WHOLE No. 1,232, Vol. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, November 26, 1859.

The Gauge Question.

(Continued from p. 737.)

Major Brown next takes up the subject of passenger cars, and endeavors to make an argument against a wide gauge from our wide cars.

Now it does not follow because the gauge is wide, that the passenger cars, of necessity, must be wide also, but it does follow that the movement of the ordinary sized car-body, placed on the wide track, is very much easier and more steady, than on the narrow track, the effect of which is a material saving in case of repairs of both car and road, to say nothing of the great ease to passengers, without any draw back whatever, for the cars will weigh no more and cost the same. But, as before, I do still maintain that the passenger cars on the ordinary gauge are too narrow for the comfort of passengers, and that our wide gauge admits of much more room being afforded them with very little additional cost, and that the greater the means of adding to the comfort of travelers, the greater will be the popularity of the route, and by a natural consequence, the greater the patronage and receipts of the road.

This company will be forced to enter upon a strong competition for the travel of the West, the route as shown by Major Brown, via Buffalo and

Albany, upon the completion of the Hudson River Railroad, by which time the roads from Albany to Lake Erie, will have been re-laid with heavy iron rails, will command more of this travel than is consistent with your interests, unless your present some advantages in the way of extra accommodation.

By reference to Major Brown's report, it will be noticed that he estimates the distance from New York to Buffalo, via Albany, to be the same as from New York to Dunkirk, via N. Y. & E. R. R. As the railroads, via Albany, have the most favorable grades, and much less curvature, there is great reason for our Directors to look sharply to all the advantages they may be able to take, in order successfully to compete with rivals, who, in such important items as grades and curves, possess by far the best route.

Should you reduce your gauge, you cannot expect to equal those roads in time, for your road is not as straight or level as theirs, nor excel them in accommodations; while, by retaining the wide gauge, your cars can be more convenient, and a much better rate of speed can be maintained, as I will endeavor to show when I come to speak of the power of engines.

Major Brown states that you can have passenger cars 9½ feet wide from outside to outside, on a gauge of 4 feet 8½ inches, and that this width furnishes all the room necessary for the accommodation of passengers. I have written to several of the managers of railroads on this subject. Mr. Parker, of the Boston and Worcester Railroad, informs me that their passenger cars are 8 feet 8 inches, from outside to outside, and that he regards this width as the best for them.

On the Boston and Maine Railroad, where competition for the Portland travel, induces the company to go as far as they can in making their route popular, they have, Mr. Minot writes, cars 9¼ feet wide from outside to outside, and he says he is not willing to exceed that width.

I am of the opinion that it would not do, to make cars on this road 9½ feet wide, if the gauge should be reduced.

We must expect to run fast with *through* passenger trains, and cars so much overhanging, would, by their rocking motion, indicate the slightest imperfections on the road, and in this

way a prejudice would be created against the route. I have traveled on the cars 8 feet 8 inches wide, and on those 9 feet 3 inches wide, upon the Eastern roads, and have found the former much more steady.

Suppose that, contrary to the experience of nearly every railroad in existence, you make your cars 9½ feet wide, or nearly twice the width of track. You then have off, the thickness of the wall 7 inches, and 22 more for the aisle, leaving 7 feet 1 inch for four seats; this is only 21 inches for each passenger, while in England they give 26 inches to each passenger on their narrow gauges, which with our American plan of cars, requires just 11 feet to seat two abreast, while 9½ is too wide for a narrow gauge, it is too narrow to afford the required room for the comfort of passengers on a long journey.

I have with me a drawing which indicates the width I think necessary to seat four passengers abreast with the greatest comfort and convenience. This drawing shows that the car should be 11 feet wide, and that less than 10 feet will not answer.

It is a tedious affair to ride 400 to 500 miles in a railroad car, and those who have such journeys to make will seek the route, which will render them the most comfortable; when they hear that you can give them more room to sit, or move about, or change their position, a chance to recline and sleep with greater ease than is to be found on a rival route, they will go with you.

A wide gauge is the only means of accomplishing this desirable end. Nothing is so safe as experience to rest a judgment upon, and we well know that our wide cars when two-thirds full, or two on a seat, by affording so much room and so much greater comfort than is enjoyed on ordinary roads, attract attention, and are admired by all; and notwithstanding much is said about three persons riding on a seat, the portion of the public who use our road, appear to be, and often speak decidedly in favor of the gauge, and are earnestly opposed to the change. Is it not most probable that the wide and roomy cars is the cause of this? It evidently is the case from the many remarks I have heard made on the subject.

Let me state again that I am not advocating *three seated cars*, but merely say, that when you have cars as wide for three on a seat, as others are

for two or nearly so, and give all this room to two persons, you add to the comfort of travelers, and for long travel, this additional comfort will give a superiority to your route over rival ones.

Messrs. Eaton & Gilbert have no experience on this subject, and their opinions are of no weight against the abundant evidence we have on matters about which they have had no opportunity to judge. In order to rebut some of the assertions about the expenses of wide cars, compared with narrow ones, I will now speak of the policy of our wide cars, with seats for three instead of two, for I think I may now safely speak of the cars, and not be understood as advising their use for long travel, although from the tenor of Major Brown's report, and the conversation of Directors and others, it seems difficult to make it understood that three seated cars are not necessarily incident to a wide gauge. From the outset I have never contemplated their use, except for short travel. I advocate the broad gauge so far as passenger cars are concerned, on the ground, *First*, that it will enable you at very nearly the same expense to give greater accommodations for long travel, and *Second*, that with better, and much better average accommodations, you can, on account of the size of the cars, take the way travel at a decided saving of expense. This last item I deem a most important consideration, not only on account of the saving in the number and cost of cars, but in the expense of motive power and repairs.

The opinion of Messrs. Eaton & Gilbert, that in our wide cars, we carry more weight for the same number of persons who will be comfortably seated, than in those designed for only two on a seat, is altogether erroneous, and of no value whatever, unless it be to show the aptness of men to adopt opinions suited to their supposed interest.

I have shown in my report that our cars now in use are only 33 feet long, the same length as a 48 passenger car on the narrow gauge, and that the average number of passengers who actually took seats in those cars, at each movement, was over 50, or more than the narrow cars would hold if each seat was occupied at every movement. I also stated that our cars were materially lighter, per passenger, than the narrow cars, and I now state, what I did not before, as I supposed all admitted it, that our cars are more acceptable to the public. They have, on account of their roominess and greater comfort, added largely to the popularity and business of the road. This is a matter of constant and daily remark; a little reflection will, I think, show the reason of this. When our cars have but two on a seat, they are two-thirds full, and passengers have all the room they want.

In cases of way travel, they have this comfort for the greater part of the route. But there is another fact, we often have three passengers on a seat when the car is not half filled. I will here notice the remark made by Mr. Allen, that passengers generally travel singly or in pairs. I find that although a large number of our passengers travel in this way, still it daily occurs that families and friends seek positions where three to six, or more, if possible, get together, and they seem to feel that the pleasure of the journey is thereby materially increased.

Experience, I think has shown, that on narrow gauge roads, their cars run on an average not more than half full; but they must furnish seats sufficient for their greatest travel, and way travel

varies exceedingly. Now, if we furnish seats in our cars, say equal to two on a seat, for the average travel, an increase of 50 per cent. *above* the average number, is provided for without adding to the number of cars. In the loads which nearly fill our cars, there are so many who are willing, or anxious, to set three on a seat, that we have no trouble on this score. I have frequently heard mothers speak of the greater ease with which they can journey with their children on our road, when they can sit by the side of their parents, instead of being held by them. I mention these circumstances to show a reason why the wide cars are popular, although three are on a seat. It is many times a matter of congratulation, rather than otherwise that it is so, and where only two are upon a seat, they are by far the pleasantest cars in our country. This is the language of all who travel our road.

Messrs. Eaton & Gilbert are entirely mistaken as to the comparative weight and comfort of our cars, as we often have three on a seat, enjoying more comfort than they could two on a seat in the narrow cars. They, however, admit that the first cost, per seat, is in favor of the wide cars, but say that the cost of repairs is against the wide cars. Sufficient experience has been had here to enable me to repeat, that this is also an error. Our cars have, in fact, done more service than cars on other roads. We have never broken an axle, a thing unheard of in the history of any other road; and yet we have carried larger loads at a great speed, while our road has not, as is well known, been kept in as even and good repair as other roads. Those gentlemen say that they build cars $9\frac{1}{2}$ feet wide for narrow roads. I think they are even mistaken here, as I can nowhere find such cars in use. But they say they would build them no wider for a 6 feet gauge, and in this Messrs. Brown & Allen concur.

Major Brown goes on to say that there is, and always will be, more dead weight with the "enormously" large cars used on the Eastern Division, yet it still remains true that we save dead weight by using our cars as they are; and in noticing the letter of Eaton & Gilbert, I explain why it is so. I will only add that if our cars hold 72 to 84 passengers, it does not follow that cars for a less number cannot be built, where it is advisable to make them so.

Major Brown cites the fact, that in England, where the "traffic is enormous," the cars are, "on an average, but little more than half full." It would be just so here if we had small cars and left them along at all the stopping places and branch roads. In England they get well paid for their first-class passengers, and submit to greater expense than we do. It is not because they have large cars, as Major Brown is well aware, but because they have small ones; therefore I see nothing in their experience to justify the conclusion that large cars are more likely to be empty than small ones.

Major Brown concluded that we want as many passenger cars on the wide as on the narrow gauge. On the contrary, I think it certain that for way trains, or two-thirds of our business, there will be a saving of at least 25 per cent., and shows the truth of this in our experience on this road, much to the pecuniary advantage of the company and the satisfaction of the public.

We now come to the question of difference in the cost of cars on the two gauges. Major Brown takes the opinion of Davenport & Bridges, that trucks for our wide gauge cost from \$50 to \$60 more than for the narrow, and of Eaton & Gilbert, that they cost from \$60 to \$70 more. Mr. Whitney's at \$24. Rogers, Ketchum & Grosvenor at \$30, and Norris Brothers at \$100 more—the average of these opinions being that the cost will be increased about \$52.80; but to be "entirely within bounds," the Major takes the excess of cost at only \$40 per each 8 wheeled car. The extra cost of each car thus determined, he goes into an investigation as to the number of cars required on this road to perform the business equal to 400,000 tons east, and 133,333 tons west. He thinks it probable that considerable time will elapse before this amount of business can be realized. I am of a different opinion. But it so happens that I also made an estimate of the probable number of cars required to do a business equal to 400,000 tons east, and 200,000 west, which, in fact, so far as the number of cars required, is concerned, is the same basis of business as is assumed by him. We are, however, wide apart in our conclusions as to the number of cars required, as will be seen by reference to my report—so wide, that I feel it incumbent upon me to state the mode of arriving at my estimate. I did not take the statistics of other roads, as I was unable to learn the exact particulars I wished in regard to them. For instance, I knew the number of cars on the Western road, but did not know the dates when new cars were placed on the line, nor did I know the extent to which they supplied foreign lines. The Superintendent told me that they furnished 25 a day to the Housatonic Railroad, and that they also supplied other lines in whole or in part. As the cars sent upon other lines must be those in running order, and as they would not always be returned as fast as taken, I suppose a large number of their cars are occupied in this way. So on other roads. I therefore relied upon our own experience, and reasoned in this way.

(To be continued.)

State Aid to Railroads.

EXTRACT FROM THE MESSAGE OF THE GOVERNOR OF GEORGIA.

In my annual message to the last Legislature, I gave it as my opinion that it would be good policy for the State to lend her credit to aid in the construction of such other railroads as may be necessary to the more full development of her vast resources, *provided* she be made perfectly secure, beyond doubt, against ultimate loss. I still entertain the same opinion. In lending her aid in the construction of a road, I only propose that the State endorse the bonds of the company, after a reasonable proportion of the road is first completed, for a sum sufficient to purchase the iron to complete the rest, as fast as the company, at its own expense, shall have first graded the road and laid down all the timbers and superstructure, ready for the iron.

For the purpose of securing the State against loss, on account of this liability, I propose that she take and retain a mortgage or statutory line upon the entire road, as well the part completed before her liability was incurred as the part completed afterwards, with all the superstructure, rolling stock, fixtures, franchises, and appurtenances of every character belonging to the company, with the right to sell the whole after sixty or ninety days advertisement, whenever the company fails to meet and promptly pay any instalment of interest or principal due on said bonds. And should

any portion of the State's liability remain unextinguished, after the sale of the road, I propose that the whole deficiency, whatever may be the amount, be divided among the solvent stockholders, in proportion to the number of shares owned by each, and that the Comptroller General, under an order from the Governor, issue execution immediately against each, for his proportion of the deficiency, to be levied and collected by sheriff of the county in which the defendant resides, or of any county in which he may have property. This would, in my opinion, make the State amply secure. Indeed, it is not probable that she would ever have to call upon the stockholders to make up a deficiency, after the sale of a road; as it is not reasonable to suppose that any company of sensible men, simply because the State would agree to endorse their bonds under the very binding restrictions above proposed, for a sum sufficient to purchase the larger part of the iron, would ever invest their capital in grading and building a road which would be of so little value when completed, that the whole road, and all its appurtenances, including the iron upon the entire track, and all the rolling stock, would not bring, if sold, a sum sufficient to pay for only the part of the iron for the price of which the State would be liable.

Capitalists do not usually invest their money where they not only expect no dividends or incomes, but the loss of the principal, with an ultimate liability to future additional loss; consequently, it is not reasonable to suppose that the stockholders in any company, under the proposed plan, would undertake to build a road, and receive the State's aid by the endorsement of their bonds, unless they were satisfied that the road was a public necessity, and that the stock, after the road should be completed, would pay reasonable dividends.

The law, if passed, should be a general one, giving to every company in the State, engaged in the construction of a railroad, the same aid, subject to the same liability. It may be objected, that the terms upon which it is proposed to grant the aid are so onerous that no prudent company would avail themselves of its benefits, and that no encouragement would be given by the proposed plan to the development of the resources of the State; and it may be asked, what are the advantages of State aid, under this plan? To this it may be replied, that the company, with this State's endorsement upon its bonds, can sell them at par in the market, and thereby save itself from the ruinous loss which it would have to bear, should it be compelled, by its necessities, as such companies often are, to expose its bonds in the market, without such endorsement, for the purpose of raising money to complete its roads. Many companies, which are now doing a prosperous business, while constructing their roads, were compelled to sell their bonds at sixty cents on the dollar, to raise money with which to complete them. Had the bonds of any such company had the proposed endorsement, they would have commanded par in the market, and thus over one-third of the cost of construction would have been saved to the company. As an illustration, suppose it will cost \$600,000 to build a road between two given points, and the road, if built, would be of much public utility, and do much to develop the resources of an interesting section of the State, and a solvent company, without the cash at present, undertakes to build it upon credit by the sale of its bonds, as such roads are often built, the bonds must be offered in the market, and will bring only sixty cents on the dollar. It will cost \$1,000,000 of bonds to raise the \$600,000 in cash. When due, these bonds must be redeemed by the company at par. It will, therefore, cost the company \$1,000,000 to build the road. But, supposing the State endorses the bonds; they will then bring par; and \$600,000 of the bonds will bring \$600,000 in cash. The company, in that case, would have but \$400,000 of bonds to redeem; consequently, it would cost them only \$600,000 to build the road. The State's endorsement would, therefore, be worth \$400,000 to the company. The State would re-

main perfectly secure, and have her resources greatly developed, and the lands of her citizens in the vicinity of the road much enhanced in value, which would increase not only the aggregate wealth of the people, but the amount of taxes due the State.

Without the endorsement of the State, the road would not probably be built. Before the company would undertake to build it, the stockholders, as prudent men, would calculate the per cent.; it would probably pay in dividends after its completion; and they might be satisfied that it would pay eight per cent. upon the cost, if it could be built for \$600,000, and be willing in that case to incur the liability and proceed with the work. Should it, however, cost \$1,000,000 to build the same road, it could then pay in dividends from the same amount of business, but little over half of 8 per cent., and in that case, they would refuse to incur the liability or to proceed with the work. Consequently, the road would not be built; the resources of the section would not be developed; the price of lands would not be raised, and the amount of tax paid into the Treasury would not be increased. Hence, I conclude that it will be a wise policy on the part of the State to grant the aid upon these terms, that no prudent company will receive it until the stockholders are satisfied that the road will pay when completed, and that the aid will be very valuable to a company engaged in building such a road.

It is sometimes said that in justice to the railroad companies already in existence, the State should not aid or encourage the building of other roads which may come in competition with those now in operation. Some of these companies are now making very large profits, and while I desire to see them prosper, and would not wish to see their dividends reduced below a point where the stock would be reasonably profitable, no matter how much other interests might be thereby promoted, I am unwilling that such sections of the State as are without railroads should be denied their benefits on the ground that the large incomes of some of the wealthy companies now in existence might be reduced by giving these sections an opportunity to participate in the advantages which would result to them from the construction of other roads. Indeed, I entertain no doubt that the interest of the people requires that the number of roads be increased till no one shall have a monopoly of the business of any very large portion of the State, provided that each shall be left with sufficient business to make its stock reasonably remunerative. The greater the competition between the roads, the lower will be the freight and fare, and the better for the interest of those who travel and ship freight over them. When there is no competition, for the purpose of accumulating larger incomes, the freights are usually placed by the company at a very high figure, and the shipper must bear the loss.

Again, I deny that any company has a right to complain that injustice have been done it by the State, should she permit or encourage the building of such roads as the interest of her people in different sections require, which do not in any manner violate the chartered rights of such company. Most of our railroad charters contain guarantees to the respective companies, that no lateral road shall be built within a certain number of miles of the road of the company to which the guaranty is given; say twenty miles, as an instance. These corporations claim that the charter is a contract between the State and the company, and they cling with tenacity to every chartered right given them by this contract, and exercise it, if profitable, no matter how onerous its exercise by them may be to other interests in the State. They should, therefore, be content with the contract, and should not be heard to complain when the State exercises rights reserved by her when she granted to them their charters. The State, in the case above supposed, as an instance, when she granted the charter, guaranteed the company an exclusive right over a strip of her territory forty miles wide. With this guaranty they were content, accepted the charter, invested their money,

and built the road. The interest of a large number of persons outside of the limits embraced in the guaranty probably afterwards requires that they have a road; the State encourages its construction and it is built. What injustice is done to the first company, and how have they been deceived? They have the full measure of their rights, and the full benefit of what they insist upon as their contract. It is true, they may not have so large a monopoly as they desire, but they have all they contracted for, while another portion of the State is developed, and the people have the benefits of low freights resulting from the competition.

The State has taken stock in two railroad companies. I oppose this policy, and do not think she should be a partner with her citizens in such an enterprise. My opinion is, that she should have no interest in any property over which she has not the entire control. By endorsing the bonds of the company, with ample security, she complicates herself with none of its private management or affairs.

(From the Memphis Bulletin.)

St. Louis, Memphis and New Orleans.

This morning we lay before our readers a document which every citizen of Memphis should read and lay aside. We allude to the report prepared by our townsmen, Messrs. Trezevant and Barnett, upon the policy of extending the Iron Mountain Railroad to the Mississippi at this point. The facts and arguments are managed with an ability that must arrest the attention of all; while the "future" of this valley, and of Memphis and St. Louis is drawn with a graphic pen. We trust it may receive that attention from the Iron Mountain Railroad Company which its commanding importance merits; and that our people will throw into that enterprise the energy and concert of action which always characterize their movements.

To the President and Directors of the Iron Mountain Railroad Company:

GENTLEMEN:—The object of the Railroad Convention held in St. Louis on the 29th of September last, was to consider the advantages of extending your road southward from Pilot Knob. Is it best for you to favor a direct connection with Columbus, Ky., and there to unite with the system of railroads in Tennessee, Georgia and South Carolina, or shall you push your road to the Arkansas State line and Memphis, and there connect with Mississippi, Alabama, Louisiana, Arkansas and Texas; or shall you do both, and which you shall do first, are questions for you to decide.

It will scarcely be thought, by the most sanguine, that you can extend your road southward, to the Arkansas State line, and also extend a branch of it in a direct line to a point opposite Columbus. You may do one of these things, but you cannot accomplish both. The question is, which of these connections will be most valuable to you, if you must confine your energies for the present to but one, as you undoubtedly should do?

The Memphis delegation present at the St. Louis Convention, requested the undersigned to submit to your consideration such facts as should, in our judgment, induce you to look to a connection with Memphis through South-east Missouri and North-east Arkansas, as preferable to all others. In doing this we shall be as brief as possible, confining ourselves to such prominent facts as must carry with them irresistible conclusions.

As preliminary to this, however, permit us to invite your attention to a few general observations that may not be inappropriate.

The most fertile region in the world is the Mississippi valley. Lying entirely in the temperate zone, yet approaching the frigid zone on the north and the torrid zone on the south, the variety of its products consists of those of almost every clime, save the tropical fruits, and hence it can support a larger population than any other country of equal extent.

The inland commerce necessarily growing up between the northern and southern portions of it is of vast amount. Its great central artery, with its many grand tributaries, affords a navigation of

25,000 miles. They drain a valley one thousand miles in extent, from the Lakes to the Gulf, and fifteen hundred from the Alleghany to the Rocky Mountains. It has not only a rich soil and genial climate, but vast forests of valuable timber, and inexhaustible mineral beds. Such a region, already under the magic influence of American enterprise and American character, must soon become the most populous portion of the globe. The census of 1850 placed the centre of the population of this Union near Pittsburg. The next census will probably locate that centre near Columbus or Cincinnati, and that of 1860 will find it in the heart of the Mississippi valley.

In this country, population is the great element of political power; and its steady progress Westward, during the past half century, justifies the opinion, that by the beginning of the next, the political supremacy of the Union will be found in this valley, where population and wealth will have centered. St. Louis is on the Mississippi, between its largest eastern and largest western affluents; she may be said to be near the centre of the great grain region of this valley. Until within the last ten years, the products of almost the entire Northwest, extending nearly to Lake Michigan, sought a market *southward by water*, and the commanding position of your city made almost that whole region tributary to her. But within that period the iron rail has given another outlet to that section; and millions of produce, whose natural channel for a market is the Mississippi river, now seek the Atlantic seaboard by artificial routes. Your city cannot now expect the trade of much of that region lying between the Ohio river and the lakes; for Chicago, Louisville and Cincinnati are large and growing depots for all such agricultural products as seek your wharves; and they are not only nearer the country tributary to them, but they are also nearer the great eastern market.

The railroads leading west from Chicago are cutting your city off from the region north of her; and the Illinois Central Railroad is now sapping you in the south, with her Cairo and Fulton branch. St. Louis must, therefore, look to the west; and, fortunately for her, it is almost limitless in resources. Unlike the "West" of former days, which was settled up by the tardy process of wagons, this is being rapidly populated by means of steamers and railroads; and its energetic inhabitants will soon convert it into mines of wealth. St. Louis will thus soon regain as much as her rivals have taken from her; and become the focus where the products of that vast region will gather for a market.

These products are grain, tobacco, hemp, hay, cattle, horses, mules, sheep, swine, fruit, iron, lead, coal, copper, and manufactures of all kinds. Their concentration there, in large quantities, will invite purchasers who wish to supply the wants of other markets and others sections needing, but not producing enough of such articles. When she gathers her wharves and warehouses the valuables of her fruitful West, she must look to the South for the larger portion of her consumers. She has no interest in sending these commodities to Chicago, Louisville or Cincinnati for purchasers, for these cities are in the market with the same things. We repeat, therefore, that St. Louis must look to the South. Must it be to South Carolina and Georgia? They certainly need constant and increasing supplies for agricultural products, such as St. Louis would sell; and it was to obtain a ready and uninterrupted access to a region producing them in abundance, that the lamented Hayne, of South Carolina, projected a railway communication between Charleston and Cincinnati thirty years ago.

So long as commerce was mostly confined to water navigation, St. Louis could compete with Louisville and Cincinnati, for the traffic of Alabama, Georgia and South Carolina; but railroads have changed the avenues of commerce in many instances, and your city is now literally distanced in the race for the trade of these States.

The last rail is laid on the Louisville and Nashville Railroad, and Louisville is now connected with Charleston and Savannah by iron bands. The people of these States need grain, beef, pork,

bacon, lard, sheep, cattle, hogs, bagging, rope, tobacco, etc., and they will buy at the nearest and cheapest market. St. Louis, Cincinnati and Louisville all covet this trade—are all rivals for it—for they all can supply the demands for these products.

Distance affects the cost of transportation, and that again, affects the prices of an article. Can St. Louis compete with these other two cities for this trade? Let us suppose there is a continuous railroad from St. Louis to Chattanooga, via Columbus, Nashville, etc. We take Chattanooga as a common point for St. Louis, Louisville and Cincinnati—for the nearest route from either city to Georgia and South Carolina is via Chattanooga. How stands the table of distances?

	Miles.
From St. Louis to Chattanooga, via Nashville,	558
From Louisville to Chattanooga, via Nashville,	334

Difference in favor of Louisville..... 224

As Cincinnati is but 100 miles further than Louisville, she has 124 miles the advantage of St. Louis in the competition for the trade of these States. Can it be supposed that these States will get their supplies at your city, when Louisville offers them the same articles, with a saving of upwards of two hundred miles of transportation? If they did, they would reverse all the laws of trade.

But there is a rival still nearer these States than Louisville or Cincinnati. Nashville is in the heart of one of the most fertile agricultural regions in the world; and an area of one hundred miles around her will soon make her the depot for its thousand productions. She will be able to offer to the citizens of these States just what St. Louis has for sale—tobacco, grain, beef, pork, bacon, lard, bagging, rope, iron, etc.; and when it is seen that she is but 150 miles from Chattanooga, while St. Louis is 558, it requires no argument to prove that she can drive you from that trade. Nashville, Middle Tennessee and Southern Kentucky will not send these articles to St. Louis, for that would be "carrying coals to Newcastle." Interest will prompt them to seek customers in the South, where such articles are in greatest demand and where there is less supply, and the market most accessible.

The same may be said of the manufactures of these cities. Cincinnati is the great manufacturing city of the West. With a population of 300,000, she has a manufacturing interest of \$115,000,000. But when she looks east of her, she sees Baltimore, Philadelphia, New York, Boston, Pittsburg, Buffalo, etc., with their immense capital, all competing for the custom of the region from the Western States to the Atlantic seaboard. She is driven to look to the South and West for customers, as is St. Louis; and she is now supplying the South with locomotives and machinery of all kinds; with agricultural, mechanical and household implements, furniture and books of every description.

St. Louis is driven to the same position; with this advantage over Cincinnati, however, she has a larger West and South to rely upon; and if true to herself, she may defy competition.

Having proven that St. Louis cannot hope to retain much of the trade of Georgia and South Carolina, the question arises, to what portion of the South must she look?

The question is easily answered.

The intelligent and courteous Secretary of your Chamber of Commerce, Mr. Baker, has furnished us with the following data with regard to the tonnage your city has in her trade with the South:

Tonnage of steamers running between St. Louis and New Orleans.....	384,000
Tonnage of steamers running between St. Louis and Memphis.....	67,500

Total trade with the South Miss. valley... 451,500
—this does not include the trade by flat-boats.

Tonnage of steamers trading between St. Louis and the Cumberland and Tennessee river valleys.....	32,000
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This table speaks volumes with regard to the trade of St. Louis. It plainly shows where her Southern customers come from. It tells her with what section she has her most lucrative commerce.

The trade with Memphis alone is worth twice as much to her as that with Middle Tennessee, Georgia and South Carolina all combined; and the trade with Memphis and New Orleans is worth to her fourteen times as much as that of those other sections combined.

This is her present state of commerce with the Southern States. What will it be in future? A glance at the census table of 1850 may aid in answering this question.

Let us see what was the population of South Carolina and Georgia, in 1840 and 1850, and also of Mississippi, Louisiana and Arkansas for the same period:

	1840.	1850.	Increase.
South Carolina.....	595,000	668,000	11 per cent.
Georgia.....	691,000	966,000	30 "
Mississippi.....	375,000	607,000	64 "
Louisiana.....	352,000	517,000	50 "
Arkansas.....	98,000	210,600	210 "

The emigration from South Carolina and Georgia, since 1850, will probably show a less ratio of increase in these States in 1860; while the rapid and continued flow of population into the others will show a ratio of increase larger than from 1840 to 1850.

The next census will probably approximate the following table:

South Carolina in 1860.....	725,000
Georgia.....	1,150,000
Total of S. Carolina and Georgia in 1860.....	1,875,000
Mississippi.....	1,000,000
Louisiana.....	800,000
Arkansas.....	900,000
Texas.....	1,000,000

Total popula'n of these four States in '60. 3,700,000

Or double that of the other two.

Carry this table to the year 1900 and it will stand thus, giving South Carolina and Georgia the same ratio of increase, and limiting the others to 50 per cent.

Population of South Carolina and Georgia in 1900.....	4,600,000
Population of Mississippi, Louisiana, Arkansas and Texas.....	18,750,000

St. Louis must lay her plans for the future, if she would retain her supremacy she now enjoys in this valley. She must not look to the men and things of to-day only, but she must endeavor to see what the future will develop.

Facts and calculations like the above should convince her, if anything be yet wanting to do so, that her Southern allies, in the future, as in the present, must be found in the South-Mississippi valley, where the great increase of population will beget continued demands for the staple commodities she has for sale.

But Louisville is the rival of St. Louis, even for the trade and travel concentrating at Memphis as this table will show:

From Louisville to Bowling Green is....	115 miles.
From Bowling Green to Paris, via Clarksville is.....	128 "
From Paris to Memphis, via Humboldt, is.....	130 "
Total dis. from Louisville to Memphis.....	373 "
St. Louis to Pilot Knob.....	86 "
Pilot Knob to Indian Ford.....	58 "
Indian Ford to Charleston, Mo.....	51 "
Charleston to Columbus.....	17 "
Columbus to Memphis.....	151 "

Total dis. from St. Louis to Memphis... 373 "

Louisville is as near to Memphis, by railroad, as St. Louis is, even if the Columbus connection be made; and she has the great advantage of not being compelled to break her cargo between her port and Memphis. In addition to this, the ship-

ments Memphis might make to the Louisville market, if not sold there, would be that much nearer the ultimate market, in the great Atlantic cities; and these items are no trivial elements in the competition between the two cities. By extending your road directly southward, however, St. Louis can reach Memphis over a line ninety-three miles shorter than the one via Columbus:

St. Louis to Pilot Knob	86 miles.
Pilot Knob to Indian Ford	68 "
Indian Ford to Chalk Bluffs	31 "
Chalk Bluffs to Memphis	95 "

St. Louis to Memphis, by this route 280 "

This saving of distance is always an important matter in transportation; and only need be stated to be appreciated. If St. Louis reaches New Orleans via Columbus, Grand Junction, Canton, etc., the distance is 751 miles; and there again Louisville is her rival; for it is just 751 miles from Louisville to New Orleans, via Bowling Green, Paris, Grand Junction, Canton, etc.

But from St. Louis to New Orleans, by the western or "air-line," the distance is as follows:

St. Louis to Memphis, via Indian Ford and Chalk Bluffs	280 miles.
Memphis to New Orleans via Paula, Grenada, Canton, &c	333 "

Total

By this line, it seems that St. Louis is seventy-eight miles nearer New Orleans than Louisville is.

Just here is another consideration of controlling importance. Memphis is at the head of perpetual navigation on the Mississippi river. There the river has never been obstructed within the memory of any living soul. It is always navigable for the largest class of steamers. At Columbus, however, such an event is not a phenomenon. The river has been gorged with ice for days together, even as low down as Randolph, sixty miles above Memphis. How important it is, then, that your road should reach the Mississippi at a point below all such obstructions.

With your road extended to Memphis, even if navigation was suspended above that city, travel and commerce would not be obstructed; for the cargoes of your steamers, bound upward from New Orleans, might here be transhipped, and the delay would be but trifling. So with the produce which generally takes the river to New Orleans. The suspension of navigation would not interfere with its shipment, as it might be placed on the railroad, brought to Memphis, and thence go South or East, by river or rail, as interest might dictate. We think the winters of 1851-2, of 1855-6 and 1856-7 are moments not soon forgotten; for such a railroad, from Memphis to St. Louis, would have saved to the merchants of St. Louis and New Orleans several hundred thousand dollars, in each of these years.

But Memphis has some claims as a commercial point. As shown just now, the trade between here and St. Louis is of heavier tonnage than that St. Louis has with Nashville, Georgia and South Carolina, all combined. There are now four or five steamers regularly employed in it, with the prospect of one or two more being added this winter. How many steamers are in the St. Louis and Columbus trade? It is a well known fact that the cotton of all West Tennessee—even of the counties on the Mobile and Ohio road, (which are much nearer to Columbus than to Memphis,) comes to Memphis instead of Columbus for a market. The same may soon be said of tobacco and grain. They will go where buyers congregate; and it is as natural that capital should seek tobacco and grain at Memphis as that it should seek cotton. Within the past twenty-five years, Memphis has increased her exports of cotton from 20,000 to 340,000 bales; and her shipments up-stream within the past ten years, have grown from 10,000 to 82,000 bales. Her population has grown from 8,000 in 1850, to 25,000 in 1859; and her lines of railroad now point in every direction.

The Ohio and Upper Mississippi valleys must eventually become the great manufacturing sec-

tions of the Union; for there, in ample abundance, are population, food and fuel. Their cotton factories worked up more bales of cotton, for the year ending July 1, 1859, than did all the New England States in 1820; and in fifty years from this date, more bales will be manufactured there than in all other portions of the Union combined. England consumed less than 150,000 bales at the beginning of the present century, while she largely exceeds two millions now. New England consumed less than 50,000 bales in 1820, while using upwards of 600,000 now. Is it an extravagant estimate to conclude that these valleys just north of us, filled with people, coal, iron and food, will, by the year 1900, demand a million and a half of bales for their factories? With all their local advantages, why should they not? They are just at the door, as it were, of the cotton-growing region. It costs them less to obtain the raw material, less to work it up, and less to send the manufactured article back to the consumers of the West and South-west, than the Eastern manufacturers must pay. Memphis is at the head of the cotton region of this valley, and it is therefore the point where all the factories in the valley above her obtain their supplies; for such an occurrence as a steamer taking cotton up stream from any point below Memphis has never yet been known.

As the consumption of cotton above us increases the supply at Memphis will increase, by the simple law of trade which increases the supply where the wants of commerce demand it.

Memphis will thus become the Liverpool of this valley; for its accessibility and its central position will invite buyers from the North, the East and the South; and these again will invite sellers.

St. Louis is just above her on the same stream, having unequaled inland commercial advantages and resources; inexhaustible mines of coal and iron at her very doors, and food for millions. Who may estimate her future wealth, power and fame?

Within the next fifteen years, thousands of miles of railroad in the South-western as well as in the other States of the Union must be relaid with new rails. They cannot afford to throw away their old ones; nor can they send them back to England. Thousands of tons must be re-rolled; and they will seek Memphis and the various railway lines, as the most accessible point from which they can be forwarded. On the line of your road is literally an Iron Mountain—such a mine as is not equaled in the world. Why cannot these rails and new ones be prepared there? Taking the Southern end of the line at Memphis, with but the handling to cross the river, they could reach the furnaces in a few hours, and be returned again, over the same line, for immediate use.

That interest alone, would be worth millions to St. Louis.

Thus relatively located, each with its peculiar and commanding advantages—the one in the centre of the great grain region of this valley, with all the elements and resources necessary to make it the chief manufacturing city of the Union; the other at the head of the cotton region of the South west, with ready access to the millions who need the supplies found so abundantly elsewhere—let us ask if two such cities do not demand close commercial relations?

Those relations can be rendered most intimate by the extension of your railroad towards our city. Memphis will do her duty towards the enterprise. She has never failed yet, and she will not now, when this last and greatest of all her improvements call on her for aid. Your noble State must come to your aid, to enable you to reach Arkansas. St. Francis, Madison, Wayne and Butler counties will be directly penetrated by the extension; while the counties bordering on them, on the East and West, will derive their proportional benefits from such an enterprise.

By this route, you enlist more friends for the good cause, where friends may be needed, than you can possibly gain on any other line; and, at the same time, you adopt a route which enables Columbus to reach you on a shorter one than Memphis and Arkansas will have to construct.

Such a road would enable passengers to leave St. Louis in the morning, and reach Memphis in the evening; or to go from St. Louis to New Orleans in twenty-four hours. This would not be traveling thirty miles per hour. Could you say to your citizens and the citizens of New Orleans, to-morrow, that they may breakfast in St. Louis one morning and in New Orleans the next, do you think your trains would leave empty? Such an announcement would soon make it one of the most crowded thoroughfares on the continent. Is it not worthy your earnest consideration?

We are respectfully,
J. T. TREZEYANT,
J. N. BARNETT.

MEMPHIS, NOV. 1st, 1859.

Railroads in Virginia.

The advanced sheets of the report on the railroads of Virginia, for 1858, show in operation—including 287 miles of the Baltimore and Ohio Railroad located in that State—1,433 miles of main line of railroad. Across the State east and west from Norfolk, via Richmond, Staunton and Covington, to the mouth of the Big Sandy, on the Ohio river, the railroad distance is 532 miles, of which distance 297 miles completed, are operated by three companies owning connecting roads. We annex the following recapitulation of the tabular statements:

Amount dividend bonds due the State	\$319,702 00
Payments made by the State on ordinary stock	13,478,325 54
Payments on account of preferred stock	1,241,000 00
Payments on account of loans	2,874,838 33
Guaranteed by the State	300 00

Total amount of State Interest	\$18,213,860 87
Capital stock authorized	\$31,807,013 79
Capital stock paid in by others than the State	9,130,445 84
Capital stock paid in by the State	14,779,324 74

Total amount paid in	\$23,909,770 58
Amount of Funded and Floating Debt.	
Funded debt	\$14,308,784 42
Floating debt	3,346,964 66

Total	\$17,655,749 08
Construction and equipments	44,611,989 76
Earnings for the year	2,818,248 85
Expenses for the year	1,256,107 82
Net earnings for the year	1,562,141 03

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending Nov. 5, were.....\$58,476 65
Week ending Nov. 6, 1858..... 50,832 36

Increase	\$7,644 28
Total traffic from July 1st	\$904,358 16
Same period last year	815,030 98

Increase

The receipts of the Marietta and Cincinnati Railroad in October were \$38,000, an increase of \$3,000 over September, and does not vary much from the earnings of October, 1858.

The October earnings of the Cincinnati and Indianapolis road were:

Passengers	\$15,643 59
Freight	25,333 43
Miscellaneous	1,445 00

Total

Florida Railroad.

Measures are being taken in Charleston, S. C., to place that city in daily communication with the Florida Railroad, at Fernandina, in view of opening a daily through route to New Orleans,

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F." Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
Alabama and Florida :					Chicago and Milwaukee :					Eaton and Hamilton :				
Convert. (guar. by Dir.)	\$300,000	7	1867		1st Mortgage (convertible)	\$512,000				1st Mortgage	\$757,734	†	var.	
Land Mortgage	150,000	7	1863		Income	62,000				Eric and North-East :				
Ala. and Miss. Rivers :	23,500	7	1869		Real Estate 2d Mortgage	188,864		1868		Exchanged for Buil. and St. L.	149,000			
State (Ala.) Loan	123,171				Chicago and Rock Island :					Evansville and Crawfordsville :				
Mortgage	109,500				1st Mortgage	1,397,000	7	1870						
Ala. and Tenn. Rivers :					Chic. St. Paul and Fond du Lac :					Florida :—				
1st Mortgage convertible	529,000	7	1872		1st Mortgage (on 1st Division)	3,000,000	7			Internal Improvement (State)	1,655,000	7	1891	
2d Mortgage	225,700	8	1864		2d Mortgage (on 1st Land Grant)	3,000,000	8			Free Land, 2d Mortgage	1,500,000	8	1891	
Albany, Vt. and Canada :					Real Estate	350,000	8			Florida and Alabama :				
1st Mortgage	500,000	7	1867		Cincinnati, Hamilton and Dayton :	461,000		1867		Internal Improvement (State)			7	1791
Albany and West Stockbridge :					1st Mortgage	950,000		1880		Free Land, 2d Mortgage			8	1791
Albany City (S. F.)	1,000,000	6	'60-'76		*Cincinnati, Wilm. and Zanesville :					Florida, Atlantic and Gulf Centr.				
Androscoggin and Kennebec :					1st Mortgage	1,300,000				Internal Improvement (State)	300,000	7	1791	
1st Mortgage	1,000,000	7			2d Mortgage	674,000				Free Land, 1st Mortgage	200,000	8	1791	
Income, convert.	710,000	7	var.		3d Mortgage	138,000				Fox River Valley :				
Atlantic and St. Lawrence :					Income	250,500				1st Mortgage	400,000	†		
Dollar Bonds	988,000	6	1866		Tunnel Right	1,000,000				2d Mortgage	180,000			
Sterling Bonds	484,000	6	'878		Cleveland and Mahoning :					Galena and Chicago Union :			7	1859
City of Portland Loan	2,000,000	6			1st Mortgage	694,500				Litchfield	52,015	7	'62-'63	
Baltimore and Ohio :					2d Mortgage	469,000				1st Mortgage (S. F.)	1,993,000	7		
Maryland Sterling	3,000,000	5			3d Mortgage	38,800				2d Mortgage (S. F.)	1,738,000	7	1875	
Mortgage Coupons	2,500,000	6	1885		Clev., Palmsville and Ashtabula	564,000	7	1861		Galvest'n, Houst. and Henderson :				
"	700,000	6	1880		1st Mortgage	303,000	7	1861						
"	1,128,500	6	1875		2d Mortgage	500,000								
"	1,000,000	6	1868		Special (Sunbury and Erie)									
Balt. City Loan	4,886,811	6			Cleveland and Pittsburgh :									
Bellefontaine and Indiana :					1st Mortgage (Main Line)	800,000	7	1860		*Great Western, Ill. :				
1st Mortgage convertible	791,000	7	1866		2d Mort. (M. L.) or 1st Extension	1,188,000	7	1873		1st Mortgage (W. Div. 100 m.)	1,000,000	10		
2d Mortgage	140,000	7	1870		3d Mort. (M. L.) or 2d Extension	1,165,000	7	1875		1st M. (E. D. 84 in.), 2d M. (W. D.)	1,350,000	7		
Real Estate (1861, '63, '68)	129,000	7	var.		4th Mort. (M. L.) or 3d Extension	1,154,000				Old Sang. and Morg. Railroad	41,000			
Income (S. F.)	199,500	7	1859		Income	118,000				2d Mortgage	323,000			
Belvidere Delaware :					Dividend Bonds and Scrip	491,825				Chattel (Equipment) Mortgage	374,426			
1st Mort. (guar. C. and A.)	1,000,000	6	1877		Cleveland and Toledo :					Greenville and Columbia :				
2d Mortgage	445,500	6			Junction 1st Mortgage 1st Div.	377,000		1867		1st Mortgage, Coupon	1,145,000			
Cand. and Amb. R.R. Co.	244,000	6			Junction 1st Mortgage 2d Div.	305,000		1872						
Black River and Utica :					Junction 2d Mortgage	324,000		1862		Hannibal and St. Joseph :				
1st Mortgage	370,000	7	1869		Tol., Nor. and Clev. 1st Mort.	522,000		1863		Missouri State	3,000,000	6		
Boston, Conc. and Mont'r'l :					Tol., Nor. and Clev. 2d Mort.	299,600		1863		Land	3,509,500	7		
1st Mortgage	200,000	6	1870		Junction Income	61,500		1862		Income (convertible)	310,000	7		
2d Mortgage	300,000	7	1870		C. and T. Income	192,950		1863		Main	11,000	7		
3d Mortgage Coupons	150,000	6	1870		C. and T. Income (convertible)	409,900		1864		Harrisburg and Lancaster :				
4th Mortgage Coupons	200,000	7			C. and T. Income (convertible)	373,000		1864		New Dollar Bonds	459,872	6	1883	
Sinking Fund	200,000	6			C. and T. Dividend (convert.)	199,735		1865		Hartford and New Haven :				
Boston and Lowell :					C. and T. Income (convertible)	129,000		1870		1st Mortgage	1,000,000			
Mortgage	440,000	6	1873		C. and T. (S. F.) Mortgage	640,000		1885		Hartf'd, Providence and Fishkill :				
Boston and Worcester :					Junction (Lloyd's)	5,000		1862						
Mortgage (plain)	100,000	6	1860		*Cleveland, Zanesville and Cin. :									
Mortgage (convertible)	500,000	6	1860											
Buffalo and State Line :					*Columbus, W'ina and Indiana :									
1st Mortgage	500,000	7	1866							Houston and Texas Central :				
Income (3 in '59, 3 in '62)	200,000	7	var.		Columbus and Xenia :					State (1st Lien)	210,000			
Unsecured	200,000	7	1864		1st Mortgage	18,000		1859		Mortgage	125,000	7	1866	
Erie and North-East	149,000	7			Dividend (due 1860, '61, '62, '66)	272,700		var.		Hudson River :				
Burlington and Missouri :					Connecticut River :					1st Mortgage	4,000,000	7	1869	
1st Mort. on 1st Division	530,000				Mortgage (due 1859, 60, '62, '63)	210,000	6	var.		2d Mortgage	2,000,000	7	1860	
Burlington Loan	75,000				Connectic't and Passump. Rivers :	800,000				3d Mortgage	3,000,000	7	1867	
Camden and Amboy :					1st Mortgage					Illinois Central :				
Mortgage	307,000	6	1864		Cumberland Valley :					Optional Right Scrip	65,000	7	1868	
Mort. (chgd from Ster'g)	888,000	5	1864		1st Mortgage	116,500				Construction	12,585,000	7	1875	
Mortgage	800,000	6	1849		2d Mortgage	97,000				Construction	4,115,000	6	1875	
Mortgage	1,700,000	6	1875		Dauphin and Susquehanna :					Free Land	3,000,000	7	1860	
Sterling (\$210,000)	1,008,000	6	1864							Indiana Central :				
Sterling (\$225,000)	1,080,000	6	1864		Dayton and Michigan :					1st Mortgage (convertible)	600,000	7	1866	
New Loan (less \$387,000)	2,500,000	6	1887							2d Mortgage	284,500	10		
Unsecured	800,000	6	1863							Income	281,500	10		
*Catawissa, W'msp. and E. :										Indianapolis and Cincinnati :				
1st Mortgage	1,500,000	7	1865							1st Mortgage	500,000	7	1866	
2d Mortgage	399,036	7	1886							2d Mortgage	400,000	7		
Chattel Mortgage	330,000	10	1871							Real Estate Mortgage	200,000	7	1868	
Cayuga and Susquehanna :										Dividend	86,284	7		
1st Mortgage	800,000	7	1865							Income and Domestic	176,000		var.	
Unsecured	89,000	7	1862							Indianap., Pittsb. and Cleveland :				
Central of Georgia :										1st Mortgage	656,000			
Mort. (due 1859 to 1863)	158,767	7	var.							2d Mortgage	167,000			
Central of New Jersey :										Income	106,000			
1st Mortgage	1,500,000	7	var.							Domestic	34,300			
2d Mortgage	1,500,000	7	1875							Jeffersonville :				
Income	375,000	7	var.							1st Mortgage	289,000			
*Central Ohio :										2d Mortgage	392,000			
1st Mortgage	450,000	7	1861											
1st Mortgage	800,000	7	1864							*Kennebec and Portland :				
2d Mortgage	800,000	7	1865							1st Mortgage	220,000			
3d Mortgage (S. F.)	950,000		1885							2d Mortgage				
4th Mortgage (S. F.)	1,339,250		1876							*Kentucky Centr. (Conv. and Lex.) :				
Income (1858, '59 and '60)	1,238,200		var.							1st Mortgage	160,000	6		
Income (ass. to Musk. Co.)	100,000		1862							1st Mortgage	260,000	7		
Charleston and Savannah :										2d Mortgage (convertible)	1,000,000	7		
1st Mortgage (endorsed)	510,000	6								3d Mortgage	600,000	7		
2d Mortgage	1,000,000	7								Guaranteed by Covington	200,000	6		
Cheshire :										Guaranteed by Cincinnati	100,000	6		
Mort. (1860, '63, '75 and '77)	756,400	7	var.							Income	400,000	10		
Chic., Burl'gton & Quincy :										Income	210,000	6		
Consolidated 1st Mort.	1,600,000	8	1883							Kent'ky Centr. (Lex. and Danv.) :				
Chic. and Aur. 1st Mort.	405,000	7	1867											
Ch. and Aur. 2d M. (S. F.)	303,000	7	1869							Keokuk, Ft. D. Moines and Minn. :				
Cent. Mil. Tr. 1st Mort.	400,000	7	1864							City of Keokuk, 20 years	400,000	8		
Cent. M. T. 2d M. (Conv.)	281,000	8	1868							City of Keokuk, (special tax)	150,000	10		
Cent. Mil. Tr. Unsecur'd	17,000	8	1868							Lee County, 20 years	150,000	8		
Cent. Mil. Tr. Unsecur'd	62,000	8	1876							Keokuk, Mt. Pleasant and Muscat.				
Chie., Alton and St. Louis :										Lee County	150,000	8		
1st Mortgage										City of Keokuk	200,000	8		
2d Mortgage										Henry and Louisa Company's	50,000	8		
3d Mortgage										Lehigh Valley :				
										1st Mortgage	1,500,000	6		

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (t) that the company is in default in its interest. "S. F." Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
La Crosse and Milwaukee:					Montgomery and West Point:					Orange and Alexandria:				
1st Mortgage (Eastern Div.)	\$903,000	†			Alabama State Loan	\$122,623				State Loan	\$400,000			
2d Mortgage (Eastern Div.)	1,000,000	†			Mortgage (due 1860, '63 and '65).	350,000	6	var.		1st Mortgage	612,500	6		
1st Land Grant (Western Div.)	4,000,000	†			Mortgage	450,000	8	1866		2d Mortgage	1,587,500	8		
2d Land Grant (Western Div.)	353,000	†			Muscogee:					Pacific (Mo.):				
3d Mortgage (whole road)	1,700,000	†			1st Mortgage	249,000	7			State (Mo.) Loan	7,000,000	6		
Farm Mortgage	1,087,700	†			Nashville and Chattanooga:					State Loan (S. W. Branch)	1,900,000	6		
Unsecured Bonds	1,785,000	†			Mortgage (State endorsed)	1,500,000				Construction	4,600,000	6		
Lexington and Frankfort:					Chat. and Clev. Subsc. (endore.)	150,000	61			Panama:				
Mortgage, due 1864, '69 and '74	130,000	6			Not endorsed	24,000				1st Mortgage Sterling	1750,000		1859	
Little Miami:					* New Albany and Salem:					1st Mortgage Sterling	1,250,000		1865	
Cincinnati and	100,000				Crawfordsville	175,000	7			2d Mortgage Sterling	1,000,000		1872	
1st Mortgage	138,000	6			1st Mortgage	500,000	10			Pennsylvania:				
2d Mortgage	7,000	6			1st Mortgage	2,235,000	6			1st Mortgage (convertible)	4,905,000	6	1888	
3d Mortgage	981,000	6			New Haven and Hartford:					2d Mortgage	1,928,000	6	1875	
Long Island:										2d Mortgage Sterling	1,539,840	6	1875	
State Loan (S. F.)	100,000	5	1876							For Canals, etc.	7,400,000	6		
Louisville and Frankfort:					* N. Hav., N. Lond. and Stonington:					Pennsylvania Coal Company:				
Louisville Loan	174,000				Mortgage	450,000	7			1st Mortgage	600,000	7		
1st Mortgage	248,000				Mortgage	200,000	6			Penobscot and Kennebec:				
Louisville and Nashville:					Extension	100,000	10			Hungor City 1st Mortgage	800,000	6		
State (Tenn.), 1st Lien	300,000	6			New Haven and Northampton:					2d Mortgage	250,200	7		
1st Mortgage	2,000,000				1st Mortgage	500,000		1869		3d Mortgage	156,000	7		
McMinnville and Manchester:					New Jersey:					Pensacola and Georgia:				
State (Tenn.)	372,000	6			Company's (various)	711,000		var.		State Internal Improvement		7	35 y's	
Mortgage	24,000	7			New London, William and Palmer:					Free Land				
Mortgage	10,000	6			1st Mortgage	500,000	71			Peoria and Ogawka:				
Madison and Indianapolis:					2d Mortgage	300,000	61							
State (Ind.) Loan					Income (convertible)	152,000	61							
Mortgage					New London City	100,000	61							
* Marietta and Cincinnati:					N. Orlns, Jackson and Gt. North:									
1st Mortgage (convertible)	2,494,000	7	1863		State (Miss.) Loan	155,000								
2d Mortgage	2,000,000				1st Mortgage	3,000,000	8	1886		Petersburg:				
3d Mortgage	1,500,000				N. Orlns, Opelous, and Gt. West:					Mortgage (due 1863 to 1872)	103,000	7	var.	
Sterling Income	333,000	4			Louisiana State Loan	621,000				Petersburg and Lynchburg (S. Side):				
Domestic	928,617		59-62		New Orleans City Loan	1,500,000				State (Va.) Loan	800,000	7	S. F.	
Memphis and Charleston:					1st Mortgage (S. F. and Land)	2,000,000	7			Mortgage (due 1869 to 1875)	925,000	6	var.	
State (Tenn.)	1,100,000	6			New York Central:					Mortgage (due 1861 to 1869)	133,500	8	var.	
1st Mortgage	1,600,000	7	1880		Albany Loan—Alb. and Sch'dy.	127,000	5	1864		Phila., Germant'n and Norrist'n:				
Memphis, Clarksv. and Louisv.:					State Loan—Sch'dy and Troy	100,000	6	1867		Consolidated Loan	274,800			
State (Tenn.)	910,000	6			State Loan—Rochester and Syr.	77,382	54	1861		Loan of 1842	100,000			
Memphis and Ohio:					State Loan—Buffalo and Roch.	55,300	54	1865		Philadelphia and Reading:				
State (Tenn.)	1,240,000	6			State Loan—Roch., L. and N. F.	298,000	7	1861		Mortgage	705,000	5	1860	
Michigan Central:					Stock Subscription	755,000	6	1883		Mortgage	1,572,800	6	1860	
1st Mortgage Sterling	467,480	6			Premium Consolidated Stock	8,000,000	6	1883		Mortgage (convertible)	886,000	6	1860	
1st Mortgage (convertible)	500,000	8			Real Estate	221,000	6	1883		Mortgage (convertible)	134,000	6	1860	
Unconvertible	258,000	8			New Convertible	3,000,000	7	1864		Mortgage (convertible)	85,000	6	1860	
1st Mortgage (convert.) Dollar	3,831,000	8			* New York and Erie:					Mortgage	3,209,000	6	1870	
1st Mortgage (S. F.), convertible	3,087,000	8			1st Mortgage	3,000,000	7	1867		Mortgage (convertible)	3,586,500	6	1886	
Mich. Southern and N'n Indiana:					2d Mortgage	2,000,000	7	1869		Lebanon Valley R. R. (convert.)	1,600,000	7	1886	
Michigan Southern	993,000	†	1857		3d Mortgage (convertible)	6,000,000	7	1871		Real Estate Mortgage	510,450		var.	
Northern Indiana	955,000	†	1861		4th Mortgage (convertible)	3,715,000	7	1880		Phila., Wilmington and Baltimore:				
Erie and Kalamazoo	300,000	†	1862		5th Mortgage	1,233,500	7	1888		Mortgage Loan	688,920	6	1860	
Michigan Southern	259,000	†	1863		Unsecured (convertible)	3,423,000	7	1871		Mortgage Loan	1,096,500	6	1884	
Northern Indiana	209,000	†	1863		Unsecured (convertible)	3,001,000	7	1862		Improvement	119,000	6	1863	
Jackson Branch	203,000	†	1865		Sinking Fund	3,925,500	7	1875		Pittsburg and Connellsville:				
Goshen Air Line	1,335,000	†	1868		New York and Harlem:					Pittsburg Loan	500,000			
Detroit and Toledo	350,000	†	1876		1st Mortgage	3,000,000	7	1873		Allegheny Co. Loan	750,000			
General Mortgage (S. F.)	2,458,000	†	1885		2d Mortgage	1,000,000	7	1864		Connellsville Loan	100,000			
2d Mortgage	2,175,000	†	1877		3d Mortgage	1,000,000	7	1867		McKeesport Loan	100,000			
* Milwaukee and Beloit:					New York and New Haven:					Baltimore Loan	1,000,000			
1st Mortgage	630,000	8			1st Mortgage	311,000	7	1860		Cumberland Loan	200,000			
Milwaukee and Chicago:					1st Mortgage	965,000	6	1866		Real Estate	700,000			
1st Mortgage	400,000	8			1st Mortgage	929,000	6	1875		Pittsburg, Ft. Wayne and Chicago:				
2d Mortgage	200,000	7			N. York, Providence and Boston:					1st Mortgage (O. and P.)	1,000,000		1865	
* Milwaukee and Horicon:					North Carolina:					2d Mortgage (O. and P.)	750,000		1866	
1st Mortgage	420,000	8			State Loan	2,000,000	6			Income (O. and P.)	1,991,000		1873	
2d Mortgage	600,000	8			State Loan	1,000,000	6			Bridge (O. and P.)	199,500			
Farm Mortgage	150,000	10			North-Eastern (S. C.):					1st Mortgage (O. and I.)	1,000,000		1872	
Milwaukee and Mississippi:					1st Mortgage	700,000				2d Mortgage (O. and I.)	850,000		1878	
1st Mortgage (convertible)	74,000	101	1861		2d Mortgage	224,500				1st Mortgage (F. W. and Chic.)	2,250,000		1873	
1st Mortgage (convertible)	526,000	81	1862		Real Estate	55,910				Real Estate (F. W. and Chic.)	498,000		1874	
1st Mortgage (convertible)	650,000	81	1863		Northern Central:					Mortgage, Consolidated Comp'y	1,097,000		1887	
1st Mortgage (convertible)	1,250,000	81	1877		Balt. and Susq. R. R. (Coupons)	150,000	6	1866		Pittsburg and Steubenville:				
South-West Branch	350,000	81	1866		Md. State Loan (B. and Susq.)	150,000	6			Mortgage	800,000	†	1865	
2d Mortgage	600,000	101	1862		York and Cumberland 1st Mort.	175,000	6	1870		Potsdam and Watertown:				
Construction	500,000	71	1859		York and Cumberland 2d Mort.	25,000	6	1871		1st Mortgage	800,000	71	64-74	
3d Mortgage	500,000	81	1862		York and C. guar. by Baltimore	500,000	6	1877		Quincy and Chicago:				
Mississippi Central:					N. C. Contract	292,300	6	1875		1st Mortgage	1,200,000		1873	
1st Mortgage	1,007,363	7			Construction	1,903,500	6	1885		Racine and Mississippi:				
Income	91,200	10			Northern (Ogdensburg):					1st Mortgage (Eastern Division)	680,000	†		
Tennessee State	45,000	6			1st Mortgage	1,500,000	71	1859		1st Mortgage (West'n Division)	757,000	†		
Mississippi Central and Tenn.:					2d Mortgage	3,077,000	71	1861		Raleigh and Gaston:				
State (Tenn.)	529,000	6			North Missouri:					Coupon	100,000		1862	
Income	95,500				State Loan	2,000,000				Rensselaer and Saratoga:				
Mississippi and Missouri:					State Loan	2,000,000				1st Mortgage		7	1863	
1st Mortgage (convertible)	1,000,000	7			State Loan	1,500,000				Richmond and Danville:				
2d Mortgage (S. F.)	400,000	8			North Pennsylvania:					State (Va.) Loan	600,000			
Oskaloosa Division	1,425,000	7			Mortgage	2,500,000				Guaranteed by State	200,000		1875	
Land Grant	7,000,000	7			Chattel Mortgage	214,500	10			Mortgage (Coupons)	250,000		1859	
Mississippi and Tennessee:					Northern (N. H.):					Registered	150,000		1860	
Tennessee State	98,000	6	1885		Mortgage (due 1860, '64 and '74)	219,500		var.		Richmond, Fred. and Potomac:				
Mississippi State	202,790	6			Norwich and Worcester:					Sterling (£67,000)	324,000		1860	
1st Mortgage	171,000	7	1876		Mass. State Loan	400,000	6	1877		Convertible	54,500		1875	
Mobile and Ohio:					Mortgage	205,800	6	1860		Dividend Certificates	35,800		1857	
City (Mobile) Tax	400,000	6			Mortgage	16,000	7	1860		Dividend Certificates	265,500		1869	
Tennessee State Loan	674,860	6			Dividend Serip and Bonds	102,330	6	var.		Richmond and Petersburg:				
Alabama State Loan	380,410	6			Ohio and Mississippi (O. and Ind.):					Coupon	159,000		1875	
Income	759,415	8	1861		1st Mortgage	2,193,500	†	1858		* Rutland and Burlington:				
Income	354,723	8	1862		2d Mortgage	316,995	†			1st Mortgage	1,800,000			
Income	375,132	8	1865		Construction	4,637,920	†	1858		2d Mortgage	913,500			
Income	18,700	8	1867		Income	3,591,185	†	1858		3d Mortgage	428,400			
Sterling	878,035	6	1883		Ohio and Mississippi (Ill.):					Sacramento Valley:				
Mississippi State	200,970	6			1st Mortgage					1st Mortgage	400,000			
										2d Mortgage	356,000			

AMERICAN RAILROAD BOND LIST.

For explanations see preceding pages.

Description.	Amount.	Interest.	Due.	Price.
Sandusky, Dayton and Cincinnati:				
Mortgage	182,000	10	1856	---
Mortgage	997,000	7	1868	---
Mortgage	1,000,000	7	1875	---
Dividend	224,000	6	'60-'62	---
Sandusky, Mansfield and Newark:				
1st Mortgage	1,290,000	1	---	---
Saratoga and Whitehall:				
1st Mortgage	250,000	7	1858	---
1st Mortgage (R. and W. Br.)	100,000	7	1856	---
Unsecured	45,000	7	1858	---
Seaboard and Roanoke:				
1st Mortgage	300,000	---	1860	---
3d Mortgage	75,000	---	1870	---
4th Mortgage	60,000	---	1856	---
South Carolina:				
State Loan	200,000	5	1868	---
Sterling	183,333	6	1863	---
Sterling	2,000,000	5	1866	---
Anditor's	246,500	7	---	---
Southern Mississippi:				
1st Mortgage	500,000	---	---	---
South-Western (Ga.):				
1st Mortgage	631,000	---	1875	---
*Springfield, Mt. Vern. and Pittsb.:				
1st Mortgage	500,000	---	---	---
2d Mortgage	450,000	---	---	---
*Stenberv. and Ind. (P. C. and C.):				
1st Mortgage	1,500,000	---	---	---
2d Mortgage	900,000	---	---	---
St. Louis, Alton and Chicago:				
1st Mortgage	2,000,000	7	---	---
2d Mortgage	1,535,000	7	---	---
3d Mortgage (Income)	1,000,000	10	---	---
St. Louis and Iron Mountain:				
State (Mo.) Aid	3,600,000	---	---	---
St. Louis City Subscription	500,000	---	---	---
St. Louis County Subscription	1,000,000	---	---	---
Carondelet Subscription	50,000	---	---	---
Sunbury and Erie:				
Mortgage	1,000,000	7	---	---
Mortgage	7,000,000	5	---	---
Syracuse, Binghamton and N. Y.:				
Terre Haute, Alton and St. Louis:				
1st Mortgage (convertible)	1,000,000	7	'62-'72	---
2d Mortgage (convertible)	2,000,000	7	'68-'70	---
1st Mortgage (Bel. and Ill.)	517,000	7	1873	---
2d Mortgage (Bel. and Ill.)	494,000	7	1869	---
3d Mortgage (Bel. and Ill.)	508,000	10	1874	---
Tennessee and Alabama:				
State (Tenn.) Loan	514,000	---	---	---
Mortgage	46,000	---	---	---
Terre Haute and Richmond:				
1st Mortgage (convertible)	235,000	7	---	---
Toledo, Wabash and Western:				
1st M. (L. Er., Wab. and St. Louis)	2,500,000	7	1865	---
2d M. (L. Er., Wab. and St. Louis)	1,200,000	7	1869	---
3d M. (L. Er., Wab. and St. Louis)	1,200,000	7	1891	---
Real Estate (L. Er., W. and St. L.)	300,000	7	1861	---
1st Mortgage (Toledo and Ill.)	900,000	7	1865	---
2d Mortgage (Toledo and Ill.)	800,000	7	1865	---
3d Mortgage (Toledo and Ill.)	600,000	7	1865	---
*Vermont Central:				
1st Mortgage	---	---	---	---
2d Mortgage	---	---	---	---
Virginia Central:				
State (Va.) Subscription	1,869,595	---	---	---
Mort. guaranteed by State of Va.	100,000	---	1880	---
Mortgage	206,000	---	1872	---
Mortgage (coupons)	941,000	---	1884	---
Dividend, due 1865, '66 and '75	246,866	---	var.	---
Income (1859 to 1863)	161,539	---	var.	---
Virginia and Tennessee:				
State (Va.) Loan	1,000,000	---	34 y's	---
1st Mortgage	500,000	---	1872	---
2d Mortgage	23,500	---	1878	---
Enlarged	1,000,000	---	1884	---
Salt Works Branch, due '58-'61	203,000	---	var.	---
Mortgage (Income)	431,000	---	1865	---
Warren (N. J.):				
1st Mortgage	568,500	---	1875	---
Watertown and Rome:				
Mortgage (due by instalments)	688,500	7	var.	---
Western (Mass.):				
Sterling (\$2899,900)	4,319,520	5	'68-'71	---
Albany City (Alb'y and W. R.)	1,000,000	6	'66-'76	---
*Western Vermont:				
1st Mortgage	700,000	---	1861	---
Williamsport and Elmira:				
1st Mortgage	1,000,000	+	---	---
2d Mortgage	700,000	+	---	---
Chattel Mortgage	495,000	+	---	---
Wilmington and Manchester:				
1st Mortgage	596,000	---	---	---
2d Mortgage	1,000,000	---	---	---
Income	177,000	---	---	---
Wilmington and Weldon:				
Mortgage, payable in England	222,667	---	---	---
Sterling, issued in 1858	144,500	---	---	---
Company's, endorsed by State	203,500	---	---	---
Winchester and Potomac:				
Mortgage	120,000	6	1867	---
York and Cumberland:				
1st Mortgage	398,000	+	---	---

RAILROAD BOND LIST.

We give this week a list of the Railroad Bonds of the United States, embracing a statement of some 750 different securities. We can give for the present week quotations of only such bonds as are current in the leading Eastern markets. We shall fill up the balance of the list as fast as the necessary information can be obtained.

RAILROAD SHARE LIST.

Railroad Companies are respectfully solicited to return to us the *duplicate* copy of the JOURNAL sent to them, with our figures properly verified, and the blank spaces filled.

American Railroad Journal.

Saturday, November 26, 1859.

Savannah, Griffin and North Alabama R. R.

A meeting of the directors of this company was recently held at Newman, Ga., at which it was announced that subscriptions to the amount of \$700,000 had been obtained towards the construction of the road. It is the intention of the company to commence the location of the line at once, and an engineer has been engaged for that purpose.

The line of this road, as we understand it, will commence at Griffin, a point on the line of the Macon and Western Railroad, about midway of its terminus, and run thence in a northern direction to Newman, on the Lagrange road, and thence, via Carrollton, to the Alabama State Line. If continued beyond that point, in a direct line, it will cross the line of the Alabama and Tennessee Rivers Railroad at or near Colima; the North-east and South-west Alabama Railroad at Lebanon, and join the Memphis and Charleston road at Woodville. The line as here drawn, is very direct, and will, when built, connect Savannah with a region that needs only an outlet to make it teem with agricultural products as it now does with minerals.

Mobile and Ohio Railroad.

Below we give the earnings of the Southern Division of this road for 10 months of the current year. The two remaining will bring them up to very nearly \$1,000,000. The net earnings will exceed one-half this sum. The Northern Division will probably earn \$200,000. These earnings give an assurance that upon the completion of the road, it must prove an eminently successful work. The road will unquestionably be opened for its entire length the ensuing year:

	Earnings.	Expenses.
January.....	\$81,219 48	\$26,008 65
February.....	64,467 89	28,688 13
March.....	43,164 53	30,047 19
April.....	41,588 10	33,445 64
May.....	36,149 02	31,600 28
June.....	31,510 48	32,168 76
July.....	35,053 64	29,566 09
August.....	42,417 24	29,319 17
September.....	105,664 90	33,527 42
October.....	149,973 45	*37,000 00
	\$634,208 73	\$310,471 33
1858.....	507,665 74	270,544 92
Increase.....	\$126,542 99	\$39,926 41
Earnings.....	\$634,208 73	
Expenses.....	310,471 33	
Net.....	\$323,737 40	

* Estimate.

Railroads in Missouri.

We understand that a line is being surveyed in Ray and Coldwell counties for a road, commencing at a point on the Hannibal and St. Joseph road, and running southward through Richmond to the Missouri river. A convention was held at Chillicothe on the 15th inst., to consider the proposition of constructing a road from Decatur City, Iowa, to Chillicothe, intersecting the Hannibal and St. Joseph road at that point, and extending to Weston on the Missouri river. At St. Joseph, the Platte Country Railroad, extending from St. Joseph to Kansas City, is going slowly forward, being aided by the late issue of bonds by the State, and by money advanced by Boston capitalists. From St. Joseph there is being also built a road to Maryville, as a prolongation of the Hannibal and St. Joseph road. The people of Lafayette county agreed by a large vote to tax themselves to the amount of \$500,000 to build a branch road from Georgetown, on the Pacific route, to Lexington.

Charleston and Savannah Railroad.

We understand that the cylinders for the bridge of this company, over the Savannah river, are now on their way thither. This bridge is to be located 13 miles above the city of Savannah, is to be 1,100 feet in length, and wide enough for a railroad track. It will be supported by cylinders sunk by Dr. Pott's Pneumatic process in the stream to the depth of twenty-six to thirty feet below the bed of the river. These cylinders are fifty feet in length, and are cast in sections nine feet each, and are six feet in diameter. A draw, affording a clear opening, on either side, of eighty-two feet, will afford all necessary passage up and down the river. It is intended to be completed by July 1, 1861.

New York and Erie Railroad.

We take it that the scheme proposed for the settlement of the affairs of this road will prove a failure. We cannot learn that creditors to any considerable amount are becoming parties to it, or that there is any prospect that they will.

We see of only one way in which to place the road on its feet again--which is to *pay* the interest on the funded debt. This can be done from the earnings of the road. Only a short delay would have to be given by any class of bondholders. Assume them that their interests will be faithfully regarded, and they will cheerfully abide their time. But they will never change the character of their securities, unless compelled by law; nor will they consent to reduce their nominal value.

The road is doing well, and the prospect for the future is cheering. Efficiency and economy in its management, and a faithful application of its earnings, will relieve the company much quicker than any financial scheme that may be proposed. In fact, there can be no relief but in the manner indicated, without a sacrifice of a portion of the bonded interest.

Iron Mountain Railroad.

At a meeting of the Directors of this road on the 17th, Stephen D. Barlow was elected President, and Madison Miller, Esq., Vice President.

Pittsburg and Erie Railroad.

This road is now open for business, and the cars have been running regularly between Erie and Conneautville for the past week. On the balance of the road the track-laying is being pushed forward very rapidly.—*Phila. Evening Journal*, Nov. 22.

Dan River Coalfield Railroad Company.

This company was organized at Wentworth, on the 5th inst., by the election of the following Board of Directors, viz: Jno. W. Brodnax, John M. Reynolds, Wm. A. Lash, J. R. Anderson, Thos. Settle, Samuel P. Wilson, Chalmers Glenn, Nathaniel Scales, and R. D. Golding.

John W. Brodnax was elected President, and Jones W. Burton, Clerk and Treasurer.

The office of Chief Engineer was tendered to Col. B. M. Jones.

Previous to the election of Directors, the following preamble and resolutions were adopted:

Whereas, it is highly important that the Dan River Coalfield Railroad Company should extend its road into the State of Virginia, so as to form a connection with the Richmond and Danville Railroad; and, *whereas*, such extension cannot be made without the right to do so shall be granted by the State of Virginia, therefore, be it

Resolved, That a committee of twenty be appointed to memorialize the ensuing Legislature of Virginia upon that subject, and upon any other subject connected with this company, which they may deem important to bring to the notice of that body.

It was also *Resolved*, That the Board of Directors shall employ an engineer to survey and locate a road on the north side of Dan river, beginning on the Virginia line at such point as may be hereafter fixed upon, thence by way of or near Leaksville, thence by way of or near Madison, and thence up the Town Fork to or near Germantown, in Stokes County.

A committee was appointed to solicit subscriptions to the stock of the company. The next annual meeting was appointed to be held in the town of Madison in November, 1860.

Baltimore Iron.

The Baltimore *American* of 29th ult., says "There are in immediate connection with Baltimore, ten extensive iron furnaces which can produce annually 23,000 tons of pig metal made exclusively with charcoal. Nature has favored this vicinity with the finest ores and the best facilities for transporting the fuel used in its smelting from the thickly wooded shores of Chesapeake Bay, and our artisans who carry the manufacture still further seem determined to add to the high reputation of the stock they use by giving it the most skillful treatment in the different processes through which it passes in their hands. The two large and intricate castings executed by Messrs. Murray & Hazlehurst at the Vulcan Works, for the condensers to the engines of the sloop-of-war *Dacotah*, during the past summer, as well as much of the work done by Messrs. Poole and Hunt, for the capitol extension at Washington, would do credit to the best foundries of the world. Messrs. Trego, Heird & Co., at their Steam Forge, have turned out some superior work in the way of car axles and forgings; and bar iron which has withstood a tensile force of 202,000 pounds to the square inch, 56,000 being the standard required by government in the chain cable iron. The Maryland Iron has proved itself less subject to corrosion than almost any iron in use, which fact has given it a wide reputation among iron boat-builders, and renders it superior for all work brought in contact with water. Messrs. H. Abbott & Son of the Canton Rolling Mills, have, within the past ten or twelve months, filled orders for the plates for nine large vessels, among which we might mention those noticed a few days since as being built by Harrison Loring, Esq., of Boston, one for the Hoogy river trade, and two of 1,200 tons each for the Boston and Southern Steamship Line. Also the Champion, 1,600 tons, of the Vanderbilt line, recently finished by Messrs. Harlan, Hollingsworth & Co., of Wilmington, Delaware, and the two large ships now building for the Merchants'

and Miners' Transportation Company to ply between this port and Boston. Messrs. Abbott & Son have made and are now making plates from Baltimore iron and placing the same in this, the New York and Boston markets.

Prospects of Iowa.

Within a few weeks business has taken a fresh start in Iowa, and particularly in the river towns. Nor does this remark apply to our State alone. Minnesota is also reaping the benefit of a revival of trade along the line of the great natural canal of the West, the Mississippi. Yesterday we met a gentleman who has just been spending a few days at Winona, and he stated that wagons, loaded principally with wheat, were rushing into that place from a distance of a hundred miles in the interior of that State. Since the rise of that article, Winona has been filled with teams of this class. The result is, that trade there is very brisk, and merchants who received their fall supply of goods, a few weeks ago, have already exhausted their stock, and sent for a second supply. What we have said of Winona applies, in the main, to Red Wing, Hastings, St. Paul, and other Minnesota towns. The great crop of wheat and potatoes in that State this year is relieving her materially of her financial pressure.

But it is mainly of our own State that we purpose to speak at this time. Trade is probably more lively in towns on the west side of the Mississippi river, this side of the line of Minnesota, than on the other. The wheat trade is brisk at Guttenburg, Clayton City and Lansing; and ten thousand bushels of wheat alone, we are told by disinterested persons, are pouring into the tunnel town of McGregor daily. It is all drawn thither from the interior by teams, which stretch like an army from the river westward to Decorah and West Union, places nearly forty miles distant.

Dubuque, with her railroad facilities, has an immense advantage over all the river towns in this State north of this point; and her imports of produce far exceed those of all the towns just mentioned. A single freight train brings hither more grain than finds its way into any other town mentioned, in a week. The Dubuque and Pacific Railroad is complete and open to Masonville, fifty-seven miles west of this city, and at that point, and at every station between here and there, the daily shipments are heavy. The road is wholly graded to Independence, and within twenty days, it is probable, the cars will be running seventy miles west of this city. This will increase the business of the road at least one-third. The Dubuque and Pacific road, it is understood, will be open to Cedar Falls, one hundred miles from this city, by the 4th of next July, when it will command, not only the entire trade of the Cedar Valley and the country for a hundred miles to the westward, but also considerable from south-western Minnesota.

The Dubuque Western road has recently been opened to Monticello, six miles beyond Sand Spring, thus securing most of the trade of Jones County for Dubuque. It will be opened to Anamosa this winter, when not only the trade of that county, but also part of that of Linn and Benton counties, will be turned in this direction.

The prospects of our city are pre-eminently encouraging. The largest one in the State, it bids fair to far outstrip all others in growth and prosperity. Much credit is due to the managers of the railroads leading out of our city, for her present life and brightening history. They moved forward while dense clouds overshadowed her, and by their energy and perseverance, have brought light to her face once more.

Other roads farther south in this State, are gradually progressing towards the Missouri Slope; day is breaking on other towns; immigrant teams are daily crossing the "Father of Waters," and wending their way into the interior of our State; and with lands here cheaper than they have been for the last six or eight years, we see no reason why settlers should not pour into Iowa next season as they did three or four years ago. The soil, the climate, the timber, the water, the free principles of the Constitution of Iowa, all combine to draw

immigration hither, and a great increase will be seen another spring. The prospects of Iowa are bright.—*Dubuque Times*, Nov. 10th.

Warwick Valley Railroad.

The Directors of this company met at Warwick on the 11th, and organized the Board. G. Burt, Esq., was appointed President; M. McEwen, Vice President; James B. Wheeler, Treasurer; W. Herrick, Secretary. About 60 per cent. of the entire cost of this road has been already subscribed, and the Directors hope shortly to secure such additional subscriptions as will enable them to prosecute the work. This contemplated road is a branch road, connecting Chester, on the New York and Erie Railroad, with Warwick, a distance of about ten miles.

Pittsburg, Fort Wayne and Chicago R. R.

The President of the Pittsburg, Fort Wayne and Chicago Railroad has just issued a circular in which he sets forth a scheme for adjusting the financial difficulties of the company. The plan proposes first to fund the interest coupons upon the first mortgage bonds till July 1, 1861, and also all the first mortgages on the three consolidated lines into a first general mortgage on the whole line for \$5,500,000. This to include \$420,000 ten per cent. sinking fund bonds issued for the payment of coupons of the first mortgage bonds. Next, all the other issues are to be merged into a second general mortgage on the whole line. The total amount of all bonds issued and required to be issued to fund all indebtedness is \$11,616,000.

Allegan and Traverse Bay State Railroad.

We learn from the Grand Haven *Clarion* that the survey of this line is progressing finely north of Carleton's Mills—that section of country being found to be well adapted to the construction of a road.

Eufala Railroad.

At a recent meeting of the citizens of Eufala, the proposition of the South-western Railroad Company, to build the bridge over the Chattahoochee river, and extend the road into that town, was accepted. The sum required is \$87,500. Measures were adopted to ensure the payment of that amount beyond all question.

Rushville and Shelbyville Railroad.

We understand that the iron for this road has all been secured, and that track-laying has been commenced. It is thought that the work may be completed this winter.

Southern Mississippi Railroad.

We learn from the Vicksburg *Whig* that there has been an actual letting of contracts for the completion of this road from Brandon across the Mobile and Ohio road to the State line, and intended thence to run eastwardly to connect with the Uniontown and Selma road, thus affording direct communication from the Mississippi to Selma, and probably Montgomery. This road is also expected to connect with the North-east and South-west Alabama Railroad, at or near the junction of that road with the Mobile and Ohio road, and will, when completed, be a valuable aid to both these important roads. The *Whig* says:

We learn from the best authority that the contract for preparing the road-bed, furnishing cross-ties and laying the track on fifteen miles of the Southern Railroad, west from Meridian, has been taken by experienced contractors, who bind themselves to finish the work by the first of October, 1860. All the balance of the work is, or will be, under contract, so as to have the entire road from Vicksburg to Meridian fully completed and ready for the transportation of passengers and freight by

that time. In this connection we have also the pleasure of announcing that the Southern Railroad Company has purchased all the iron it requires for the completion of the entire road.

Journal of Railroad Law.

DUTY OF PASSENGERS TO CONFORM TO RULES OF THE COMPANY.

The case of Beebe against Ayres illustrates the duty of passengers upon railroads to conform to all reasonable rules established by the company. The facts of this case were as follows. Beebe, having occasion to become a passenger upon the New York and Erie Railroad, purchased a ticket from Newburg, on a branch of the eastern division to Addison, on the Susquehanna division. On the ticket was written these words: "Good for this trip only."

The New York and Erie Railroad consists of four divisions. The Eastern, extending from Piermont to Port Jervis; the Delaware, extending from Port Jervis to Susquehanna; the Susquehanna, extending from Susquehanna to Hornellsville, and the Western, extending from Hornellsville to Dunkirk. The tickets issued to passengers upon the road, have upon them at each corner, a printed letter, which is the initial of one of the several divisions of the road; and by the regulations of the railroad company, each conductor of a train passes over the whole of a single division of the road, and is required to go through the cars when first entering upon his division, and examine the ticket of each passenger and tear off from the corner of it, the letter indicating the division over which he runs, and then return the ticket to the passenger; and if a passenger desires to lie over at any point on the division, the conductor is authorized so to endorse his ticket as to secure his passage from that point to the end of the division, if the ticket extends so far, and when so endorsed, other conductors on the same division are to receive it. If not so endorsed other conductors on the same division are to disregard it and collect fare; and if the passenger refuses to pay, or to leave the car upon request, it is made the duty of the conductor to put him off. When Beebe purchased his ticket these rules were in force. He started on the trip on the evening of the day he purchased the ticket, and passed on as far as Deposit, on the Delaware division, and there lay over one train, and on the morning of the next day went on board of a slow train, and stopped again at Great Bend, on the Susquehanna division, where he remained until afternoon, when he got on board of a train conducted by the defendant. While on his way to Great Bend, a new conductor had come on board. The plaintiff exhibited his ticket; the conductor took it and tore off the corner having upon it the letter indicating the division over which they were then passing. With the ticket in this condition the plaintiff got on board of the train of which the defendant was conductor, by whom he was asked for his ticket. He exhibited one having all the corners with the letters indicating the respective divisions over which he had passed, including the Susquehanna division, torn off. This ticket thus mutilated, the defendant refused to receive, and demanded of the plaintiff his fare, which the plaintiff refused to pay, insisting that he had paid his fare from Newburg to Addison. The defendant told him he could not help that;

his instructions were such that he could not receive his ticket. The plaintiff said: "Do you suppose that I would lie?" To which the defendant replied, "I suppose what you say is true, but I cannot take the ticket;" and told him that if he did not pay he should put him off; that he had better keep the ticket he had, and when he got to Binghamton buy another. When the train arrived at Binghamton the plaintiff refused to purchase another ticket, and the defendant put him off the train.

Beebe then brought this suit against the conductor to recover damages. The defendant being examined as a witness in his own behalf, testified that he had no reason to believe the plaintiff had traveled on the ticket any further than to Great Bend. There was evidence tending to show that the conductor on the Delaware division allowed the plaintiff to pass from Deposit to Susquehanna, notwithstanding the corner of the ticket having upon it the letter indicating that division had been previously torn off by the conductor who had charge of the previous train from Port Jervis to Susquehanna, and that the conductor having charge of the train from Susquehanna to Great Bend, advised the plaintiff to lie over at Great Bend until a faster train should come along. But it did not appear that the conductor knew he got off at that place, or that the plaintiff asked the conductor so to endorse his ticket that it would be good for the next train. On the trial the plaintiff had a verdict subject to the opinion of the court.

The opinion of the Supreme Court was afterwards rendered against his right to recover, as follows:

GRAY, J.—It does not appear from the case that a point was made upon the trial, founded upon the conduct of the two conductors of the one, in permitting the plaintiff to ride upon a mutilated ticket from Deposit to Susquehanna, in violation of the rules of the company, or of the other in advising the plaintiff to lie over at Great Bend. And if one had been made, I am unable to perceive how the conduct of one conductor, in violating the rules of his employers, could prejudice another more faithful than himself who adhered to his instructions and discharged his duties under them. Nor can I perceive that any wrong was committed by the conductor who advised the plaintiff to lie over at Great Bend. The plaintiff was not advised to omit getting his ticket endorsed, and if he had been, it would have been the error of that conductor and not the error of the defendant. It must be borne in mind that this action is not against the company, for any wrongful act of its employee, or against any employee whose acts have misled the plaintiff, but against one who has committed no wrong, provided the regulations of the company were reasonable and reasonably executed. Nor can it prejudice the defendant that he believed the plaintiff's statement to be true. The company, by their regulations, had prescribed rules of evidence for him. He had no right to act upon oral evidence; what was written or printed upon the passenger's ticket was the only evidence he had the right to take; and when the letter indicating the plaintiff's right to ride upon the Susquehanna division, was torn from the ticket, it was evidence to him that the plaintiff had ridden

over that division, and the plaintiff had no right to supply what that letter indicated, by parole proof. Once admit the right of the conductor to take the word of a passenger as a substitute for a ticket or what a ticket indicates, and frauds innumerable would be committed by dishonest travelers upon over-credulous conductors. All concede that the important interests which railroad companies have at stake, render regulations to be observed, not only by their conductors, but by passengers on their trains, indispensable to secure each against imposition by the other. The right of the company to make such rules stands upon authority not to be questioned here. The regulations of the road, however, must be reasonable, or its patrons are not bound by them. A part of the contract between the plaintiff and the railroad company was, that the ticket given him should be good only for the trip he commenced on the day he purchased the ticket; and for the purpose of ascertaining how much of the trip he made, each conductor, by the regulations of the company, was required, at the commencement of his division, to call for and examine, then, the tickets of the passengers, and tear off from each ticket the corner having upon it the letter indicative of his division. This was a necessary regulation to guard against frauds; if the letter should not be torn off until leaving the station nearest the end of the division, the plaintiff might have traveled to within a few miles of Hornellsville and stepped off with his ticket in his pocket, and passed it over to another, or retained it himself and rode again with some other conductor, from Susquehanna to the same station where he got off, as often as he pleased, unless he should be recognized by some conductor who could detect him in the fraud; or the ticket might be passed from one to another, and answer the purposes of a hundred passengers from the beginning of the Susquehanna division to the station next to the end. The plaintiff professes not to have understood why the corners of the ticket were torn off. His want of intelligence in that respect cannot aid him; he had ridden over the road often, and of course must have seen printed upon the corners of his ticket the letters indicating the respective divisions of the road, and when he had seen a conductor of each division as he passed, tear off the corner of his ticket, having upon it the letter indicating the division over which he was traveling, he had the means of knowing that his ticket, which, by its terms, was good only for the trip he was then taking, was being divested of its corners that the ticket itself might show how much of the trip he had traveled. But it is not necessary to prove that he knew the object of divesting the ticket of its corners. He is presumed to have purchased the ticket in reference to the regulations of the road, and when he choose to lie over a train, there was nothing unreasonable in requiring him to procure his ticket to be so endorsed as to make it a voucher to the conductor who should have the charge of the next or some subsequent train. No point is made that the regulations of the company were unreasonably executed by the defendant, by the exercise of too great force in ejecting the plaintiff from the car.

The verdict upon the whole case was taken, subject to the opinion of this court, and I am of opinion, for the reason stated, that the defendant should have judgment upon the verdict.

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.			Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.			Price of shares.		
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.	Road in progress or projected.	Engines.	Passenger Cars.		Freight, etc.	Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trailing.	Earnings.				
									Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.				
ALABAMA.																							
30 Jun. '59	43.3	—	—	—	72.3	3	12	19	Alabama and Florida	1,086,278	*	—	539,396	473,500	101,295	1,127,174	27.3	—	—	59,430	22,350	—	—
28 Feb. '59	30.3	—	—	—	58.1	—	—	19	Alabama and Mississippi	461,505	30,991	—	335,010	199,500	21,632	518,995	30.3	—	—	55,791	31,852	—	—
31 May '59	99.2	—	—	—	68.4	—	—	81	Alabama and Tennessee Rivers	2,101,907	144,549	—	1,054,915	713,226	212,496	2,264,468	99.2	—	—	155,628	78,907	—	—
30 Jun. '59	57.0	—	—	—	171.3	—	—	—	Mobile and Girard	1,500,000	—	—	—	—	—	—	57.0	—	—	76,775	21,006	—	—
1 Jan. '59	319.2	14.7	—	—	213.0	25	18	361	Mobile and Ohio	7,252,891	681,559	114,894	3,441,859	4,051,547	726,546	8,360,792	302.0	—	—	769,787	420,000	—	—
28 Feb. '59	88.5	28.4	—	—	20.1	20	14	272	Montgomery and West Point	1,519,405	279,435	100,000	1,419,672	922,621	18,956	2,462,492	116.9	—	—	446,153	211,880	6	—
10 Dec. '59	—	—	—	—	26.1	—	—	—	North East and South West	728,000	—	—	105,700	—	—	—	—	—	—	—	—	—	—
ARKANSAS.																							
30 Nov. '58	88.5	—	—	—	301.4	—	—	—	Cairo and Fulton	—	—	—	351,524	446,000	10,725	811,949	—	—	—	—	—	—	—
30 Sep. '58	22.5	—	—	—	107.5	—	—	—	Memphis and Little Rock	553,877	*	—	—	—	—	—	—	—	—	—	—	—	
30 Sep. '58	22.5	—	—	—	41.8	—	—	—	Sacramento Valley	1,547,100	*	—	791,100	756,000	—	1,547,100	22.5	—	—	185,108	102,726	—	—
CONNECTICUT.																							
31 Jan. '59	23.9	—	—	—	3	6	30	—	Danbury and Norwalk	335,237	49,773	—	279,050	85,000	3,502	404,622	23.9	—	—	56,044	20,618	6	—
30 Sep. '59	122.4	—	—	—	75.1	16	20	250	Hartford, Provid. and Fishkill	3,903,455	302,511	—	1,936,740	1,810,500	319,443	4,323,922	122.4	—	—	333,500	152,777	—	—
31 Aug. '59	61.4	10.6	—	—	—	—	—	—	Hartford and New Haven	3,108,018	254,000	102,889	2,350,000	964,000	16,463	3,932,432	72.0	—	—	723,460	204,134	10	124
31 Dec. '58	74.0	—	—	—	11	19	212	—	Housatonic	2,438,847	—	8,559	2,000,000	278,500	76,675	2,556,837	159.0	—	—	271,273	66,320	—	—
31 Dec. '58	57.0	—	—	—	7	15	178	—	Naugatuck	1,578,301	*	—	1,031,800	437,550	30,713	1,706,802	57.0	—	—	199,556	314,068	—	—
30 Nov. '58	62.3	—	—	—	—	—	—	—	N. Haven, N. London and Ston.	1,470,661	*	—	738,538	750,000	—	1,488,558	50.1	—	—	76,758	8,946	—	—
31 Dec. '58	46.4	8.8	—	—	—	—	—	—	New Haven and Northampton	1,400,000	*	—	922,500	500,000	—	1,481,723	55.2	—	—	172,369	70,487	5	—
30 Nov. '58	66.0	—	—	—	5	5	167	—	N. Lond., Willimant. & Palmer	1,561,241	*	5,453	516,900	1,055,600	272	1,575,147	66.0	—	—	104,464	30,512	—	—
31 Mar. '58	62.2	63.8	—	—	29	72	368	—	New York and New Haven	4,593,698	661,547	—	3,000,000	2,219,002	79,722	5,882,071	74.0	—	—	432,924	231,500	3	—
31 Mar. '58	59.0	7.0	—	—	—	—	—	—	Norwich and Worcester	2,245,406	176,792	—	2,522,300	324,130	59,614	2,598,672	66.0	—	—	265,417	44,587	—	—
DELAWARE.																							
31 Dec. '58	71.0	—	—	—	19.4	—	—	—	Delaware	1,146,311	—	—	252,561	735,000	123,750	1,146,311	71.0	—	—	66,628	—	—	—
30 Nov. '58	14.3	—	—	—	—	—	—	—	Newcastle and Frenchtown	699,514	—	25,000	762,320	—	—	767,278	14.3	—	—	19,895	—	—	—
FLORIDA.																							
30 Apr. '58	154.2	—	—	—	45.1	—	—	—	Florida	292,291	*	—	317,847	154,000	70,620	543,237	—	—	—	—	—	—	—
30 Jun. '59	31.3	2.0	28.6	—	2	1	24	—	Florida and Alabama	396,310	28,608	—	295,781	204,600	164,670	594,836	19.3	—	—	10,255	1,504	—	—
30 Jun. '59	26.5	3.9	—	—	227.0	—	—	—	Pens. Atlantic and Gulf Central	—	—	—	—	—	—	—	29.4	—	—	—	—	—	—
GEORGIA.																							
31 July '58	86.7	—	—	—	15	11	105	—	Atlanta and La Grange	1,179,351	*	—	1,000,000	187,500	23,384	1,459,075	86.7	—	—	362,061	197,357	7 1/2	—
30 Jun. '59	30.0	—	—	—	133.5	—	—	—	Atlantic and Gulf—M. Trunk	—	—	—	—	—	—	—	30.0	—	—	—	—	—	—
31 Dec. '57	53.0	—	—	—	—	—	—	—	Augusta and Savannah	1,032,200	—	—	733,700	298,500	—	1,032,200	53.0	—	—	125,427	69,679	—	—
30 Apr. '59	43.5	—	—	—	23.7	—	—	—	Brunswick and Florida	755,000	—	—	151,887	—	—	—	31.0	—	—	—	—	—	—
30 Nov. '58	191.0	—	—	—	52	28	633	—	Central of Georgia	3,750,000	—	550,152	3,750,000	199,851	—	5,645,001	229.0	—	—	714,787	1,253,722	75,615	10
31 Mar. '59	171.0	61.0	—	—	18	16	171	—	Georgia (and Bank)	4,174,492	829,550	4,150,000	373,000	—	7,398,665	232.0	—	—	1,154,621	544,363	4	—	
31 July '59	102.5	—	—	—	7	2	107	—	Macon and Western	1,600,000	—	5,073	1,428,800	62,500	—	1,851,721	102.5	—	—	325,192	163,124	7 1/2	100
1 May '58	50.0	—	—	—	—	—	—	—	Muskegon	774,244	162,534	—	609,950	249,000	—	1,026,860	50.0	—	—	202,714	110,516	8	—
31 July '59	106.1	56.5	14.8	44.3	15	18	166	—	Savannah, Albany and Gulf	1,286,654	52,273	1,275,901	10,200	—	180,621	1,473,140	71.6	—	—	547,876	387,769	—	—
30 Sep. '58	138.0	—	—	—	52	24	705	—	South Western	3,105,000	*	—	2,254,000	631,000	—	3,105,000	147.2	—	—	852,139	457,916	—	—
ILLINOIS.																							
30 Apr. '59	138.0	—	—	—	62	31	990	—	Chicago, Alton and St. Louis	10,000,000	—	—	3,500,000	4,500,000	—	10,000,000	220.0	—	—	—	—	—	—
31 Dec. '58	45.0	—	—	—	6	14	101	—	Chic., Burlington and Quincy	6,068,054	1,400,872	680,158	4,029,340	2,990,000	—	8,149,084	210.0	—	—	1,044,573	171,515	—	—
30 Jun. '59	138.0	—	—	—	75.0	—	—	—	Chicago and Milwaukee	1,799,594	67,869	120,000	988,000	762,865	188,085	2,050,065	45.0	—	—	243,282	135,284	—	—
30 Jun. '59	181.8	—	—	—	55	57	960	—	Chicago and Northwestern	6,776,119	—	173,165	5,500,000	1,397,000	5,651	7,543,104	238.4	—	—	1,407,846	629,029	63 1/2	—
10 Nov. '58	33.2	—	—	—	—	—	—	—	Chicago and Rock Island	580,000	—	—	—	—	—	—	—	—	—	—	—	—	
31 Dec. '58	121.0	138.5	73.6	—	60	63	1,369	—	Fox River Valley	8,027,473	1,311,917	211,003	6,020,400	3,783,015	292,466	10,300,517	326.5	—	—	808,231	1,547,561	620,328	4
31 Dec. '58	173.0	—	—	—	113	96	2,305	—	Galena and Chicago Union	5,022,926	—	1,000,000	3,088,426	334,500	5,022,926	173.0	—	—	—	—	—	—	
31 Dec. '58	454.0	250.0	—	—	81.5	—	—	—	Great Western	19,674,214	3,247,799	10,249,210	20,000,000	1,297,277	31,596,487	704.0	—	—	1,976,578	556,624	66	—	
—	—	—	—	—	—	—	—	—	Illinois Central	4,870,586	—	—	1,780,295	3,292,403	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	—	Ohio and Mississippi	—	*	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	—	Peoria and Bureau Valley	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	—	Peoria and Hannibal	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	—	Peoria and Oquawka	—	—	—	—	—	—	—	—	—	—	—	—	—	
31 Dec. '58	186.0	—	—	—	129.0	—	—	—	Quincy and Chicago	5,400,000	*	—	1,569,889	2,200,000	—	1,860,000	186.0	—	—	—	—	—	—
31 Dec. '58	100.0	—	—	—	—	—	—	—	Rock Island Bridge	1,978,555	*	—	800,000	1,200,000	—	2,000,000	100.0	—	—	—	—	—	
31 Dec. '58	168.5	39.8	12.2	—	31	30	424	—	Terre Haute, Alton & St. Louis	7,005,958	628,487	—	3,026,903	5,035,615	741,040	8,865,252	208.3	—	—	823,767	—	—	—
INDIANA.																							
—	—	—	—	—	—	—	—	—	Cincinnati and Chicago	2,080,433	*	—	1,193,679	1,906,125	—	—	—	—	—	—	—	—	
31 Jan. '57	109.0	—	—	—	73.0	—	—	—	Cincinnati, Peru and Chicago	—	—	—	—	—	—	—	—	—	—	—	—	—	
1 Jan. '58	72.4	—	—	—	19	21	278	—	Evansville and Crawfordsville	2,223,413	—	2,750	986,061	1,219,100	51,772	2,283,748	109.0	—	—	249,867	119,432	—	—
31 Dec. '58	89.8	20.2	—	—	23	19	313	—	Indiana Central	1,666,280	244,051	25,641	1,166,000	47,850	2,111,059	109.0	—	—	368,189	132,054	6	—	
31 Dec. '58	84.0	—	—	—	—	—	—	—	Indianapolis and Cincinnati	2,497,952	540,043	25,689	1,689,900	1,362,284	140,689	3,458,108	110.0	—	—	448,858	230,834	9	—
31 Aug. '57	78.0	—	—	—	—	—	—	—	Ind., Pittsburg and Cleveland	1,904,956</													

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (.....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.			or projected.	Equipment.			Companies.	Abstract of Balance Sheet.							Earnings.				Dividends.	Price of shares.	
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.		Engines.	Cars.			Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Liabilities.			Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trackage.	Gross.	Net.			
						Passenger.	Freight, etc.					Bonded and Mortgage Debt.	Floating Debt.									
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	P. c.	P. c.		
MAINE.																						
31 Dec. '58	32.0	—	—	8.0	4	25	Androscoggin	645,271	*	—	145,787	511,500	—	—	32.0	—	—	30,987	17,268	—	—	
31 May, '59	55.0	—	—	—	9	10	128	Androscoggin and Kennebec	2,210,947	*	27,925	457,900	1,748,457	101,209	2,307,566	137.0	—	281,929	89,766	—	—	
30 Jun. '59	149.0	—	25.0	—	41	17	349	Atlantic and St. Lawrence	6,066,375	857,566	—	2,494,900	3,472,000	9,572	5,976,472	149.0	429,791	545,741	150,226	6	—	
31 Dec. '58	12.5	—	—	—	4	2	45	Bangor, Oldtown and Milford	175,232	*	—	135,000	—	—	175,516	12.5	—	38,059	16,550	—	—	
31 Dec. '58	63.0	9.0	—	—	12	11	109	Kennebec and Portland	2,871,264	*	—	1,107,526	1,763,738	—	—	72.5	—	145,074	70,746	—	—	
31 Dec. '58	—	—	—	23.0	—	—	—	Penobscot	308,413	*	—	180,000	143,678	—	—	—	—	—	—	—	—	
31 May, '59	54.7	—	—	—	4	10	93	Penobscot and Kennebec	1,611,413	104,019	78,014	555,228	1,206,800	128,576	1,890,604	54.7	oper. by	An. & K.	67,324	—	—	
31 May, '59	61.3	—	—	—	11	13	118	Portland, Saco and Portsmouth	1,494,792	*	5,208	1,500,000	—	—	1,500,000	61.3	141,664	208,299	104,029	6	96	
31 May, '59	37.0	—	—	—	—	—	—	Somerset and Kennebec	753,763	*	—	169,200	556,600	—	—	37.0	—	55,403	—	—	—	
31 May, '59	18.5	—	—	33.5	—	—	—	York and Cumberland	1,090,000	*	—	370,000	450,000	270,000	1,090,000	18.5	—	—	—	—	—	
MARYLAND.																						
30 Sep. '58	279.6	7.2	—	—	228	87	3,489	Baltimore and Ohio	20,019,286	3,538,360	2,951,982	13,111,500	10,668,645	412,483	29,400,161	286.8	3,626,805	3,856,485	1,325,280	—	61	
30 Sep. '58	30.0	—	—	—	7	33	167	Washington Branch	1,650,000	*	—	1,650,000	—	—	1,650,000	30.0	—	187,427	469,423	266,969	6	100
31 Dec. '58	138.0	4.0	—	—	42	38	1,455	Northern Central	6,543,457	733,934	220,963	2,260,000	5,393,800	655,607	8,681,557	154.5	606,492	810,604	364,649	—	29	
MASSACHUSETTS.																						
30 Nov. '58	21.2	—	—	—	6	4	80	Berkshire	600,000	*	—	600,000	—	—	600,000	ope	rat. by	Housat.	42,000	7	—	
30 Nov. '58	26.8	1.8	43.6	—	20	26	544	Boston and Lowell	2,239,253	183,345	—	1,830,700	440,000	21,965	2,619,210	28.6	274,655	407,399	166,109	6	99	
31 May, '59	74.3	7.4	50.8	—	30	39	540	Boston and Maine	3,847,004	368,357	106,987	4,076,570	—	—	—	81.7	—	818,681	399,667	—	7	
31 Dec. '57	74.5	—	2.1	—	—	—	—	Boston and New York Central	3,622,203	69,941	—	2,241,000	374,550	1,209,039	3,923,819	74.5	—	58,453	7,052	—	—	
30 Nov. '58	43.5	12.0	22.8	—	22	27	200	Boston and Providence	3,533,807	191,175	—	3,160,000	185,220	—	3,862,710	65.8	292,649	927,764	259,176	6	103	
30 Nov. '58	44.7	24.0	59.2	—	31	64	697	Boston and Worcester	4,251,682	437,416	100,000	4,500,000	500,000	60,774	5,078,160	68.7	498,325	923,223	332,270	6	100	
30 Nov. '58	46.1	1.1	2.7	—	7	10	109	Cape Cod Branch	907,781	123,864	—	651,689	144,600	114,417	47.2	78,262	106,846	49,453	—	—		
30 Nov. '58	50.0	2.4	8.9	—	12	13	350	Connecticut River	1,614,364	187,568	20,000	1,591,100	223,000	28,000	1,814,100	75.4	158,815	238,390	90,877	2	—	
31 May, '59	44.2	36.4	19.4	—	26	46	320	Eastern	4,134,475	456,523	262,102	2,854,400	2,105,500	172,218	5,128,719	100.6	373,641	663,135	319,522	—	57	
30 Nov. '58	19.9	1.3	2.8	—	2	28	643	Essex	742,592	4,416	—	299,107	277,961	197,423	774,492	ope	rat. by	Eastern	12,295	—	—	
30 Nov. '58	50.9	16.8	70.1	—	29	28	643	Fitchburg	3,189,851	350,149	—	3,540,000	131,453	3,868,710	67.7	303,392	572,967	278,555	6	100		
30 Nov. '58	14.0	—	2.4	—	3	2	45	Fitchburg and Worcester	239,658	40,226	—	210,000	64,200	65,738	—	26.0	35,557	55,476	12,949	6	—	
30 Nov. '58	9.0	—	9.0	—	—	—	—	Grand Junction (Boston).	598,206	—	—	592,651	200,000	105,649	—	9.0	—	—	—	—	—	
30 Nov. '58	24.8	—	2.0	—	2	3	28	Hampshire and Hampden	332,853	30,275	—	300,000	100,000	—	—	14.6	22,455	42,784	18,540	3	—	
30 Nov. '58	12.4	—	2.3	—	12	11	301	Lowell and Lawrence	658,919	95,684	—	600,000	—	—	—	12.4	123,395	180,085	71,505	8	—	
30 Nov. '58	14.5	17.1	1.1	—	7	18	144	Nashua and Lowell	495,059	51,906	—	600,000	—	—	—	14.6	123,395	180,085	71,505	8	—	
30 Nov. '58	20.1	1.4	1.1	—	5	9	43	New Bedford and Taunton	495,059	51,906	—	600,000	—	—	—	21.5	62,220	137,914	28,968	—	—	
30 Nov. '58	26.9	2.4	2.4	—	2	5	19	Newburyport	570,086	59,096	—	220,240	198,520	221,335	36.0	70,236	44,974	9,257	—	—		
30 Nov. '58	8.6	—	0.4	23.4	—	—	—	N. York and Boston Air Line	416,133	—	—	223,176	673,210	4,643	—	8.6	18,093	16,066	1,647	—	—	
30 Nov. '58	79.5	7.8	25.1	—	25	46	350	Old Colony and Fall River	3,025,445	334,503	—	3,015,100	161,500	30,955	3,748,870	87.3	365,197	561,399	257,060	6	102	
30 Nov. '58	18.6	—	0.8	—	1	2	1	Pittsfield and North Adams	432,430	11,247	—	450,000	—	—	—	ope	r. by We	stern.	27,000	6	—	
30 Nov. '58	43.4	14.9	—	—	12	18	374	Providence and Worcester	1,534,911	254,565	—	1,550,000	300,000	46,500	1,897,369	43.4	199,895	270,402	110,344	6	—	
30 Nov. '58	16.9	—	1.7	—	3	3	198	Salem and Lowell	366,987	82,543	—	243,305	226,900	—	—	16.9	29,822	60,856	—	—	—	
30 Nov. '58	21.9	—	—	—	—	—	—	Stockbridge and Pittsfield	444,600	4,100	—	448,700	—	—	450,000	ope	r. by Ho	useaton.	31,409	7	—	
30 Nov. '58	7.1	—	—	35.5	—	—	—	Troy and Greenfield	329,741	—	—	288,428	169,000	9,854	—	—	—	—	—	—	—	
30 Nov. '58	69.0	8.0	5.5	—	12	8	194	Vermont and Massachusetts	3,309,287	297,343	—	2,214,223	1,003,675	6,500	—	77.0	99,256	225,079	105,037	—	11	
30 Nov. '58	173.4	94.3	—	—	72	47	1,149	Western (incl. Alb. & W.S. etc.)	9,785,569	1,095,713	15,120	5,150,000	6,032,520	243,800	13,528,766	210.6	944,951	1,700,298	809,363	8	109	
30 Nov. '58	45.7	8.8	—	—	10	8	145	Worcester and Nashua	1,279,836	140,961	—	1,141,000	200,000	31,210	1,416,555	45.7	152,803	185,127	83,849	6	—	
MICHIGAN.																						
1 Jun. '50	17.3	—	—	2.7	2	1	100	Bay de Noquet and Marquette	—	—	—	—	—	—	—	—	—	—	—	—	—	
30 Sep. '59	57.0	—	—	—	—	—	—	Chic. Detroit & Can. G.T. June	8,270,623	647,596	—	8,239,155	4,707,500	—	—	—	—	—	—	—	—	
1 Jan. '59	188.0	—	—	—	—	—	—	Detroit and Milwaukee	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	Flint and Pere Marquette	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	Grand Rapids and Indiana	—	—	—	—	—	—	—	—	—	—	—	—	—	
31 May, '59	284.0	—	—	183.0	98	123	1,528	Michigan Central	12,847,238	*	1,149,069	6,067,840	8,284,063	119,089	14,548,411	329.0	—	2,417,915	886,697	—	41	
1 Mar. '59	246.0	293.0	—	—	91	135	976	Mich. St'n & N't'n Indiana	14,517,892	1,607,906	1,312,534	8,975,400	9,343,000	816,460	19,595,407	539.0	—	2,019,425	777,273	—	6	
—	—	—	—	—	—	—	—	Port Huron and Milwaukee	—	—	—	—	—	—	—	—	—	—	—	—	—	
MINNESOTA.																						
—	—	—	—	—	—	—	—	Minnesota and Pacific	—	—	—	—	600,000	—	—	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	Southern Minnesota	—	—	—	—	375,000	—	—	—</						

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "all." Running dots (....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.			Road in progress or projected.	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.		Engines.	Cars.			Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.				
						Passenger.	Freight, etc.		Railroad Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.				
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.		
30 Sep. '58				140.0				NEW YORK.															
30 Sep. '58								Albany and Susquehanna	227,356			275,793		8,667									
30 Sep. '58								Albany, Vermont and Canada	1,557,502	136,038		439,005	1,575,099	50,000									
30 Sep. '58								Albany and West Stockbridge	2,289,934			1,000,000	1,289,934										
30 Sep. '58								Black River and Utica	1,153,699	81,405		804,648	662,500	52,570									
30 Sep. '58								Bloesburg and Corning	496,661			250,000	220,000										
30 Sep. '58								Buffalo, New York and Erie	2,975,325	*		680,000	2,490,593	164,938									
30 Sep. '58								Buffalo and State Line	2,460,251	312,736		1,913,000	1,049,000	172,378									
30 Sep. '58								Cayuga and Susquehanna	1,016,058	79,542		687,000	426,000	7,042									
30 Sep. '58								Chemung	400,000			380,000	70,000										
30 Sep. '58								Elmira, Canandaigua & N. Falls															
30 Sep. '58								Erie and New York City	287,708			352,742	14,000	28,716									
30 Sep. '58								Genesee Valley	91,889			59,374	38,500	23,404									
30 Sep. '58								Hudson and Boston (West'n)	148,000	27,000		175,000											
30 Sep. '58								Hudson River	10,146,617	1,182,372		3,755,466	8,842,000	455,003									
30 Sep. '58								L. Ontario, Auburn & N. York	74,203			75,771											
30 Sep. '58								L. Ontario and Hudson River	3,497,538	178,320		2,715,186	870,000	115,856									
30 Sep. '58								Long Island	2,211,591	854,611	1,000	1,852,715	639,497	144,566									
30 Sep. '58								New York Central	25,475,490	5,257,077	8,193,000	24,182,400	14,402,635	43,079	40,633,635	555.9	3,660,194	5,525,412	3,041,120				
30 Sep. '58								New York and Erie	29,099,749	4,148,835	973,083	11,000,000	26,371,511	1,707,575	39,079,086	495.0	3,000,369	5,151,616	1,086,575				
30 Sep. '58								New York and Harlem	7,303,339	634,777		5,717,100	5,151,287	147,640									
30 Sep. '58								Northern (Ogdensburg)	4,086,712	702,079		1,494,000	1,494,000										
30 Sep. '58								Oswego and Syracuse	660,919	100,462		396,340	197,000	16,415									
30 Sep. '58								Pottsdam and Watertown	1,523,646	63,382		663,077	818,500	150,138									
30 Sep. '58								Rensselaer and Saratoga	743,977	156,573		610,000	140,000										
30 Sep. '58								Rochester and Genesee Valley	653,539			555,450	150,000	30,417									
30 Sep. '58								Sackett's Harbor and Ellensburg	371,556	17,714		167,485	278,400	56,810									
30 Sep. '58								Saratoga and Schenectady	490,654			300,000	86,500										
30 Sep. '58								Saratoga and Whitehall	820,518	74,904		500,000	395,000	5,456									
30 Sep. '58								Staten Island	40,000			40,000											
30 Sep. '58								Brooklyn and Jamaica	309,856			284,850	85,000										
30 Sep. '58								Syracuse, Binghampt. & N. Y.	2,857,707	*		1,200,130	1,500,000	59,418									
30 Sep. '58								Troy and Boston	1,296,302	125,887		568,297	797,500	231,083									
30 Sep. '58								Troy and Greenbush	258,658	36,073		275,000											
30 Sep. '58								Troy Union	732,114			30,000	680,000										
31 Dec. '58								Watertown and Rome	2,159,295		28,000	1,498,500	690,000	85,071	2,278,611								
								NORTH CAROLINA.															
								Atlantic and North Carolina	1,850,000	*		1,600,000	400,000										
								North Carolina	4,235,000	*		4,000,000											
								Raleigh and Gaston	1,240,241	*		973,300	126,200										
30 Sep. '58								Wilmington and Manchester	2,548,363			1,125,315	973,000	259,621	2,830,239								
30 Sep. '58								Wilmington and Weldon	2,869,223			1,340,213	791,055	102,391	3,114,954								
15 Mar. '58								Western North Carolina	190,793		4,700	290,212		70,860	364,072								
								OHIO.															
31 Dec. '58								Atlantic and Great Western	613,231			866,939		77,294									
1 Aug. '58								Bellefontaine and Indiana	3,008,919	*	11,000	1,879,370	1,274,828	39,028	3,370,281								
31 Mar. '58								Central Ohio	5,578,518	806,633	106,133	1,627,906	3,869,300	1,252,440	6,894,557	141.0							
31 Mar. '58								Cinc., Hamilton and Dayton	2,648,266	504,892	26,500	2,156,800	1,411,000	32,618	3,650,710	60.3							
31 May. '58								Cinc. and Indianapolis Junc.															
31 Dec. '58								Cinc., Wilmington and Zanesv.	6,250,841	*		2,441,176	3,032,000	228,973									
31 Dec. '58								Cleveland, Columbus and Cinc.	4,087,571	684,955	67,422	4,746,100	38,000	8,242	5,348,275	141.2							
31 Dec. '58								Cleveland and Mahoning	1,920,953			580,000	1,202,300	161,200	1,943,500	67.0							
31 Dec. '58								Clev., Painesville & Ashtabula	3,338,114	620,532	523,000	3,000,000	1,367,000	119,812	4,858,932	96.6							
30 Nov. '58								Cleveland and Pittsburg	9,320,288			3,942,368	4,918,325	668,821	9,661,102	203.5							
30 Apr. '58								Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720	358,005	7,858,918	188.6							
31 Dec. '58								Clev., Zanesville and Cincin.	1,714,693			369,673	575,250	632,486									
30 Nov. '58								Columbus and Indianapolis	2,555,000			750,000	1,600,000	205,000									
31 Dec. '58								Columbus and Xenia	1,376,250	392,909	112,734	1,490,000	290,700	50,500	1,965,539								
31 Dec. '58								Dayton and Michigan	3,746,000			1,620,000	2,126,000										
31 Aug. '58								Dayton and Western	930,262	104,912		289,692	700,000	90,482	1,080,174	36.6							
31 Aug. '58								Dayton, Xenia and Belpre	860,496			437,838	422,658										
31 Dec. '58								Eaton and Hamilton	1,101,744	79,022	62,630	469,762	728,853	152,694	1,358,867	45.0							
31 Dec. '58								Fremont and Indiana															
31 Aug. '58								Greenville and Miami	888,000	*		300,000	473,000	75,000									
30 Nov. '58								Iron	172,830			118,865	50,000	3,965									
30 Nov. '58								Little Miami	3,451,179	785,817	438,857	2,981,293	1,399,000	84,196	4,709,137	138.0							
31 Dec. '58								Marietta and Cincinnati	9,517,551	1,115,062	574,000	3,477,705	7,405,917	1,754,220	13,202,262	195.4							
30 Apr. '58																							

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.				or projected	Equipment.			Companies.	Abstract of Balance Sheet.							Earnings.			Price of shares.	
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Engines.		Cars.		Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trailers.	Earnings.			
						Passenger.	Freight, etc.	Railroad and Appurtenances.		Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.				Gross.	Net.		Dividends.
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.	
31 Dec. '58	28.0						PENNSYLVANIA, (Continued.)														
30 Nov. '58	98.0	6.0			31	60	487	Philadelphia and Trenton	1,000,000			1,000,000				1,000,000	28.0	oper. by	Cam. & Amboy		
31 Oct. '57	48.0							Phila., Wilmington and Balt.	7,235,522	762,226	78,081	5,600,000	2,547,379	198,961		8,782,966	194.0		1,095,847	344,152	
31 Dec. '58	10.3							Pittsburg and Connelville	2,285,606	*		1,031,173	1,100,000	513,403		2,044,756	48.0		45,586	4,318	
31 Dec. '58	467.0				94	96	1,130	Pittsburg and Erie									10.3				
30 Sep. '57	51.0							Pittsburg, Ft. Wayne & Chicago	14,631,110	*	91,100	6,260,555	9,029,765	1,057,504		17,046,252	467.0	1,394,029	1,567,232	601,658	
30 Sep. '57	31.0							Pittsburg and Steubenville	1,947,462			1,221,277	280,000								
30 Sep. '57	25.0							Schuykill Valley								25.0					
1 Jan. '59	40.2							Sunbury and Erie	5,517,841	37,933		3,903,843	527,000	309,501		8,876,132	40.3				
31 Mar. '59	29.7							Tioga	1,093,263												
31 Mar. '59	78.0							Williamsport and Elmira	3,650,682	380,847		1,500,000	2,361,973	161,272		4,148,920			191,970	96,308	
31 Aug. '58	50.0		2.0		9	13	84	Rhode Island.													
30 Nov. '58	13.6		0.5			3	5	N. Y., Providence and Boston	2,158,000	*		1,508,000	306,500			2,158,000	50.0	147,231	208,439	96,571	
30 Nov. '58	13.6							Providence, Warren & Bristol	434,698	1,588		287,917	109,597	36,159			13.6	23,514	23,065	1,278	
31 Dec. '58	13.2	1.5		182.4	2		26	SOUTH CAROLINA.													
31 Dec. '58	51.9			50.4	4	3	21	Blue Ridge	2,130,539			1,916,515	217,577			2,134,092	13.2				
31 Dec. '58	109.6							Charlotte and Savannah	801,615	34,372	250,000	706,295	195,286	197,905		1,099,536	51.9				
31 Dec. '58	40.3				13	9	176	Charlotte and South Carolina	1,719,045	*		1,201,000	384,000				109.6		283,293	151,536	
31 Dec. '58	40.3							Cheraw and Darlington	600,000			400,000	200,000				49.3				
1 Jan. '59	143.2	21.3						Greenville and Columbia	2,439,709	324,161		1,429,008	1,145,000	345,546		2,919,554	143.2		341,190	125,871	
31 Aug. '58	22.5							Kings Mountain	196,230			200,000				200,000	22.5				
31 July '58	32.0							Laurens	543,403	*		400,000		106,218		575,729	32.0		27,568	8,527	
28 Feb. '60	102.0							North Eastern	2,011,632	*		985,743	960,410	108,172		2,057,325	102.0		230,014	96,145	
31 Dec. '58	136.0	106.0			62	59	790	South Carolina	5,517,384	1,103,130	374,060	4,179,475	2,770,463	193,086		7,701,337	242.0		1,501,008	820,511	
31 July '58	25.1			41.9				Spartanburg and Union									25.1				
31 July '58	25.1							Tennessee.													
31 July '58	25.1							Cleveland and Chattanooga	867,210												
31 July '58	25.1							Edgeland and Kentucky													
30 Jun. '58	110.8							East Tennessee and Georgia	3,376,943			1,289,155	1,910,688	278,319		3,561,197	110.8		264,959	156,195	
30 Jun. '58	130.3				10	13	95	East Tennessee and Virginia	2,529,418	117,512		1,289,800	1,968,950	406,639		3,041,040	130.3		191,198	95,231	
30 Jun. '58	271.0	28.0						Memphis and Charleston	5,276,573	699,776	109,066	2,258,115	2,594,000	837,992		6,354,752	299.0		1,330,812	778,036	
30 Jun. '58	82.0				48.3			Memphis and Ohio	3,200,000								82.0				
30 Jun. '58	82.0				73.0			Memphis, Clarkesv. & Louisv.	195,364												
30 Apr. '59	48.1				24.8	4	3	Mississippi Central and Tenn.	1,023,470	*		309,562	624,500	113,659		1,052,721	48.1			43,436	
30 Nov. '58	34.2				2	3	21	McMinnville and Manchester	565,459	*		140,097	406,000			565,459	34.2	run by	Nash. & Chatta.		
30 Nov. '58	151.0	8.0			38	20	323	Nashville and Chattanooga	3,733,472		160,000	2,262,406	1,674,000	83,944		4,121,557	193.2		641,552	279,267	
30 Nov. '58	151.0	8.0						Nashville and Northwestern	1,000,000												
30 Jun. '58	43.6				68.3			Tennessee and Alabama	935,697	*		309,754	626,889	83,037			43.6		55,775	29,405	
30 Jun. '58	15.0				9.5			Winchester and Alabama													
30 Jun. '58	15.0							TEXAS, (all aided by State).													
30 Jun. '58	15.0							Buffalo Bayou, Braz. & Col'do									32.0				
30 Jun. '58	15.0							Galvest, Houston & Henderson									56.0				
30 Jun. '58	15.0							Houston and Brazoria									43.0				
1 May '58	50.0				306.0	2	3	Houston and Texas Central	1,132,747	*		1,270,123	335,000	128,305		1,691,443	35.0		76,958		
30 Jun. '58	25.0				110.0			San Antonio & Mexican Gulf.									25.0				
30 Jun. '58	28.0				756.0			Southern Pacific									28.0				
31 Aug. '58	90.7				10.6	7	7	VERMONT.													
31 Aug. '58	119.9		13.0		26	18	548	Connect. & Passumpsic Rivers	2,345,724	185,421		1,200,000	800,000			90.7	95,256	171,625	67,553		
31 Aug. '58	62.0				20	18	548	Rutland and Burlington	3,989,708	556,275	92,559	2,233,376	3,145,001	1,013,764		6,392,141	119.6	343,265	332,214	41,697	
31 Aug. '58	62.0				3.4	10	6	Rutland and Washington	1,771,683	*		950,000				1,780,683	62.0	154,997	174,429	1,566	
31 Aug. '58	122.0				20.0	42	28	Vermont Central	8,402,055	*		5,000,000	3,853,000	1,423,299		10,276,299	122.0	569,323	705,837	127,398	
31 Aug. '58	47.0							Vermont and Canada	1,350,695			1,250,000				1,350,695	ope	r. by Vt. Central			
31 Aug. '58	23.7				4	4	52	Vermont Valley	1,212,274	89,612		515,664	703,200			1,308,864	23.7	47,324	43,996	10,493	
31 Aug. '58	64.0	10.5						Western Vermont	1,083,500	*		332,000	700,000			1,083,500	ope	r. by Troy & Bost.	55,568		
31 Aug. '58	64.0	10.5						VIRGINIA.													
31 Aug. '58	64.0	10.5						Alex., Loudoun & Hampshire	902,787	*		844,653		58,134		902,787					
30 Sep. '58	75.8				63.5	9	8	Manassas Gap	3,202,990	209,901		3,038,500	418,000	292,956		3,939,729	75.8		125,599	65,554	
31 Mar. '58	79.2							Norfolk and Petersburg	1,696,907	64,027	10,500	1,346,870	456,893			1,803,769	79.2				
30 Sep. '58	108.5							Northwestern Virginia	5,322,150	*		465,605	5,719,229				108.5	345,427	248,004	loss	
30 Sep. '58	112.5	9.1	4.5		36.0	12	10	Orange and Alexandria	4,339,375	*		1,899,329	1,480,500	371,590		5,134,475	97.6	150,538	258,875	151,872	
30 Sep. '58	123.3	10.1			18	21	317	Petersburg and Lynchburg	3,008,798	362,263		1,371,800	2,039,000	97,274		3,508,074	133.4		375,297	183,345	
31 Dec. '58	59.2	21.3			14	17	131	Petersburg and Roanoke	988,791	192,940		883,200	127,427	34,344		1,313,657	80.5		310,988	186,085	
30 Sep. '58	140.5	1.8			23	18	370	Richmond and Danville	3,588,653	*		1,951,017	1,126,407	25,153		4,424,671	142.3	263,893	491,674	267,192	
31 Mar. '58	75.4							Richm., Frederick & Potomac	1,985,579	*	52,800	1,033,000	680,115								

Atlantic and Gulf Railroad.

We copy the following in reference to this road from the message of the Governor of Georgia;

In May last, I visited the Atlantic and Gulf Railroad, and I take great pleasure in saying that I consider it an excellent road, so far as it is completed, reflecting great credit upon the able, energetic and efficient officers who have had the work in charge, and upon the trustworthy and intelligent board of directors who have the supervision and direction of its affairs. While the work seems to have been faithfully done, my opinion is that those having the control have permitted no wasteful or extravagant expenditure of the State's money. The Board of Directors, since the date of my last message, having certified to me, as the statute requires, that the second, third and fourth instalments, of sixty thousand dollars each, have been paid in by the private stockholders, on their subscription. I have, in each case, issued fifty thousand dollars of the State's bonds, as the statute directs, and delivered them to the company, at par, at the State's instalments due upon her stock. The whole amount of bonds issued to this time, on account of the road, is \$250,000, for which the State holds that amount of stock in the company. The directors having lately notified me that the fifth instalment of \$60,000 has been lately paid in by the private stockholders, I have prepared \$50,000 more of the bonds, which are now ready for delivery, and will be demanded in a few days.

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Boston, June, 1859. 29 Central Wharf.

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THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,

9 South William st.

New York, Aug. 1, 1859.

SUBMARINE BLASTING.

PATENT Electric Submarine Safety Fuse Train for military and civil purposes. Also, A substitute for the Galvanic Battery for sale by

E. GOMEZ, 165 Broadway, N. Y.

GREAT REPUBLIC DINING ROOMS, 77 NASSAU ST., Between FULTON and JOHN, NEW YORK.

CHARLES W. NASH, PROPRIETOR.

NEW WORK.

"SPECIFICATIONS AND CONTRACTS" by PROFESSOR DONALDSON, Architect, and the first English and French Architects and Engineers have contributed their "SPECIFICATIONS," with Elevations, Plans, etc., lithographed by W. C. GLEN, and others: also the **Law of Contracts**, by W. C. GLEN, Barrister, all in 2 vols. Price £1. ATCHLEY & CO., 104 Great Russell Street, LONDON. 3m47

TO CONTRACTORS**HAVING CAPITAL.**

THE MARYLAND AND DELAWARE R. R. CO., will receive sealed proposals until the first of December for the work and materials of fifty-three miles of road; extending from its junction with the Delaware R. R. at Smyrna, Del., to Oxford, Md., forming the shortest connection between Philadelphia and Chesapeake Bay, at a point always obstructed by ice, near the mouth of Great Choptank River.

The resources of the Company (which is free of debt) consist of individual stock, State appropriations, and work already done; but they propose to make payment for a work now offered, principally in first mortgage bonds, which they are prepared to show will be a safe, interest paying and profitable investment.

Twenty miles of the road are already graded, the entire line located and secured, and the nature of the work very favorable for contractors.

A circular containing a map and profiles, with descriptions of the character, position, and resources of the road, will be issued about the 25th inst. and sent by mail on application to J. C. W. Powell, Sec. Md. R. R. Del R. R. Co., Easton, Md.; to whom proposals will also be addressed.

TENCH THIGHMAN, President.

543

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859.

SEALED PROPOSALS for the Graduation of the First Division of twenty miles eastward from Van Buren, will be received at this office, until THURSDAY NOON, DECEMBER 1st, 1859. The work is divided into twenty sections of about one mile each, and proposals for either a part, or the whole of the Division may be made; but no bid for less than one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise. Estimate of work done will be made on the first day of every alternate month, and payments made on the first day of the month following; and fifteen per cent. of all estimates will be retained until the completion of the contract. Contractors desiring to go on terms of payment may bid accordingly as the above terms are not positive or settled.

The Company having a large amount of the finest lands in Western Arkansas, will give preference to those requiring the least proportion of money, and the largest proportion of stock and lands. The Company reserves the right to reject any and all bids at its option.

Plans, profiles and specifications may be seen, and all desired information obtained, on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, President.

Notice to Contractors.

OFFICE OF THE LITTLE ROCK AND FORT SMITH BRANCH OF THE CAIRO AND FULTON R. R. CO.
Van Buren, Ark., Sept. 10, 1859.

SEALED PROPOSALS for the Masonry of the First Division of twenty miles eastward from Van Buren, will be received at this office until THURSDAY NOON, DECEMBER 1st, 1859. No bids for less than the amount of money upon any one section will be considered. Blank forms of Proposals will be furnished on application at this office, by mail or otherwise.

Contractors will state terms of payment, and proportions of money, stock and lands, and amount to be retained by the Company to secure the completion of the contract. The Company reserves the right to reject any and all bids at its option.

Plans and specifications may be seen, and all desired information obtained on application at the Engineer's Office in Van Buren.

2m40

JESSE TURNER, President.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPTON,
44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,
17 William st., N. Y.

LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T RAILS, of the following weights per lineal yard, viz - 25, 30, 36, 40, 45, 50, 60, 63, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. Y.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK.

RAILROAD IRON.

THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

BUSSING, CROCKER & DODGE,
32 CHURCH ST.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.
Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 CHURCH ST., New York.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,

10 Wall st., near Broadway, N. Y.

500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSBORO, Cambria Co., Penna. and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA { NORTH PENNA. R. R. BUILDING,
OFFICE, { No. 407 Walnut st.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,

13 Cliff st., N. Y.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Spem Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or Europe.

THE IMPERIAL
LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON.)

Nos. 108, 110, 112, 114, 116 & 118 Cliff St.,

NEW YORK.

**For Railroads,
Machine Shops,
Steamships,
Mills, etc.**

THIS OIL having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is much less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing; all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear, but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to heat up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

6th. It will remain limpid at as low a temperature as sperm.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length; 2 to 20 feet as required.

Wrought Iron Welded Tubes,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,
No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL
IN ALL THEIR VARIETIES.

BOILER PLATE. CAR AXLES.
BOILER RIVETS. RAILROAD IRON.
CUT NAILS and SPIKES. PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

RAILROAD IRON.

The Crescent Manufacturing Company
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Secy,
Wheeling, Va.

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 49.]

SATURDAY, DECEMBER 3, 1859.

[WHOLE No. 1,233, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, December 3, 1859.

The Gauge Question. (Continued from p. 764.)

The whole number of cars on this road at the end of the fiscal year (September 30th) was equal to 43 8-wheeled cars. Equating the time at which the new ones were placed on the line, and time lost in rebuilding those which had become unfit for use, I found the average number in use to equal 30, either employed or under repair. I then supposed that with a line 450 miles, instead of 53, cars would do vastly more work—at least do four times as much.

I found that 30 cars had carried 1,583,000 tons 1 mile, equal to 52,633 tons 1 mile, for each car.

I then supposed the business of the road will be 600,000 tons, and carried on an average of 300 miles, which is equivalent to 180,000,000 tons 1 mile. I further supposed that each car would easily carry 200,000 tons 1 mile in a year; to do which, a car has only to travel 100 miles in a day, with 10 tons, for 200 days; or 200 miles in a day, for 100 days. Upon such an estimate, 900 would be the number of cars required; and at \$600 each, they would cost \$540,000.

But I estimated the cost of freight cars at \$700,

000, which would add, say, 400. 6-wheel cars at \$400 each.

It will be seen from the above, that if, when the road is longer, cars should do no more than they did last year only, 3,400 would be required.

The coal cars on the Reading road are 4-wheeled. From Major Brown's calculations, comparing the length and estimated business of the Erie with the Reading Railroad, the number of cars required to equip our road would appear to be 11,320. A similar comparison with the Western Railroad makes 10,560, and with the Eastern Division, 9,884. There is, as Major Brown says, a "remarkable coincidence here," but that is hardly proof of the correctness of the results. Major Brown, however, adopts 5,000 as the requisite number.

By adding \$40 to the cost of trucks of each car, he makes a charge of \$200,000 against the 6 feet gauge, and then by supposing that all of them will have to be renewed once in 8 years at the same expense, he adds to that charge a sum which will produce the necessary income to meet this additional cost of renewal, amounting to \$416,666 more.

It may be well here to remark that 5,000 cars at \$600 each, will cost \$3,000,000. This is a large sum, which, when added to the cost of the engines that Major Brown estimates will be required for freight only; and then making a low estimate on cost of engines and cars for the passenger business, it will be found to amount to something near \$7,000,000 as the cost of engines and cars alone. I must say that your road cannot pay a dividend, if you cannot carry the estimated traffic with a vastly less outlay.

When I stated the probable cost of freight cars in my report, my object was merely for a safe comparison with the narrow gauge, and it may be that \$700,000 is too small a sum. I should not, however, with all the thought I have been able to give the subject since the date of that report, make the number required exceed 1,800 8-wheel cars; nor can I see any reason why so great a number should be wanted.

Whatever may be the number of cars necessary to do the work required, one thing is certain, that the entire outfit for the 6 feet gauge, will cost very much less than for the 4 feet 8½ inches gauge. On our wide gauge, we shall want a less

number of cars, they will be more fully loaded, and weigh less per ton of load. They have inside bearings, and consequently the axles are no longer and the trucks no heavier than upon the narrow gauge. The bodies can be made wider and much shorter for the same area, and of course weigh less per square foot of area. In addition, the tracks will cost less, instead of \$40 more per car. I have a proposition from a respectable builder in New York, who has made trucks for us, which states that recent improvements in his trucks, have enabled him to reduce the price from \$500 to \$450, for ordinary gauge using outside bearings; but he says—"On your road of 6 feet gauge and inside bearings, I can afford them still cheaper, and I will on this account furnish any number of trucks for freight cars at the rate of \$425 per set, as there is a full saving of \$25 each on the cost of their construction compared with the outside bearings used on narrow gauges."

He also expresses a decided preference for inside bearings, as being safer and more durable in every respect, "especially adapted for roads of wide gauge like yours." So we have, beside the saving on the number of cars, less dead weight, better cars, and cheaper by \$25 each; and on the principle adopted in Major Brown's estimate, the the saving on 5,000 cars will amount to more than \$335,000.

That this saving of \$25 on the cost of a set of trucks is likely to be realized, can be understood by noticing that the materials composing the trucks are of less size and weight, except the wheels, axles and springs, which remain the same; in other words, the trucks are smaller.

I do not suppose there can be any doubt of the greater value of inside bearings compared with the outside. The cars have less rocking motion, and their movement around curves is found to be decidedly better than on the outside bearings. A car overloaded on outside bearings, drops its wheels between the rails, and tears up the track; with inside bearings, this can never happen, unless the rails are out of gauge. Should an axle or wheel break, from the inside bearing, the safety chains will be much more likely to keep up the truck, as the wheel is free to leave the track without throwing the train off; while with outside bearings the danger is imminent.

Major Brown next comes to the subject of locomotive engines, and introduces it with the following remarks:

"I deem it to be a matter fully settled by experience that the narrow gauge affords ample space for the construction of locomotive engines with all the power that can ever be necessary for the transaction of railroad business."

I will now call your attention to the proof offered by Major Brown to sustain this proposition, and reply to the evidence as I proceed. He introduces an extract from the joint letter of Messrs. Baldwin & Whitney as "interesting and important." They say that "without reference to the strength of superstructure of the road, experience has begun to indicate a limit to the aggregate weight of train, beyond which, there can be no economy in extending it. For instance: the Philadelphia and Reading Railroad Company have transported over the line of the road the last year more than 1,200,000 tons of coal, and although the locomotive engines that have performed this service, have most of them been of a class sufficiently powerful for each engine to move at the velocity required, (10 miles per hour on the level,) a train weighing in the aggregate 750 tons; yet the company has not found it advantageous to load these engines with trains weighing more than 650 tons, including weight of cars." I need not repeat the whole letter, but they go on to give as reasons why this is so, in substance, that with larger loads, damage is done to the cars by the extra strain on them; and that the connections, and the parts of cars by which they are connected, have not sufficient strength. It is a most important matter to determine whether it is true that 650 tons on level is the limit to which it is advantageous to load an engine, as above stated. Such a tonnage on a level requires no more power than 140 on our grades of 60 feet. It follows then that our *maximum* loads must not exceed 140 tons, on a very large portion of the road, including the Eastern Division, doing the largest business.

Let us see how this is to affect the revenues of the company. The locating commissioners say that we can make our loads on direction of greatest trade, 6 parts freight and 4 parts cars. They state, and so does Major Brown, that in direction of least trade, or most, the freight will be but one-third of that going East; their 140 tons going East, is 84 tons of useful, and 56 tons of dead weight; consequently, 84 tons West, is 28 useful and 56 dead weight. The average (net) load is 56 tons of freight, and 56 in cars.

The commissioners make the locomotive power alone, to be 40 cents per mile; then, with such loads, the cost per ton per mile will be, say three-fourths of a cent for motive power. The Eastern Division, 75 miles, taking 533,000 tons each year, as estimated by Major Brown, will be equal to about 40,000,000 tons one mile. Supposing that on the other portions of the line, a like distance is affected in the same way by grades of 60 feet per mile, but that only *one-half* the business is done. Then on the line affected by 60 feet grades, the tonnage is equal to 60,000,000 one mile, which at a cost of three-fourths of a cent, equal \$450,000.

If this tonnage were to be taken by trains averaging 112 tons net, the cost for the motive power would be but one-half or \$225,000. One-half the number of engines, firemen and conductors,

and at least one-third of the brakemen, would be dispensed with, which would save more than the additional cost of the fuel, and this saving made by increasing the net loads is equal at 6 per cent. to an investment of \$5,750,000, to say nothing of the saving in the number and first cost of the engines to do the work.

I am told it is proposed to make Port Jervis a changing place for engines, (I am doubtful of the policy, if it be so.) Then an engine travels 75 miles per day, and if its net load is 56 tons, the work done is equal to 4,200 tons one mile per day. If the engine works 250 days in one year, it will have carried 1,500,000 tons one mile, and the whole tonnage, 40,000,000, will require 38 engines; but if 112 tons be taken, then, only 19 engines will be required. A saving of 19 engines at \$8,000 each, is \$152,000, and by the time you add a sum to keep this number in repair, and for the extra wear of track, and all the items growing out of having double this number of trains moving on the road, get an expenditure of about \$3,000,000 on the first 75 miles alone, by reducing the loads from 112 to 56 tons. This result will not surprise Directors after the examination they have made, and the reports that have been submitted to them by the locating commissioners and their Chief Engineer, showing the effect of heavy loads upon the cost of transportation. The question is the same, no matter what diminishes the load; whether it be *heavy grades* or small engines, the effect is to increase expenses.

Now what are the objections to taking more than 650 tons on a level?

Mr. Whitney says you must have stronger cars and stronger connection. It would be interesting to know how much stronger, and how much more increased strength would cost; but it is more important to know whether Mr. Whitney states facts in regard to the result of experience in the Reading Railroad. 84 tons of freight require 7 cars like ours. Can it be possible that seven 8 wheeled cars are all that we can connect together with good economy? We often have 12 to 14 of these freight cars on a train! Now there must be some mistake, either of the Reading Railroad managers or by Mr. Whitney. In order to learn which, I went over to the Reading Railroad, and had conversations with the Superintendent and with the principal of their shops. The Superintendent, in answer to my question, "What limits your loads?" replied, "The power of our engines." I asked him if they had engines of greater power, would he attach greater loads? he said, "Yes, as large as they would take."

He showed me an engine they were building with which they expected to take from 200 to 250 tons more than the Baldwin & Whitney engines could draw.

He assured me that, whatever might be the opinion of the builders, the Baldwin & Whitney engines could only take 65 tons, that but few of them could take so much, and the *power* of the engines was the only reason for the limit they had found.

This was, as I had expected, common sense without experience, and would have led me to the belief that such were the facts. In order, however, to be more fully satisfied, Mr. Brandt and myself went on the trains and carefully noticed the working of the engines and the amount of the

loads. I was more than ever convinced that the whole secret was—*want of power*. The engines want boiler room; they require too much draft to make their steam, and to run 10 miles an hour with their small wheels; they work off their steam so fast as to "choke up," or create a back pressure upon their pistons.

I am aware that I have consumed much time in noticing this letter of Mr. Whitney, but it is important that directors should understand the matter, for if the statements therein contained are correct, I would not build the road at all; and if it be true that with engines of 24 tons weight, only 140 tons can be taken over your grades of 60 feet at 8 miles per hour, I would not invest one dollar in the road.

Your wide gauge gives room for the generation of more steam, and it is more steam that is wanted. This is obtained by a larger effective heating surface, and by generating it in such a manner as not to consume its power in creating it.

(To be continued.)

Dubuque, Marion and Western Railroad.

A new railroad organization has recently been effected in this State under the title of the Dubuque, Marion and Western Railroad Company, the object of which is to construct a road, commencing at Anamosa, and running thence westerly, substantially on the line of the Iowa Central road to the Missouri river. The directors elected were: Hon. Robert Smyth and J. W. Neeley of Marion; Herman Gelpcke, New York; E. C. Bishop, Bridgeport, Conn.; F. S. Winslow, John Bell, and Edward Stimson, Dubuque. At a subsequent meeting of the directors, the following named gentlemen were elected officers of the Board, viz:—Edward Stimson, President; Platt Smith, Attorney; F. S. Winslow, Treasurer.

On the 15th inst., a meeting was held at Lyons, composed of the directors of the Iowa Central Air Line Railroad, Messrs. Courtright, Bishop & Co., contractors on said road; Sherrill, Bagley & Co., and other sub-contractors; and representatives of numerous other parties, creditors of the corporation. The result of it was a contract executed by the Iowa Central Company and the Dubuque, Marion and Western Company, by the terms of which all the right, title and interest of the former in the Land Grant passed by Congress, May 15, 1856, and subsequently re-appropriated by the Iowa Legislature, also the right of way, &c., from Anamosa westward, were released and transferred to the latter company. These relinquishments and transfers received the free, full assent of all the officers, contractors, and *bona fide* creditors of the Central road, and none of the parties in interest seemed to manifest more satisfaction with the arrangement than the directors, representing the section of road between Anamosa and Lyons, and whose interests might at first glance be deemed to conflict with the new enterprise. But their assent was based upon a belief that the new arrangement would eventuate in the completion of the road from Anamosa to Lyons at an earlier day than would otherwise be the case. Other arrangements are also in progress which we are sanguine will result in the material advancement of the local interests of Lyons.

In addition to the contract of which we have made mention, a written agreement was made between the President of the Dubuque, Marion and Western Railroad, and the parties represented by him, and the citizens of Marion, the substantial points of which were that in case the latter should fulfill certain obligations stipulated by them, the former party guaranteed that the road from Anamosa to Marion should be in operation by the 1st of July next. During the last week engineers have been at work between Anamosa and Fairview, seeking for the most favorable route, and during the entire winter all the work that can be performed, such as excavations in heavy cuts, the collection of ties and other materials, &c., will be accomplished.

Negotiations for this important railroad enterprise have been a long time in progress, and have at last been brought to a most successful termination. The gentlemen into whose hands the franchises and effects of the Central road have fallen, are energetic, capable men; they can command all necessary capital; and they will push the new enterprise with all possible dispatch. Parties representing the new company speak in high terms of the directory of the Central road, and particularly those representing Wyoming, Marquette, and Lyons. They manifested from the beginning a liberal spirit, and a disposition, while adhering tenaciously to their local interests, not to embarrass the immediate success of the work as a whole. —*Dubuque Times.*

Plan for the Re-adjustment of Debt of Pittsburgh, Fort Wayne and Chicago Railroad Company.

Statement of the indebtedness of the company as it stood June 30th, 1859, (omitting the Real Estate bonds, as they are secured independently upon land,) including interest maturing before July 1, 1861:

First Mortgage Bonds.	
Of Ohio and Penna. R. R. Co.	\$1,750,000
Of Ohio and Ind. R. R. Co.	1,000,000
Of Ft. Wayne and Chic. R. R. Co.	1,250,000
	<hr/> \$4,000,000
Sinking Fund bonds issued for coupons of above b'ds.	420,000
Total	<hr/> \$4,420,000
Int' rest on all of above bonds falling due before July 1, 1861, not exceeding	680,000
	<hr/> \$5,100,000

Other Bonds.	
Income bonds of the Ohio and Penna. R. R. Co.	\$1,991,000
2d mort. bonds of Ohio & Indiana R. R. Co.	380,000
	<hr/> 2,371,000
3d mort. bonds of Ohio and Indiana R. R. Co.	17,000
Construction bonds of Pittsburgh, Ft. Wayne & Chic. Railroad Company.	
Amount issued	\$1,229,000
Balance hypothecated; and applicable to funding of floating debt and purchase of additional equipm't	2,271,000
	<hr/> 3,500,000

Total	<hr/> \$5,888,000
Sinking Fund bonds issued for all coupons except those of First Mortgage bonds.	
Amount outstanding	214,000
Total	<hr/> \$6,102,000
Int' rest on all of above bonds maturing before July 1, 1861, not exceeding	398,000
	<hr/> \$6,500,000

Bridge Bonds.	
Amount issued	216,500

Total amount of bonds issued, and required to be issued, to fund all indebtedness

It is proposed to re-adjust the above debt as follows:

1. The First mortgages on the Ohio and Pennsylvania, the Ohio and Indiana, and the Fort

Wayne and Chicago Railroads, to be assigned to Trustee, and a new First mortgage upon the whole road to be executed to the said Trustee for \$5,100,000. The bonds issued under this mortgage to be irredeemable, and to bear 6 per cent. per annum interest, payable semi-annually in New York.

The holders of the bonds secured by the several old First mortgages, and of the Sinking Fund bonds issued for interest on said old First mortgage bonds, to exchange them for those of this new First General Mortgage, and to convert their coupons falling due before July 1st, 1861, into the said new bonds.

The Trustee, in case of a default in payment of interest for 90 days, to take possession of and work the road, until satisfactory arrangements are made by the company to meet the interest regularly thereafter.

2. The Second and Income mortgages of the old roads, (including a Third mortgage of \$17,000 on the Ohio and Indiana Railroad,) the General Mortgage on the consolidated road, and the mortgage made to secure the Sinking Fund bonds, issued for interest on all except the First mortgage bonds, to be assigned to Trustee, and a new Second mortgage to be executed to said Trustee, securing the issue of \$6,500,000 of Seven per cent. Preferred Stock, in 130,000 shares of \$50 each. This mortgage shall give such Preferred Stock precedence of all other debts except those for such labor and materials as may be necessary for operating the road.

Its issue to be limited to

The bonds secured by the above mortgages, viz: The Income bonds of the Ohio and Pennsylvania Railroad Company, the Second and Third mortgage bonds of the Ohio and Indiana Railroad Company, the Construction bonds of the Pittsburgh, Fort Wayne and Chicago Railroad Company, and such of the Sinking Fund bonds as have been issued for interest on other than First mortgage bonds, to be funded at par in this Preferred Stock, which shall be entitled to all the net profits of the company, until the amount during any one year shall exceed a sum sufficient to pay the interest on the First mortgage bonds, and a dividend of 7 per cent. on the said Preferred Stock; the surplus, if any, to form a dividend on the Common Stock.

Until the necessary legislation can be obtained, transferable certificates of indebtedness to be issued, secured by this Second mortgage, and to bear interest at the rate of 6 per cent. per annum, payable semi-annually. These certificates or bonds to be converted into the Seven per cent., Preferred Stock, as soon as such legislation is obtained. If the required legislation cannot be obtained, then said certificates or bonds shall be converted into Irredeemable Seven per cent. Bonds, secured by a Second mortgage.

If the company should—within ninety days after the interest becomes due on these bonds, or dividends on the certificates of stock secured by this mortgage—fail to meet said interest or dividend, the Trustee shall take possession of the road, and manage it temporarily, for the interests of all parties; and he shall, immediately thereupon, give notice to the preferred stockholders to elect twelve members, and the Board of Directors to elect three members, of a Board of Control; and said Board shall have all the powers in relation to the management of the road that before devolved upon the Board of Directors. The Board of Control shall be elected annually, in the proportions above named, by the preferred and common stockholders; and shall continue in power until the interest on the Preferred Stock shall be promptly met, and a surplus remain, amounting to two per cent. on the Common Stock—whereupon the Common Stockholders may resume control of the road, with the proportion of Directors above named, reversed.

3. The Floating Debt of the company, (as it stood October 30, 1859,) was as follows:

Secured Floating Debt	\$1,168,963
Unsecured " "	661,649

Total

This can be discharged by appropriating the net revenues of the road until January 1st, 1861, estimated at, say \$700,000, and so much as may be necessary of the Preferred Stock remaining after funding the bonded debt.

4. Any surplus of Preferred Stock, after the payment of the floating debt, to be held and disposed of for the purpose of increasing the equipment of the road, and of erecting stations at its termini.

5. The condition of the company will then stand as follows:

Common stock	\$6,263,438	33
Seven per cent. preferred stock	6,500,000	00
First mort. 6 per cent. bonds	5,100,000	00
Bridge bonds	216,500	00

Total capital and debt

—excepting Real Estate bonds, which are separately secured on land.

6. The Income required to meet the interest on this debt will be as follows:

6 per ct. on 1st mort. bonds	\$5,100,000	—\$306,000
7 " " preferred stock	6,500,000	—455,000
7 " " bridge bonds	216,500	—15,155

Total interest

An amount which the net receipts of the road will, it is believed, be ample to meet, on and after the first day of July, 1861.

EXPLANATORY STATEMENT.

The above plan for the re-adjustment of the debt of the Pittsburgh, Fort Wayne and Chicago Railroad Company—which is at present secured by no less than ten distinct mortgages—has been arranged after consultation with the representatives of a large amount of its bonds. If accepted, it will remove the embarrassments of the company, and at once give vitality to its securities, without the cost, delays and uncertainty attending the litigation which the numerous classes of creditors, chiefly the result of the consolidation of three distinct companies—must inevitably produce.

The existing first mortgages are upon separate divisions of the road, and executed to different Trustees. The first issue is upon the road from Pittsburgh to Massillon—covering a line both in Pennsylvania and Ohio. The second from Massillon to Crestline, in Ohio only. The third from Crestline to Fort Wayne, in Ohio and Indiana; and the fourth from Fort Wayne to Chicago, in Indiana and Illinois.

These mortgages differ materially in their conditions, and do not seem to fully meet the requirements of the laws of some of the States traversed, as now understood. It is proposed to cover these defects by giving to these bondholders a general mortgage over the whole road, that will place in their hands without litigation, the most summary process for enforcing the payment of interest. It is also proposed to make these bonds irredeemable except by purchase in the open market. This feature, when the small amount of debt to remain upon the whole road is considered, will be found of great value. It will be similar in its effect on this security to that upon an irredeemable ground rent in Philadelphia, which commands a premium of about 20 per cent. over one that is redeemable, upon property of equal value.

The advantages of this arrangement seem to fully justify the second class of bondholders and the company, in asking a concession upon the part of the first mortgage bondholders, of one per cent. interest from the recommencement of cash payments. Its effect, if carried out, will, doubtless, be to advance the market value of their securities

from 50 and 60 per cent., their present rate, to 80 per cent. and upwards, as its advantages become fully understood and appreciated. The accruing interest (the company having no other debt) will be as punctually met as upon the bonds of any Railway Company in the country—the whole amount required for this purpose being but 16 per cent. of the present receipts of the road.

The holders of the second class of bonds, (including the construction bonds, which, with the exception of two small mortgages amounting to \$397,000, constitute a second security on 280 miles of road: while the income bonds of the Ohio and Pennsylvania Railroad—the remaining security of this class—amounting to \$1,991,000 are a second mortgage on 187 miles) are asked to fund their coupons falling due previous to July 1, 1861, and to receive therefor a preferred seven per cent. stock. Included in this preferred stock will be about \$1,600,000 of construction bonds required to cancel the secured debt of the company, incurred for the benefit of the whole road. The remainder will be necessary to increase the rolling stock, build depots, and place the company in a condition to earn a dividend upon its preferred shares of seven per cent.

The second class of bondholders by this arrangement free the property of the company at once from all risks of separation into fragments, or of its passing into other hands; and in case of default to meet the dividend of seven per cent. upon the preferred shares—from the revenues of the road—they obtain absolute control of its management. These preferred shares—limited in amount as they will be by a specific mortgage—will be a much more desirable investment than the higher sounding securities which they replace.

The business of the company is materially embarrassed by the present condition of its indebtedness. No party is willing to step forward and relieve its necessities, under the existing complication of its affairs. The interests of all its creditors, therefore, demand an early adjustment of its liabilities upon some satisfactory basis.

The floating debt, secured and unsecured, has been incurred for the completion of the road after the failure of the company; for its equipment with locomotives and cars, and for labor and materials for working the line, during a vain effort to preserve the credit of the company by the payment of the interest upon its securities. The amount due for labor and materials constitutes nearly the whole of the unsecured floating debt, and is of that character which seems to demand the consideration of all interested. The application of the net proceeds of the road that can be spared from the protection of its pledged bonds, (for the time stated in the plan,) will remove these obligations.

The plan of adjusting the company's indebtedness is submitted, under the full conviction that its adoption will promote to the greatest extent the interest of all of the creditors of the company, while it requires no concession from any interest for which there is not, in our opinion, an ample equivalent granted.

J. EDGAR THOMSON,

Pres't P. & Chi. R. R. Co.

PHILA., Nov. 25, 1859.

Memphis and Little Rock Railroad.

The grading of the track for the Memphis and Little Rock Railroad is progressing rapidly.

Memphis City Aid to Railroads.

The subscriptions of Memphis to the four roads centering in that city are as follows:

Memphis and Charleston Road	\$500,000
Memphis and Ohio Road	427,000
Memphis and Little Rock Road	650,000
Memphis and Tennessee Road	250,000
	<hr/> \$1,827,000

Virginia and Tennessee Railroad.

The twelfth annual meeting of the stockholders in this company was held at Lynchburg, Va., on the 14th of September last, at which the report of the President and Directors was read; and, together with the accompanying documents, embracing the reports of the General Superintendent, Resident Engineer, Secretary, Treasurer, Auditor, Freight, Wood, Statistical, Ticket and Express Agents, was referred to the usual committee, and ordered to be printed. The operations of the various departments of the road are brought down to the 30th of June, at which time the fiscal year of the company closed. The gross earnings of the road were:

From transportation of passengers	\$297,259 73
" freight	323,966 11
" mails	40,999 95
" express freight, etc.	10,668 72
	<hr/> \$672,894 51

And the running expenses were:

Repairs of road	\$102,294 77
" locomotives ..	56,049 58
" cars	39,863 75
" buildings	8,763 18
" bridges	10,885 69
" tools and machinery	6,002 81
Train expenses	59,974 06
Wood	35,085 55
Oil and waste	7,075 07
Depot expenses	41,906 51
Salaries	11,520 35
Loss and damages	287 14
Miscellaneous	14,426 98
	<hr/> 394,135 44

Leaving as net receipts

—or 41½ per cent. of the gross. The receipts per mile of road were \$3,146 58; and per mile run \$2.11.

Compared with the previous year, the gross receipts show an increase of

With an increase in expenses of

Making an increase in net receipts of

The income in gross earnings was upwards of 45 per cent. upon the capital stock, after deducting 6 per cent. interest on the funded debt of the company. The receipts per mile of road, and per mile run, were nearly 44 per cent. greater. The net gain per mile of road was about 25 per cent.; and per mile run 53 per cent.

The aggregate increase of tonnage was upwards of 14 per cent. The increase westward was 3½ per cent.; and eastward nearly 20 per cent. The average distance each ton was moved, was 59 per cent. of the length of the entire road, or 121 miles—being an increase over the previous year of 10 per cent. The average rate of freight was 20 per cent. less; the yield was, however, about 5 per cent. more. The whole movement of tonnage east, was 40,973, or 69 per cent., and 18,181, or 31 per cent. west. The mileage, or tons carried one mile, was 75 per cent. eastward, and 25 per cent. westward. The preponderance, therefore, was 38 per cent. in tonnage and 50 per cent. in

mileage eastward. The number of tons passing over each mile of road was 33,525, or 7,157,634 tons carried one mile; and the number of tons furnished by each mile, 272. The average cost of handling tonnage at the several depots was 24 cents per ton.

A comparison of the several classes of freight, shows that the products of the forest have decreased in quantity 57 per cent., and of manufactures 16 per cent. The mines show an increase of 27 per cent.; animals, 15; agricultural and vegetable, 26; and merchandise 58 per cent.

The total number of passengers carried over the road during the year was 98,554—being an increase over the preceding year of 23,747. Of this number, 52,951, or 43 per cent. were transported west; and 45,602, or 23 per cent. east. The number of way passengers was 67,446—being an increase of 5 per cent.; and of through passengers 28,717, or 323 per cent.—the increase eastward being 180, and westward 508 per cent. The increase in way passengers carried one mile was 5 per cent.; and of all kinds 102 per cent. The average distance traveled by each passenger was 94 miles—an increase per mile of 29 per cent. The receipts from passengers increased upwards of 80 per cent.; and while the rate was 10½ per cent. less, the yield per passenger was 30 per cent. greater. The increase of mail pay was nearly 36 per cent.; of express business, 225 per cent.; and from all sources on the passenger trains 76 per cent. The number of passengers transported over each mile of road was 43,372, or 9,260,016 carried one mile.

The road-bed, bridges, machinery, etc., were in excellent order. The whole number of ties laid during the year was 47,919. The bridges and most of the buildings had also undergone considerable repairs.

The following additions have been made to the buildings and equipment:

Completed engine house at Bristol	\$4,573 55
Extension depot at Lynchburg	2,500 00
Other buildings	3,420 00
Eleven locomotives	102,059 89
Seven first class passenger cars	17,150 00
Five second "	10,825 00
Five mail and baggage "	8,400 00
Sixty freight box "	40,500 00
	<hr/> \$189,428 44

There were also several sidings put in, and turntables erected.

The receipts from all sources during the year were \$1,088,559 50; and the disbursements \$983,747 38—leaving a balance on hand of \$104,812 17. The receipts from all sources since the organization of the company were \$8,759,035 96; and the disbursements \$8,654,223 79.

At the commencement of the year there remained unpaid of the capital stock

Of this sum there has been collected of individuals

Of the State

Remaining unpaid by individuals	\$23,952 25
By the State	28,375 00
	<hr/> 52,327 25

To which add subsequent subscription by the State, after the accounts were made up

Making of uncollected subscriptions

—of which \$29,475 is nominally due from the State,

although that amount has been paid to the company, in the form of a temporary loan, in advance of collections from individuals.

The chartered capital is now \$5,000,000. The amount of stock now held is as follows:

By the State\$2,300,000
By individuals 1,204,300

And is thus classed:

Plain stock\$2,872,000
Guaranteed stock 182,300
Preferred stock 500,000
\$3,554,300

The entire cost of the road, buildings, bridges and equipment to June 30th last was\$6,854,975 10
Salt Works Branch 245,552 64

\$7,100,527 74

The earnings of the Salt Works Branch from transportation of 8,389½ tons of salt, plaster and miscellaneous freight 10 miles were.....\$6,030 50
And the expenses were..... 7,930 50

Excess of expenses.....\$1,900 00

The whole amount received from freight during the year to and from the Salt Works, on the main steam and branch combined, was \$23,333 50.

The amount and condition of the floating debt is as follows:

Notes and bills payable\$153,752 18
Plain bonds due 9,914 84
Due to individuals 88,454 49
Due State for arrearage of interest .. 292,622 03
Do. for temporary loan 29,475 00
By Salt Works bonds 97,000 00

\$671,218 54

The resources applicable to the payment of the above, independent of the future earnings of the road, and the mortgage bonds on hand, are:

Bills and notes receivable, \$12,512 16
Due from individuals 146,562 29
From capital stock 52,327 25
Telegraph stock 2,400 00
Cumberland Gap Branch.. 3,088 73
Montgomery Coal Branch. 809 33
Cash on hand 104,812 17

322,511 98

Leaving a balance of.....\$348,706 56

The funded and floating debt combined amounts to \$3,625,718 53, and matures as follows:

FUNDED DEBT.

Third mortgage 6 per cent. bonds, due December 31, 1865\$331,000 00
Fractional mortgage 6 per cent., due December 31, 1868 23,500 00
First Mortgage bonds 6 per cent., due December 31, 1872 500,000 00
Second or enlarged mortgage 6 per cent., due June 30, 1884 1,000,000 00
Loan from State 6 per cent., due in 1887 1,000,000 00

\$2,954,500 00

FLOATING DEBT.

Due during the year ending June 30, 1860\$443,432 52
Year ending June 30, 1861 227,786 01

671,218 53

Total funded and floating debt\$3,625,718 53

The loan of \$1,000,000 from the State, was made for 34 years; a yearly payment of one per cent. is required as a sinking fund, which extinguishes the loan within that period. Therefore by the payment of \$10,000 annually to the State,

the company in effect receives a credit for \$29,411 76—which is 1-34th part of the loan.

The present annual charge on the company is, for interest on Salt Works bonds and funded debt, including sinking fund on loan from the

State\$191,740
Dividends on guaranteed stock 7,938
\$199,678

The floating debt of the company has been considerably reduced, including \$71,000 of the Salt Works bonds. All current interest on funded debt has been promptly met; and the current dividend of 6 per cent. on guaranteed stock has been paid on call.

Of the \$800,000 of income bonds authorized to be issued at the previous annual meeting, \$431,000 have been sold at an average of 76½ per cent.—the maximum being 80. The remaining bonds could have been sold at that price; but if found necessary to dispose of them at all, higher rates are expected.

The earnings for the year were \$22,894 51 in excess of the estimated amount; the increase would have been still greater but for the shortness in the crops along the line—the article of wheat alone being 33½ per cent., and tobacco 16 per cent., less than the preceding year. In addition to this, the expected eastern and western connections were not completed, by which the operations of the road were confined to local movements—the freight wholly, and the passenger traffic mainly so—until near the close of the year. It is now almost certain that the road will have the benefit of full connections both east and west for passengers and freight during the last half of the year. This will give increased employment by means of through tonnage, at the season during which local business is slack. The earnings for the current year are estimated at \$900,000; for the year ending June 30, 1861, \$1,100,000; for 1862, \$1,200,000; and thereafter \$1,250,000.

A series of calculations are made by the board, based upon these estimates, whereby, after allowing 60 per cent. for expenses, they will be enabled to meet promptly the interest as it accrues, provide the means for the liquidation of their floating debt, for the payment of their bonds at maturity, and for dividends to the stockholders. The latter, however, does not come into the calculation till the year 1862. The result of these estimates up to the period to which they extend, Dec. 31, 1873, is as follows:

Paid 3d mortgage due Dec. 31, 1865..\$431,000 00
" fractional mortg. " 1868.. 23,500 00
" 1st mortgage, " 1872.. 500,000 00
" floating debt 398,706 56
" dividends 2,531,164 00
Retaining a surplus of..... 220,241 44

Making an aggregate of..\$4,104,612 00

The enlarged mortgage bonds of \$1,000,000, due June 30, 1884, are to be retired by setting apart \$60,000 annually as a sinking fund, commencing after all the preceding liabilities have been paid.

This being done, the State loan only remains, requiring an annual payment of \$70,000 for the three remaining years to cancel it, principal and interest. During this time, however, the stockholders are not forgotten. Annual dividends, varying from 5 to 10 per cent. are to be paid, so that in 1887, the company will be free from debt

and after paying a dividend of 10 per cent., will have a surplus of upwards of one million of dollars.

GENERAL STATEMENT.

Capital stock subscribed by State..\$2,270,525 00
Capital stock subser'd by individuals 1,180,347 75
State loan on seven per cent. 1,000,000 00
State advance on stock account.... 90,000 00
1st mortgage bonds 500,000 00
2d do. 23,500 00
Enlarged mortgage bonds. 1,000,000 00
Income do. 431,000 00
Salt Works Branch mortgage bonds 203,000 00
Premium on 1st mortgage bonds... 6,275 00
Do. 2d do. 1,360 00
Interest on State bonds 18,424 87
Do. income mortgage bonds. 827 80
Miscellaneous 25,279 43
Amount received for earnings of road from all sources..... 2,013,496 11

\$8,759,035 96

LIABILITIES.

Bills and notes maturing 153,752 18
Plain bonds maturing 9,814 84
Due State on account of advance .. 29,475 00
Do. for interest 292,622 03
Due individuals..... 79,743 03
Due contractors, agents, officers, etc. 8,711 46

\$9,333,254 50

Cost of road-bed, superstructure, etc.\$5,117,265 17
Cost of equipment 771,086 63
Interest and exchanges 410,995 96
Law expenses..... 9,352 30
Salaries 32,685 17
Ballasting and new iron..... 10,629 43
Paid State on account of interest and one per cent. 77,969 68
Paid interest on temporary loan.... 60,525 00
Paid coupons 419,572 24
Paid dividends on guaranteed stock, 12,665 66
Running expenses 1,812,723 45
Paid Salt Works bonds 106,000 00
Cost of Salt Works Branch..... 245,552 64
Cost of Cumberland Gap Branch... 3,088 73
Cost of Montgomery Coal Branch.. 809 38
Cost of telegraph stock..... 2,400 00
Discounted in sales of State bonds. 37,096 50
Discounted in sales of enlarged mortgage bonds 283,040 53
Discounted in sales of income mortgage bonds..... 103,492 08

\$3,016,950 55

RESOURCES.

Due from individuals ..\$129,916 16
Due by bills receivable, 12,512 16
Due by agents 16,646 18
Due by individuals on stock 23,952 25
Due by State on stock . 28,375 00
Cash in hand and banks 104,812 17

316,213 87

Error in balance sheet 90 08

\$9,333,254 50

The officers of the company are:

JOHN R. McDANIEL, *President.*

WM. H. HUGHES, *Secretary.*

F. G. MORRISON, *Treasurer.*

CHAS. W. CHRISTIAN, *Auditor.*

E. H. GILL, *General Superintendent.*

JAS. H. BUFORD, *Resident Engineer.*

Dubuque Western Railroad.

The cars on this road have been running to Monticello for more than a week. Another lot of iron has been received within a few days, and the track is being laid to Langworthy with great rapidity. The cars will probably be running to that place before the close of this month. They will then be within eight miles of Anamosa. Should the weather be favorable during the first half of the winter, the cars will be running to that place by the first of February.—*Dubuque Times.*

Report of the Inspector of Railways in Canada.

"The Board of Railway Commissioners of Canada," have published in the form of a Blue Book, the report of Mr. Samuel Keefer, Inspector of Railways, dated Toronto, Feb. 28, 1859, for 1858, a copy of which we have received. The report is elaborate. Mr. Keefer's introductory remarks occupy 31 pages. In addition there is a voluminous appendix, containing minute additional details relative to the railways of Canada, at once useful and interesting.

This is the first report that has been made by Mr. Keefer since the passage of the accidents on Railways Act in 1857. The act, he says, was passed too late to enable him to complete a report that year.

At the time of the passing of the act, in 1857, there were 1,402 miles of railway in operation in Canada: Great Western and its branches, 279; Grand Trunk, (in Canada) 685; the Northern, 95; Buffalo, 114; London and Port Stanley, 24; Erie and Ontario, 17; Cobourg and Peterboro', 28; Prescott and Ottawa, 54; Montreal and Champlain, (in Canada) 81; Grenville and Carillon, 13; St. Lawrence and Industry, 12.

In 1857, after the passing of the act, 70 additional miles of railway were opened in Canada: the Galt and Guelph, 16 miles; Preston and Berlin, 11; Port Hope and Lindsay, 43.

In 1858, 140 miles were opened: Buffalo and Lake Huron—Stratford to Goderich—45; Port Hope, Lindsay and Beaverton—Millbrook and Peterboro' Branch—13; Grand Trunk—Stratford to London—31; Great Western—Sarnia Branch—51.

Altogether at the close of 1858 there were 1,612 miles open in Canada, besides the branches in the United States connecting with them, and controlled from this side the lines, as the Grand Trunk to Portland.

Mr. Keefer says it is worthy of remark that Canada has now more miles of railway open than Scotland or Ireland, or any of the six New England States; more than the three Atlantic States of New Jersey, Delaware and Maryland, or the two Carolinas, North and South, and is only exceeded in the number of miles open by the five following States:

New York, which has.....	2,726 miles
Pennsylvania ".....	2,678 "
Ohio, ".....	2,978 "
Indiana, ".....	1,939 "
Illinois, ".....	2,774 "

1,465 miles of the railways in Canada have the Provincial medium gauge of 5 feet 6 inches; and 147 miles have the narrow gauge of 4 feet 8½ inches.

Mr. Keefer says:

There are now in course of construction no less than seven lines or sections of railway, of which, in all probability about 327 miles will be completed and opened for traffic in the course of this year. They are—

1. The Grand Trunk—St. Mary's to Sarnia 70 miles.
 2. The Grand Trunk—St. Thomas to R. du Loup..... 78 "
 3. The Grand Trunk Junction to Victoria Bridge..... 6 "
- 154 miles.
4. Brockville and Ottawa—to Perth and Land Point 86 "
 5. Stanstead, Shefford and Chambly—St. John's to Stukely 45 "
 6. The Welland..... 25 "
 7. The Hamilton and Port Dover—Hamilton to Caledonia..... 17 "

In all..... 327 miles.

Several of the above sections have been already finished.

We further gather from the report that:

The average speed of express trains, including stops, is 26 miles per hour; and in motion between stations, 30.5 miles per hour. The maximum speed is got upon the Montreal and Quebec

division of the Grand Trunk Railway, which is 36 miles an hour. The average speed of accommodation trains is 22 miles per hour, including stops, or 27 miles when in motion between stations. The average speed of mixed trains is 15 miles, including stops, and 19 miles when in motion. The average rate of speed of freight trains is 13 miles, including stops, and 19 miles when in motion. The total number of locomotive engines upon all the roads, at the end of 1858, was 366. The following table shows the amount of rolling stock of the several classes:

	Number.	Per mile of road.
Locomotive engines	366	0.23
First-class passenger cars	213	0.14
Second-class passenger cars	122	0.08
Box, mail and express cars.....	122	0.07
Box, freight and cattle cars.....	2,477	1.58
Platform cars.....	1,841	1.17
Construction cars	1,063	0.67

Of the locomotives, the Portland Company have furnished 52, the Amoskeag Works 48, the Schenectady Works 32, the Boston Works 23, Lowell and Manchester each 12, Philadelphia 10, and other United States works 20; Messrs. Peto & Co. 50, Fairbairn 12, Stothert and Slaughter (Eng.) 20, and other English builders 28. Canada has built 47. Of the whole number, the shops of the United States have furnished 209, England 110, and Canada 47.

The total number of miles run by passenger trains in 1858 was 1,735,821 miles; by mixed and freight trains 1,671,137; by wood and construction trains 876,648; by all trains 4,532,742; the total number of passengers was 1,613,935: the total number of miles traveled by passengers was 91,027,299.—*Montreal Gazette*, 12th.

Rutland and Burlington Railroad.

The earnings of this road for the year ending August 31, 1859, were:

From Passengers	\$123,199 72
" Freights	197,974 03
" Mails	15,500 00
" Rents, interest, etc.....	17,614 26
	<hr/> \$354,288 01

And the expenses were:—

Repairs of road	\$39,194 01
" bridges	7,793 90
" engines	14,882 76
" cars	35,526 42
" stations, fences, etc.	12,769 69
Fuel	43,525 53
Oil and waste	8,615 62
Repair shop	13,481 42
Rail renewals	21,182 18
Salaries of Trustees, Sup't, Treasurer, printing, etc.	13,315 42
Conducting transportation,	49,149 09
Miscellaneous	13,290 95
	<hr/> 272,726 99

Leaving as net income.....\$81,561 02
To which add net earnings as per previous report 284,961 61

	<hr/> \$366,522 63
Paid coupons August and Feb., 1854.	\$110,536 50
" for wood on hand	30,371 20
" materials in shop	81,185 76
" real estate	20,091 41
" engines and cars	45,233 97
Cash on hand	\$44,921 80
Due from connecting roads	30,795 91
" agents, etc.	13,617 63
" sundry accounts,	29,768 45
	<hr/> 119,103 79

\$366,522 63

There has been added to the stock on hand the past year 100 tons of new rails, which with that previously purchased, makes 319 tons new rails

which the trustees have paid for, and charged to operating expenses. There has also been 2,266 tons re-rolled, and 12,173 tons repaired. There have also been used in renewals of track, 212,268 new cross-ties. A new and substantial structure has been erected in the place of Middleburg bridge destroyed by fire. Considerable sums have also been expended by trustees in erecting tank houses, rebuilding and repairing station houses, for masonry to replace structures that had become unsuitable for use, to redeem the property from sales on executions, where suits had been commenced and attachments issued before the trustees were placed in possession and otherwise to defend and protect the property.

There have been rebuilt, during the past year, 3 locomotives, 2 passenger and 47 freight cars.

The repairs and renewals have been of the most permanent character: so that the road and rolling stock has been greatly enhanced in value, and is in more perfect condition than when surrendered to the trustees. Another coupon was to have been paid in October.

The equipment of the road consists of: 26 locomotives; 16 first class and 2 second class passenger, 8 baggage, 2 mail, 389 8-wheel box, 75 do. platform, 5 do. cattle, 12 4-wheel box, and 20 gravel cars.

The number of miles run by passenger trains was 165,620; by freight trains, 193,031; by wood and gravel trains, 87,091—total 395,752.

The receipts have increased.....\$21,973 32
And the expenses have diminished ... 17,800 71

Showing a net gain of.....\$39,774 03
as compared with the previous year.

GENERAL STATEMENT.		CR.
Capital stock.....		\$1,242,500 00
Eight per cent. preferred stock		382,700 00
Six per cent. preferred stock		608,176 31
FUNDED DEBT, viz:		
First mortgage bonds.....	1,800,000 00	
Second do.	913,500 00	
Third do.	431,501 05	
FLOATING LIABILITIES, viz:		
Notes payable.....	\$589,165 91	
Six per cent. bonds.....	296,500 00	
Interest bonds	23,900 00	
Interest scrip	17,199 02	
Div. 8 per ct. stock	8,332 00	
Div. 6 do.	728 00	
Mortg. bonds coupons..	353 50	
Sundry accounts	77,585 34	
	<hr/> 1,013,763 77	
	<hr/> \$6,392,141 13	

Dr.	
Construction	\$3,989,708 05
Equipment.....	556,275 56
Incidentals	293,098 28
Interest on Loans, etc.	333,925 53
Interest on stock	103,060 21
Coupons on six per cent. bonds	328,128 50
Coupons on interest bonds	4,458 00
Discount on six per cent. bonds	220,078 25
Do. 1st mortgage bonds ...	109,686 25
Do. 2d do.	261,180 10

ASSETS.	
V't Valley R. R. shares ..	\$6,750 00
Northern Tel. Co. shares..	2,000 00
Real estate	34,174 47
Steamboat and barges ...	57,753 99
8 per ct. preferred stock..	40,000 00
Plattsburg and Montreal	
R. R. shares	23,355 10
Notes receivable	25,508 84
	<hr/> 192,542 40
	<hr/> \$6,392,141 13

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (.....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Road in progress or projected.	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Dividends.	Price of shares.
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Engines.		Cars.		Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trailers.	Gross.	Net.						
						Passenger.	Freight, etc.	Railroad and Appurtenances.		Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.											
	M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.				
ALABAMA.																									
30 Jun. '59	43.3	—	—	72.3	3	2	19	Alabama and Florida	1,086,278	*	539,396	473,500	101,205	1,127,174	27.3	—	59,430	22,359	—	—	—	—			
28 Feb. '59	30.3	—	—	58.1	2	2	19	Alabama and Mississippi	461,505	30,991	335,010	109,500	21,632	618,965	30.3	—	55,791	31,852	—	—	—	—			
31 May '59	99.2	—	—	68.4	7	7	84	Ala. and Tennessee Rivers	2,101,007	144,549	1,064,915	713,226	212,496	2,264,468	99.2	—	155,628	78,907	—	—	—	—			
30 Jun. '59	57.0	—	—	171.3	—	—	—	Mobile and Girard	1,500,000	—	—	—	—	—	57.0	—	76,773	21,006	—	—	—	—			
1 Jan. '59	319.2	14.7	—	213.0	25	18	361	Mobile and Ohio	7,252,801	681,859	114,894	3,441,859	4,051,547	8,860,702	319.2	—	769,187	420,000	—	—	—	—			
28 Feb. '59	88.5	28.4	—	20	14	272	361	Montgomery and West Point	1,819,403	279,435	100,000	1,419,672	922,621	18,956	2,462,492	116.9	—	446,153	211,880	6	—	—			
16 Dec. '59	—	—	—	295.8	—	—	—	North East and South West	728,000	—	—	105,760	—	—	—	—	—	—	—	—	—	—			
TENNESSEE AND ALA. CENTRAL.																									
ARKANSAS.																									
30 Nov. '58	38.5	—	—	301.4	—	—	—	Calo and Fulton	553,877	*	—	351,524	446,000	10,725	811,949	—	—	—	—	—	—	—			
30 Sep. '58	22.5	—	—	107.5	—	—	—	Memphis and Little Rock	1,547,100	*	—	791,100	756,000	—	1,547,100	22.5	—	185,108	102,726	—	—	—			
CALIFORNIA.																									
30 Sep. '58	22.5	—	—	41.8	—	—	—	Sacramento Valley	1,547,100	*	—	791,100	756,000	—	1,547,100	22.5	—	185,108	102,726	—	—	—			
CONNECTICUT.																									
31 Jan. '59	23.9	—	—	—	3	6	30	Danbury and Norwalk	333,237	49,773	279,050	85,000	3,502	404,622	23.9	—	56,044	20,618	6	—	—	—			
30 Sep. '59	122.4	—	—	75.1	16	20	250	Hartford, Provid. and Fishkill	3,903,455	302,511	1,936,740	1,510,500	319,443	4,323,922	122.4	—	333,500	152,777	—	—	—	—			
31 Aug. '59	61.4	10.6	—	—	—	—	—	Hartford and New Haven	3,108,018	254,000	102,889	2,350,000	904,000	16,463	3,932,482	72.0	—	723,460	204,134	10	124				
31 Dec. '58	74.0	—	—	—	11	19	212	Housatonic	2,438,847	8,669	2,000,000	278,500	76,675	2,655,837	159.0	—	271,273	66,330	—	—	—	—			
31 Dec. '58	67.0	—	—	—	7	15	178	Naugatuck	1,578,301	—	—	1,031,800	437,500	30,713	1,706,802	67.0	—	169,536	314,068	—	—	—			
30 Nov. '58	62.3	—	—	—	—	—	—	N. Haven, N. London and Ston.	1,470,661	—	11,060	738,538	750,000	—	1,488,588	62.3	—	76,758	8,946	—	—	—			
31 Dec. '58	46.4	—	—	—	—	—	—	New Haven and Northampton	1,400,000	—	—	922,500	500,000	—	1,481,723	55.2	—	172,369	70,487	5	—	—			
30 Nov. '58	68.0	—	—	—	5	5	107	N. Lond., Willimant. & Palmer	1,561,241	—	5,453	519,900	1,065,600	—	1,575,147	66.0	—	104,464	30,512	—	—	—			
31 Mar. '58	62.2	—	—	63.8	29	72	368	New York and New Haven	4,586,696	661,547	3,000,000	2,219,002	79,722	5,882,071	74.0	—	832,550	231,600	3	—	—				
31 Mar. '58	59.0	7.0	—	—	—	—	—	Norwich and Worcester	2,245,406	176,792	2,522,300	324,130	59,614	2,598,672	66.0	—	265,417	44,587	—	—	—	—			
DELAWARE.																									
31 Dec. '58	71.0	—	—	19.4	—	—	—	Delaware	1,146,311	*	252,561	735,000	123,750	1,146,311	71.0	—	66,628	—	—	—	—	—			
30 Nov. '58	14.3	—	—	—	—	—	—	Newcastle and Frenchtown	669,514	—	25,000	762,320	—	767,278	14.3	—	19,896	—	—	—	—	—			
FLORIDA.																									
30 Apr. '58	154.2	—	—	45.1	—	—	—	Florida	292,291	*	—	317,847	154,000	70,620	543,237	—	—	—	—	—	—	—			
30 Jun. '58	31.3	—	—	2.0	2	1	24	Flo., Atlantic and Gulf Central	396,310	28,008	317,847	154,000	70,620	543,237	31.3	—	10,255	1,504	—	—	—	—			
30 Jun. '58	26.5	3.9	—	227.0	—	—	—	Pensacola and Georgia	—	—	205,781	204,600	164,670	594,836	29.4	—	—	—	—	—	—	—			
GEORGIA.																									
31 July '58	86.7	—	—	—	15	11	105	Atlanta and La Grange	1,179,381	*	1,000,000	187,500	23,384	1,459,076	86.7	—	362,061	197,257	7 1/2	—	—	—			
30 Sep. '58	30.0	—	—	—	—	—	—	Atlantic and Gulf—M. Trunk	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
31 Dec. '57	53.0	—	—	133.5	—	—	—	Augusta and Savannah	1,032,200	*	735,700	298,500	—	1,032,200	53.0	—	125,427	69,679	—	—	—	—			
30 Apr. '59	43.5	—	—	—	—	—	—	Brunswick and Florida	755,000	—	—	151,587	—	—	31.0	—	—	—	—	—	—	—			
30 Nov. '58	191.0	—	—	23.7	62	28	633	Central of Georgia	3,750,000	550,162	3,750,000	199,851	—	5,645,001	229.0	—	1,353,723	755,615	10	—	—				
31 Mar. '59	171.0	61.0	—	—	—	—	—	Georgia (and Bank)	4,174,492	829,550	4,150,000	373,000	—	7,368,063	232.0	—	1,154,621	544,366	4	—	—				
31 July '59	102.5	—	—	—	18	16	171	Macon and Western	1,500,000	5,073	1,488,500	52,500	—	1,851,721	102.5	—	325,192	163,124	7 1/2	—	—				
31 July '59	50.0	—	—	—	7	2	107	Muscogee	774,244	162,534	669,950	249,000	—	1,026,868	50.0	—	202,714	110,616	8	—	—				
1 May '58	68.1	—	—	—	3	4	39	Savannah, Albany and Gulf	1,386,634	52,373	1,275,901	10,300	—	1,473,140	71.0	—	547,576	357,709	—	—	—	—			
31 July '59	106.1	56.5	14.8	44.3	15	18	166	South Western	3,165,000	—	2,254,000	631,000	—	1,473,140	147.2	—	547,576	357,709	—	—	—	—			
30 Sep. '58	138.0	—	—	—	52	24	705	Western and Atlantic	5,901,497	—	—	—	—	—	158.0	—	852,139	467,916	—	—	—	—			
ILLINOIS.																									
30 Apr. '59	138.0	—	—	—	62	31	990	Chicago, Alton and St. Louis	10,000,000	—	3,500,000	4,500,000	—	10,000,000	220.0	—	—	—	—	—	—	—			
31 Dec. '58	45.0	—	—	—	6	14	101	Chic., Burlington and Quincy	6,068,064	1,400,872	680,158	2,990,000	—	8,149,084	220.0	—	1,044,573	171,515	—	—	—	—			
30 Jun. '58	181.8	—	—	75.0	—	—	—	Chicago and Milwaukee	1,799,394	67,869	120,000	985,000	762,865	188,085	2,050,065	45.0	—	243,282	135,284	—	—	—			
30 Jun. '58	181.8	—	—	—	68	57	960	Chicago and Northwestern	—	—	4,250,000	6,350,000	2,500,000	13,330,000	138.0	—	1,407,846	629,029	—	—	—	—			
10 Nov. '58	33.2	—	—	—	—	—	—	Chicago and Rock Island	6,776,119	175,165	5,603,000	1,397,000	5,651	7,543,104	228.4	—	1,407,846	629,029	—	—	—	—			
31 Dec. '58	121.0	138.5	73.6	—	60	63	1,369	Fox River Valley	580,000	*	—	580,000	—	—	84.0	—	—	—	—	—	—	—			
31 Dec. '58	121.0	138.5	73.6	—	60	63	1,369	Galena and Chicago Union	8,027,473	1,311,917	211,003	6,028,400	3,783,015	292,466	10,300,517	326.5	—	808,221	1,547,561	4	72 1/2				
31 Dec. '58	175.0	—	—	—	—	—	—	Great Western	6,022,926	—	1,600,000	3,088,426	334,500	5,022,926	175.0	—	1,547,561	629,029	—	—	—	—			
31 Dec. '58	454.0	250.0	—	81.5	113	96	2,305	Illinois Central	19,074,214	3,347,799	10,249,210	20,000,000	1,297,277	31,506,487	704.0	—	1,976,578	556,624	—	—	—	—			
ILLINOIS RIVER.																									
—	148.0	—	—	—	—	—	—	Ohio and Mississippi	4,870,586	*	1,780,295	3,292,403	—	—	148.0	—	—	—	—	—	—	—			
—	46.6	—	—	—	—	—	—	Peoria and Bureau Valley	—	—	—	600,000	—	—	oper. by Chic.	—	—	—	—	—	—	—			
—	186.0	—	—	129.0	—	—	—	Peoria and Hannibal	—	—	—	—	—	—	oper. by Chic.	—	—	—	—	—	—	—			
31 Dec. '58	100.0	—	—	—	—	—	—	Peoria and Oquawka	5,400,000	*	1,569,889	2,200,000	—	—	186.0	—	—	—	—	—	—	—			
31 Dec. '58	100.0	—	—	—	—	—	—	Quincy and Chicago	1,978,555	*	800,000	1,200,000	—	2,000,000	100.0	—	—	—	—	—	—	—			
31 Dec. '58	168.5	39.8	12.2	—	31	30	424	Rock Island Bridge	—	—	—	—	—	—	oper. by Chic.	—	—	—	—	—	—	—			
31 Dec. '58	168.5	39.8	12.2	—	31	30	424	Terre Haute, Alton & St. Louis	7,608,958	628,487	3,026,903	5,035,615	741,040	8,865,252	208.3	—	823,767	—	—	—	—	—			
INDIANA.																									
—	108.0	—	—	—	—	—	—	Cincinnati and Chicago	2,080,433	*	1,196,679	1,006,125	—	—	108.0	—	—	—	—	—	—	—			
—	29.0	—	—	73.0	—	—	—	Cincinnati, Peru and Chicago	—	—	—	—	—	—	29.0	—	—	—	—	—	—	—			
31 Aug. '57	109.0	—	—	—	—	—	—	Evansville and Crawfordsville	2,233,413	—	2,750	986,061	1,219,100	51,772	2,283,748	109.0	—	249,867	119,432	—	—	—			
1 Jan. '58	72.4	—	—	—	19	21	278	Indiana Central	1,066,280	244,081	25,641	611,050	1,166,000	47,850	2,111,059	109.0	—	368,189	132,094	6	—	—			
31 Dec. '58	89.8	20.2	—	—	23	19	313	Indianapolis and Cincinnati	2,497,952	540,043	25,689	1,689,900	1,362,284	140,689	3,458,108	110.0	—	448,585	230,834	9	—	—			
31 Dec. '58	84.0	—	—	—	—	—	—	Ind., Pittsburg and Cleveland	1,904,958	—	10,000	935,971	1,025,200	19,719	2,109,338	84.0	—	232,905	92,850	—	—	—			
31 Aug. '57	78.0	—	—	—	—	—	—	Jeffersonville	1,839,576	—	—	1,014,252	681,000	99,400	1,080	—	222,737								

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (.....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				or projected.	Equipment.			Companies.	Abstract of Balance Sheet.							Earnings.				
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Engines.		Cars.		Property and Assets.			Liabilities.			Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.		Dividends.	Price of shares.	
						Passenger.	Freight, etc.	Railroad and Appurtenances.		Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.				Floating Debt.	Gross.			Net.
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.	
MAINE.																					
31 Dec. '58	32.0			6.0	4	25	Androscoggin	645,271	*		145,787	611,500			32.0		30,957	17,263			
31 May, '59	55.0				9	10	128	Androscoggin and Kennebec	2,210,947		27,925	457,900	1,748,457	101,209	2,307,566	137.0		281,929	89,706		
30 Jun. '59	149.0		25.0		41	17	349	Atlantic and St. Lawrence	6,066,875	857,566		2,494,900	3,472,000	9,572	5,976,472	149.0	429,791	545,741	150,226	6	
31 Dec. '58	12.5				4	2	45	Bangor, Oldtown and Milford	175,232	*		135,000			175,516	12.5		33,050	16,530		
31 Dec. '58	63.0	9.0			12	11	169	Kennebec and Portland	2,871,264	*		1,107,526	1,763,738			72.5		145,074	70,746		
31 Dec. '58				23.0				Penobscot	308,413	*		180,000	143,678								
31 May, '59	54.7				4	10	93	Penobscot and Kennebec	1,611,413	104,019	78,014	555,228	1,206,800	128,576	1,890,604	54.7	oper. by	An. & K.	67,324		
31 May, '59	51.3				11	13	118	Portland, Saco and Portsmouth	1,494,792		6,208	1,500,000			1,500,000	51.3	141,664	208,299	104,029	6	96
31 May, '59	37.0							Somerset and Kennebec	783,763	*		169,200	556,000			37.0		55,403	28,404		
31 May, '59	18.5			33.5				York and Cumberland	1,090,000	*		370,000	450,000	270,000	1,090,000	18.5					
MARYLAND.																					
30 Sep. '58	279.6	7.2			228	87	3,480	Baltimore and Ohio	20,019,286	3,538,360	2,961,982	13,111,500	10,668,645	412,483	29,400,161	280.8	3,626,805	3,856,485	1,325,280	62½	
30 Sep. '58	30.0				7	33	167	Washington Branch	1,050,000	*		1,650,000			1,824,806	39.0	187,427	469,423	206,969	6	100
31 Dec. '58	138.0	4.0			42	38	1,455	Northern Central	6,943,457	733,934	220,965	2,200,000	5,395,800	655,507	8,681,557	154.5	606,482	810,604	364,649	20½	
MASSACHUSETTS.																					
30 Nov. '58	21.2				6	4	80	Berkshire	600,000	*		600,000			600,000	ope. rat. by	Honsat.	42,000	7		
30 Nov. '58	26.8	1.8	43.6		20	26	544	Boston and Lowell	2,239,253	183,345		1,830,700	440,000	21,965	2,619,210	28.6	274,655	407,399	166,109	6	99½
31 May, '59	74.3	7.4	50.8		30	39	540	Boston and Maine	3,847,004	368,357	105,937	4,076,570				61.7		818,681	399,657	7½	106
31 Dec. '57	74.5		2.1					Boston and New York Central	3,622,203	69,941		2,241,000	374,550	1,299,039	3,923,319	74.5		88,483	7,052		
30 Nov. '58	43.5	12.0	22.8		23	27	200	Boston and Providence	3,333,807	191,175		3,160,000	195,220		3,362,710	55.5	292,649	527,764	259,176	6	103
30 Nov. '58	44.7	24.0	59.2		31	64	697	Boston and Worcester	4,251,682	437,416	100,000	4,500,000	60,774	5,578,160	63.7	498,325	923,223	332,270	6	101	
30 Nov. '58	46.1	1.1	2.7		7	10	109	Cape Cod Branch	907,761	123,864		631,689	144,000	114,417	47.2	78,282	106,840	49,483			
30 Nov. '58	50.0	2.4	8.9		12	13	330	Connecticut River	1,614,364	187,558	20,000	1,591,100	223,000		1,814,100	75.4	158,815	238,390	90,877	2	
31 May, '59	44.2	36.4	19.4		28	46	320	Eastern	4,134,475	458,523	262,102	2,853,400	2,105,600	172,218	5,123,719	100.6	373,641	663,135	319,526	57½	
30 Nov. '58	19.9	1.3	2.8					Essex	742,592	4,416		299,107		277,961	774,492	ope. rat. by	Eastern	12,395		40½	
30 Nov. '58	14.0		2.4		29	25	643	Fitchburg	3,189,851	350,149		3,540,000		137,453	3,863,710	67.7	303,392	572,967	278,855	6	100
30 Nov. '58	9.0		9.0		3	3	45	Fitchburg and Worcester	293,658	40,226		210,000	64,200	65,735		26.0	35,557	35,476	12,849	6	
30 Nov. '58	24.9		2.0					Grand Junction (Boston)								9.0					
30 Nov. '58	12.4		2.3		2	3	28	Lowell and Lawrence	598,299			292,651	200,000	105,649		ope. r. by N.	H. & N'h	23,294			
30 Nov. '58	14.6	17.1			12	11	301	Nashua and Lowell	332,833	30,275		200,000	100,000		12.4	22,455	42,784	18,540	3		
30 Nov. '58	20.1	1.4	1.1		7	18	144	New Bedford and Taunton	558,919	95,684		600,000			14.6	123,395	180,085	71,505	8		
30 Nov. '58	26.9	2.4	2.4		5	9	43	Newburyport	493,059	51,906		600,000		12,600	21.5	52,220	137,914	28,968			
30 Nov. '58	8.6		0.4	23.4				N. York and Boston Air Line	570,086	50,096		220,240	198,520	221,335	36.0	70,236	44,974	9,257			
30 Nov. '58	79.5	7.8	25.1		25	46	359	Old Colony and Fall River	416,133			223,176	673,210	4,643	8.6	18,093	16,606	1,647			
30 Nov. '58	15.6		0.8		1	2		Pittsfield and North Adams	3,028,445	334,503		3,015,100	161,500	30,935	3,748,970	87.3	365,197	551,399	257,060	6	107
30 Nov. '58	43.4	14.9			12	15	374	Providence and Worcester	432,430	11,247		450,000			ope. r. by Western.		27,000	6			
30 Nov. '58	16.9		1.7		3	3	198	Salem and Lowell	1,534,911	254,565		1,550,000	300,000	46,500	1,897,509	43.4	199,895	270,402	110,344	6	
30 Nov. '58	21.9							Stockbridge and Pittsfield	306,987	82,543		243,505	226,900		16.9	29,822	50,856				
30 Nov. '58	7.1			35.5				Troy and Greenfield	444,600	4,100		448,700			450,000	ope. r. by Ho	neaton.	31,409	7		
30 Nov. '58	69.0	8.0	5.5		12	8	194	Vermont and Massachusetts	329,741		207,243	288,438	169,000	9,854		71.0	98,256	225,079	105,037		11½
30 Nov. '58	173.4	94.3			72	47	1,149	Western (incl. Alb. & W.S. etc.)	3,309,287	207,243	15,120	2,214,225	1,003,675	6,500	77.0	98,256	225,079	105,037			
30 Nov. '58	45.7		8.8		10	8	145	Worcester and Nashua	9,785,569	1,065,713		5,150,000	6,032,520	243,500	13,528,766	210.6	944,951	1,700,293	809,363	8	109
									1,279,936	140,961		1,141,000	200,000		31,210	1,416,555	152,803	83,849	5½		
MICHIGAN.																					
1 Jan. '59	17.3			2.7	2	1	100	Bay de Noquet and Marquette													
30 Sep. '59	57.0							Chic. Detroit & Can. G.T. Junction	built and equip	ed by G	r. Tr'k R. R. Co. of	Canada									
1 Jan. '59	188.0							Detroit and Milwaukee	8,270,623	647,590		2,330,155	4,707,500		9,008,369	188.0		365,038	144,270		
								Port and Pere Marquette													
								Grand Rapids and Indiana													
31 May, '59	234.0			183.0	98	123	1,528	Michigan Central	12,847,235	1,140,069	6,057,840	8,284,063	119,089	14,548,411	329.0		2,417,915	586,697			
1 Mar. '59	246.0	293.0			91	135	976	Mich. S't'n & N't'n Indiana	14,517,892	1,607,906	1,312,534	8,975,400	9,343,000	816,460	19,596,407	539.0		2,019,425	777,273		
								Port Huron and Milwaukee													
MINNESOTA.																					
								Minnesota and Pacific					600,000								
								Southern Minnesota					375,000								
								Minneapolis and Cedar Rapids					600,000	191,130							
								Minnesota Transit					500,000								
								Root River Valley													
MISSISSIPPI.																					
1 May, '59	146.5			41.7	11	6	155	Mississippi Central	3,395,965	*		1,641,947	1,346,363	883,129	3,717,469	146.5		239,585	117,371		
1 Oct. '59	71.4			27.8	7	4	41	Mississippi and Tennessee	1,254,894	159,018		798,285	456,949	275,060	1,974,444	59.7		176,462	116,433		
31 Dec. '58	83.2			60.4				Southern Mississippi	2,750,000	*		1,000,000	1,400,000			83.2		250,047	121,659		
MISSOURI.																					
30 Nov. '58	12.0			65.8	1			Cairo and Fulton	281,645	9,200		50,493	327,000	50,892	123,386	12.0					
1 July '58	71.0			36.0				Hannibal and St. Joseph	8,164,559	330,422		1,664,773	6,830,500	37,500	8,533,228	171.0					
31 Oct. '58	168.8			63.0				North Missouri	5,396,527	235,994		2,620,000	3,250,000	48,006	6,018,106	168.0		256,159			
								Platte County													
28 Feb. '59	163.0	19.0		119.0	26	26	412	Pacific	8,621,659	614,782		3,330,637	8,203,000	754,837	12,288,494	182.0		670,310	301,563		
31 Oct. '58	19.0			264.0																	

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

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Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.						Earnings.				Price of shares.		
	Main Line.	Lateral and Branch Lines.	2d Track and Sidings.	Road in progress or projected.	Engines.	Cars.			Property and Assets.			Liabilities.			Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trailers.	Earnings.			
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.				Gross.		Net.	
	M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.
NEW YORK.																					
30 Sep. '58				140.0				Albany and Susquehanna	227,356			275,793		8,097							
30 Sep. '58	32.9		3.3		5	12	53	Albany, Vermont and Canada	1,557,502	156,038		439,005	1,575,099	50,000		32.9	93,894	84,119	11,215		
30 Sep. '58	38.3		34.0					Albany and West Stockbridge	2,289,934			1,000,000	1,289,934			37.5	34,424	60,524	32,413	6	
30 Sep. '58	34.9	2.6		73.6	4	6	39	Black River and Utica	1,153,069	81,405		804,648	662,500	52,570		14.8	16,530	23,554	9,204	5	
30 Sep. '58	14.8		1.6					Blossburg and Corning	490,661	*		250,000	220,000			230.0	355,480	429,754	128,122		
30 Sep. '58	142.0	78.0	13.6		26	32	353	Buffalo, New York and Erie	2,975,325			680,000	2,400,593	164,938		87.6	356,145	514,116	359,609	6	
30 Sep. '58	68.3		18.0		28	34	312	Buffalo and State Line	2,460,251	312,736		1,913,000	1,049,000	172,378		34.6	59,539	59,421	5,992		
30 Sep. '58	24.6		38.1					Cayuga and Susquehanna	1,016,058	79,542		687,000	426,000	7,042		oper. r. by N. Y. & E.				7	
30 Sep. '58	17.4		2.1					Chemung	400,000			380,000	70,000			oper. r. by Re- ceivers.					
30 Sep. '58	46.8		2.9		10	8	83	Elmira, Canandaigua & N. Falls				352,742	14,000	28,716		17.3	49,519	58,207	10,840	6	
30 Sep. '58				63.2				Elmira and New York City	287,708			59,374	38,500	23,404		150.0	700,234	1,620,412	594,639		41
30 Sep. '58				15.0				Genesee Valley	91,889			175,000				oper. r. b. N. Y. & E.					
30 Sep. '58	17.3		0.5		5	3	50	Hudson and Boston (West'n)	148,000	27,000											
30 Sep. '58	144.0		106.5		57	107	537	Hudson River	10,146,617	1,182,372	3,758,466	8,842,000	455,003								
30 Sep. '58				73.8				L. Ontario, Auburn & N. York	74,203		75,771										
30 Sep. '58				182.0				L. Ontario and Hudson River	3,497,538	178,320	2,715,186	870,000	115,856			101.5	213,414	334,038	111,531		11
31 Mar. '59	84.0	2.5		8.5	19	34	185	Long Island	2,211,659	354,611	1,000,000	1,289,934	144,566			555.9	3,060,194	6,528,412	3,041,120	8	82
30 Sep. '58	297.8	258.1	313.8		218	258	2,869	New York Central	25,475,490	2,577,077	8,193,083	24,182,400	14,402,635	43,079	40,633,635	555.9	3,060,194	6,528,412	3,041,120	8	82
30 Sep. '58	146.0	19.0	282.5		210	183	2,684	New York and Erie	29,909,749	4,148,885	973,083	11,000,000	26,311,511	1,707,575	39,079,086	496.9	3,060,569	5,151,616	1,086,575	9	98
30 Sep. '58	130.8	2.1	30.9		33	89	430	New York and Harlem	7,303,339	634,777	5,717,100	5,151,287	147,640			152.9	621,747	975,853	358,792		10
30 Sep. '58	118.0	3.8	17.7		28	8	417	Northern (Ogdensburg)	4,086,712	702,079			1,484,000			121.1	311,404	410,806	127,015		
30 Sep. '58	35.9		2.2		7	6	44	Oswego and Syracuse	660,919	100,462		396,340	197,000	16,415		35.9	68,845	115,960	61,247	8	
30 Sep. '58	75.4		2.0		6	4	35	Pottsdam and Watertown	1,523,646	63,382		663,077	818,500	180,138		75.4	98,686	94,385	44,715		
30 Sep. '58	25.2		2.1		5	13	70	Rensselaer and Saratoga	743,977	156,573		610,000	140,000			46.2	89,389	208,223	33,946	3	
30 Sep. '58	18.4		1.3	32.6				Rochester and Genesee Valley	653,539		555,450					18.4	32,980	37,290	18,590		
30 Sep. '58	18.0		1.0		2		32	Sacketts Harbor and Ellisburg	371,556	17,714		167,455	278,400	56,810		18.0	17,620	12,025			
30 Sep. '58	21.0		1.6		2	3	10	Saratoga and Schenectady	480,684	*	300,000	86,500				oper. r. by Ten. & Sar.				24	
30 Sep. '58	40.9	6.0	3.9		9	12	84	Saratoga and Whitehall	820,518	74,904	500,000	395,000	5,456			54.5	107,566	139,388	32,106		
30 Sep. '58				13.2				Staten Island	40,000		40,000										
30 Jun. '59	11.0							Brooklyn and Jamaica	369,856		284,850	85,000				oper. r. by Long Isl.					
30 Sep. '58	81.3		7.1		13	12	117	Syracuse, Binghamt. & N. Y.	2,857,607	*	1,200,130	1,500,000	59,418			81.3	148,240	177,627	74,359		
30 Sep. '58	27.2		3.2	7.7	7	4	65	Troy and Boston	1,296,302	125,887		568,297	797,500	231,083		27.2	61,614	125,042	63,289		
30 Sep. '58	6.0		0.1					Troy and Greenbush	258,658	36,073		275,000				oper. r. b. Hud. & River.				6	
30 Sep. '58	2.1		2.1					Troy Union	732,114	*	30,000	680,000				oper. r. by other Co's.					
31 Dec. '58	96.8			11.0	7	11	298	Watertown and Rome	2,159,295	28,000	1,498,500	690,000	85,071	2,278,611	96.8	215,605	397,712	187,000	6		
NORTH CAROLINA.																					
30 Sep. '58	95.2	2.0						Atlantic and North Carolina	1,850,000	*		1,000,000	400,000			95.2					
30 Sep. '58	223.0							North Carolina	4,235,000	*		4,000,000				223.0					
30 Sep. '58	97.0							Raleigh and Gaston	1,240,241	*		973,300	126,200			97.0					
30 Sep. '58	161.0				22	20	144	Wilmington and Manchester	2,548,363	*	223,150	1,125,315	973,000	259,621	2,830,229	171.0					
30 Sep. '58	161.9				24	32	144	Wilmington and Weldon	2,869,223	*	103,150	1,340,213	791,055	102,391	3,114,954	171.0	323,069	477,554	235,201		
15 Mar. '58				43.0				Western North Carolina	190,793	*	4,700	290,212	70,860		364,072						
OHIO.																					
31 Dec. '58	118.2				17	12	208	Atlantic and Great Western	613,231			866,939		77,294							
1 Aug. '58	137.0				41	39	508	Bellefontaine and Indiana	3,008,919	*	11,000	1,879,370	1,274,828	39,028	3,370,281	118.2					
31 Mar. '59	60.3				22	28	432	Central Ohio	5,578,518	806,633	100,133	1,627,906	3,869,300	1,252,440	6,894,557	141.0					
30 Sep. '58	37.0				62.1			Cine., Hamilton and Dayton	2,648,266	26,500	2,155,800	1,411,000	32,618			60.3					
1 May, '59	131.8				31.0	16	10	Cine. and Indianapolis Junc.				2,441,176	3,032,000	228,973		37.0					
31 Dec. '58	135.4	5.8			42	31	439	Cine., Wilmington and Zanev.	6,250,841	*		5,900,000	1,202,300	161,200	1,943,500	141.2	304,168	190,745	10,180		
31 Dec. '58	67.0				18.0			Cleveland, Columbus and Cine.	4,087,571	654,955	67,422	4,746,100	38,000	8,242	5,343,275	141.2					
31 Dec. '58	95.4		1.2	37.9	31	39	453	Cleveland and Mahoning	1,920,953	*		5,900,000	1,202,300	161,200	1,943,500	67.0					
30 Nov. '58	101.0	102.5			42			Clev., Painesville & Ashtabula	3,338,114	620,532	523,000	3,000,000	1,367,000	119,812	4,858,932	96.6	402,935	1,251,537	590,048	15	
30 Apr. '59	109.2	79.4			32	52	430	Cleveland and Pittsburgh	9,300,285		3,942,368	4,918,325	653,821	9,601,102	203.5	643,413	772,093	332,065	4		
31 Dec. '58	61.4				53.0	5	6	Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720	338,605	7,858,918	185.6					
31 Dec. '58	72.0				31.0	6	9	Clev., Zaneville and Cincin.	1,574,693			369,673	575,250	632,456		61.5	75,120	68,128	10,762		
30 Nov. '58	54.5			10.4				Columbus and Indianapolis	2,555,000			750,000	1,600,000	205,000		72.0	144,000	84,000	17,760		
31 Dec. '58	72.0				72.0			Columbus and Xenia	1,376,250	392,909	112,734	1,490,000	290,700	50,500	1,965,539		72.0	144,000	84,000	17,760	
31 Aug. '58	86.6				5	3		Dayton and Michigan	3,746,000			1,620,000	2,126,000			72.0	144,000	124,559	60,779		
31 Aug. '58	16.0				47.0	3	2	Dayton and Western	930,262	104,912		1,020,000	700,000	90,482	1,080,174	36.6					
31 Dec. '58	45.0				6	5		Dayton, Xenia and Belpre	860,490	*		437,538	422,658			16.0	40,064	64,000	33,000		
30 Sep. '58	36.0				84.0			Dayton and Hamilton	1,101,744												

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Years ending.	Railroad.			or projected	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.		Engines.	Passenger.	Freight, etc.		Property and Assets.			Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trailers.	Earnings.				
									Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.				
	M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.		
PENNSYLVANIA, (Continued.)																							
31 Dec. '58	28.0							Philadelphia and Trenton	1,000,000				1,000,000				oper. oy	Cam. &	Amboy	7	36		
30 Nov. '58	98.0	6.0			31	60	487	Phila., Wilmington and Balt.	7,235,522	762,225	76,081	5,600,000	2,547,379	198,961	8,782,996	194.0		1,095,847	344,152	5			
31 Oct. '57	48.0							Pittsburg and Connellsville	2,255,000	*		1,031,173	1,100,000	513,403	2,644,756	48.0		45,586	4,318				
31 Dec. '57	10.3							Pittsburg and Erie								10.3							
31 Dec. '57	467.0				94	96	1,130	Pittsburg, Ft. Wayne & Chicago	14,631,110	*	91,100	6,260,555	9,029,765	1,657,594	17,046,252	467.0	1,304,029	1,567,232	601,658				
30 Sep. '57	31.0							Pittsburg and Steubenville	1,947,462			1,221,277	280,000										
1 Jan. '59	25.0							Schenck Valley								25.0							
1 Jan. '59	40.2				230.9			Sunbury and Erie	5,517,841	37,933		3,903,843	627,000	309,591	8,976,132	40.3							
31 Mar. '59	29.7							Tioga	1,093,263														
31 Mar. '59	78.0							Williamsport and Elmira	3,650,682	380,847		1,500,000	2,361,973	161,272	4,148,920			191,970	90,308	1			
RHODE ISLAND.																							
31 Aug. '58	50.0		2.0		0	13	84	N. Y., Providence and Boston	2,158,000	*		1,508,000	306,500		2,158,000	50.0	147,231	208,439	96,571	5			
30 Nov. '58	13.6		0.5		3		5	Providence, Warren & Bristol	434,898	1,588		287,917	109,937	36,139		13.6	23,514	23,005	1,278				
SOUTH CAROLINA.																							
31 Dec. '58	13.2	1.5		182.4	2		26	Blue Ridge	2,126,539			1,916,515	217,577		2,134,092	13.2							
31 Dec. '58	61.9			50.4	4	3	21	Charlotte and Savannah	801,615	34,372	250,000	706,365	195,266	197,905	1,099,536	61.9							
31 Dec. '58	109.6				13	9	176	Charlotte and South Carolina	1,719,045	*		1,201,000	384,000			109.6		283,293	151,536	6			
31 Dec. '58	40.3							Cheraw and Darlington	600,000	*		400,000	200,000			49.3							
1 Jan. '59	143.2	21.3						Greenville and Columbia	2,439,769	324,161		1,429,008	1,145,000	345,546	2,919,554	143.2		341,190	125,871				
31 Aug. '58	22.5							Kings Mountain	196,230	*		200,000				22.5							
31 July '58	32.0							Laurens	543,403	*		400,000	106,218		575,729	32.0		27,568	8,527	5			
28 Feb. '59	102.0							North-Eastern	2,011,662	*		985,743	990,410	108,172	2,057,325	102.0		220,014	96,145				
31 Dec. '58	136.0	106.0			62	59	790	South Carolina	5,517,384	1,103,130	374,000	4,179,475	2,770,463	198,056	7,701,337	242.0		1,501,008	820,511	7			
31 July '58	25.1			41.9				Spartanburg and Union								25.1							
TENNESSEE.																							
31 Aug. '58	30.0							Cleveland and Chattanooga	867,210														
30 Jun. '58	110.8							Edgemoor and Kentucky		*													
30 Jun. '58	110.8							East Tennessee and Georgia	3,376,943			1,289,155	1,910,688	278,319	3,501,197	110.8		264,959	156,195				
30 Jun. '58	130.3				10	13	95	East Tennessee and Virginia	2,529,413	117,512		629,800	1,968,950	406,659	3,041,940	130.3		191,198	95,231				
30 Jun. '58	271.0	28.0						Memphis and Charleston	5,276,573	699,778	109,066	2,258,115	2,594,000	837,992	6,354,752	299.0		1,330,812	778,036				
30 Jun. '58	82.0				48.3			Memphis and Ohio	3,200,000	*						82.0							
30 Jun. '58	82.0				73.0			Memphis, Clarkesv. & Louisv.	195,364	*													
30 Apr. '59	48.1				24.8	4	48	Mississippi Central and Tenn.	1,023,470	*		309,562	624,500	118,059	1,052,721	48.1			43,426				
30 Nov. '58	34.2				2	3	21	McMinnville and Manchester	5,276,573	*		140,097	406,000		565,459	34.2		run by Nash. & Chatta.					
30 Nov. '58	151.0	8.0			38	20	323	Nashville and Chattanooga	3,733,472	*	100,000	2,262,405	1,074,000	85,944	4,121,557	193.2		641,552	279,267	3			
30 Nov. '58	151.0	8.0			38	20	323	Nashville and Chattanooga	3,733,472	*	100,000	2,262,405	1,074,000	85,944	4,121,557	193.2		641,552	279,267	3			
30 Jun. '58	43.6				63.3			Nashville and Northwestern	1,000,000	*													
30 Jun. '58	15.0				9.5			Tennessee and Alabama	935,697	*		309,754	626,889	83,037		43.6		run by Nash. & Chatt.	29,405				
30 Jun. '58	15.0				9.5			Winchester and Alabama							operated								
TEXAS, (all aided by state).																							
30 Jun. '58	32.0				158.0			Buffalo Bayou, Braz. & Col'do								32.0							
30 Jun. '58	56.0				184.0			Galveston, Houston & Henderson		*						56.0							
30 Jun. '58	43.0				31.0			Houston and Brazoria								43.0							
1 May '58	50.0				306.0	2	3	67	Houston and Texas Central	1,132,747	*		1,270,122	335,000	128,205	1,691,443	50.0		76,958				
30 Sep. '57	25.0				110.0			San Antonio & Mexican Gulf.								25.0							
30 Sep. '57	28.0				756.0			Southern Pacific								28.0							
VERMONT.																							
31 Aug. '58	90.7				10.6	7	7	181	Connect. & Passumpsic Rivers	2,345,724	185,421		1,200,000	800,000		90.7	95,256	171,625	67,853				
31 Aug. '58	119.9		13.0		26	18	548	Rutland and Burlington	3,959,708	556,275	92,859	2,233,376	3,145,001	1,013,764	6,392,141	119.9	343,265	332,214	41,697				
31 Aug. '58	62.0		3.4		10	6	201	Rutland and Washington	1,771,683	*		950,000			1,780,683	62.0	154,997	174,429	1,506				
31 Aug. '58	122.0		20.0		42	28	885	Vermont Central	8,402,655	*		5,000,000	3,853,000	1,423,209	10,276,299	160.0	569,323	705,837	127,388				
31 Aug. '58	47.0							Vermont and Canada	1,380,695			1,350,000			1,380,695	ope. r. by Vt. Central							
31 Aug. '58	23.7		0.7		4	4	52	Vermont Valley	1,212,274	89,612		1,516,864	793,200		1,308,864	23.7	47,324	43,998	10,493				
31 Aug. '58	64.0	10.5						Western Vermont	1,083,500	*		332,000	700,000		1,083,500	ope. r. b. Troy & Bost.							
VIrginia.																							
31 Aug. '58	75.8				63.5	9	8	216	Alex., Loudoun & Hampshire	902,787	*		844,053		58,134	902,787	75.8						
30 Sep. '58	75.8							Manassas Gap	3,262,990	209,901		3,035,500	418,000	292,956	3,939,729	75.8		125,509	65,554				
31 Mar. '59	79.2							Norfolk and Petersburg	1,690,907	64,027	10,500	1,346,876	456,893		1,803,769	79.2							
30 Sep. '59	103.5							Northwestern Virginia	5,322,150	*		498,605	5,719,229		5,719,229	103.5	345,427	248,004	loss				
30 Sep. '58	112.5	9.1	4.5	36.0	12	10	101	Orange and Alexandria	4,339,375	*		1,899,329	1,480,500	371,590	5,134,475	97.6	150,538	258,875	151,872				
30 Sep. '58	123.3	10.1			19	13	279	Petersburg and Lynchburg	3,040,636	374,996		1,365,300	1,851,500	292,842	4,745,256	133.4		410,166	201,344				
31 Dec. '58	56.2	21.3			14	17	131	Petersburg and Roanoke	958,791	192,940		883,200	127,427	34,344	1,313,057	80.5		310,988	186,085	5			
30 Sep. '58	140.5	1.8			23	18	370	Richmond and Danville	3,588,653	*		1,981,017	1,126,407	25,153	4,424,671	142.3		263,593	491,674	267,192			
31 Mar. '58	75.1							Richm., Frederik & Potomac	1,055,579	*	52,800	1,033,600	680,115	116,550	2,183,232	75.1		269,126	145,656	7			
30 Apr. '59	22.2	2.7			10	16	192	Richmond and															

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F.," Sinking Fund. "var.," that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
Alabama and Florida :					Chicago and Milwaukee :					Eaton and Hamilton :				
Mortgage	\$300,000	7	1867		1st Mortgage (convertible)	\$512,000	-----	-----	-----	1st Mortgage	\$757,734	1	var.	
Convert. (guar. by Dir.)	150,000	7	1863		Income	62,000	-----	-----	-----	Erie and North-East :				
Land Mortgage	23,500	7	1869		Real Estate 2d Mortgage	188,864	1869	-----	-----	Exchanged for Buff. and St. L.	149,000			
Ala. and Miss. Rivers :					Chicago and Rock Island :					Evansville and Crawfordville :				
State (Ala.) Loan	123,171	-----	-----	-----	1st Mortgage	1,397,000	7	1870	66½					
Mortgage	109,500	-----	-----	-----	Chic. St. Paul and Fond du Lac :									
Ala. and Tenn. Rivers :					1st Mortgage (on 1st Division)	3,000,000	7	-----	-----	Florida :—				
1st Mortgage convertible	526,000	7	1872		2d Mortgage (1st Land Grant)	3,000,000	18	-----	-----	Internal Improvement (State)	1,655,000	7	1891	
2d Mortgage	225,705	8	1864		Real Estate	350,000	18	-----	-----	Free Land, 2d Mortgage	1,500,000	8	1891	
Albany, Vt. and Canada :					Cincinnati, Hamilton and Dayton :					Florida and Alabama :				
1st Mortgage	500,000	7	1867		1st Mortgage	461,000	1867	-----	-----	Internal Improvement (State)		7	1791	
Albany and West Stockbridge :					2d Mortgage	950,000	1880	-----	-----	Free Land, 2d Mortgage		8	1791	
Albany City (S. F.)	1,000,000	6	66-76		*Cincinnati, Wilm. and Zanesville :					Florida, Atlantic and Gulf Centr.:				
Adroscoggin and Kennebec :					1st Mortgage	1,300,000	-----	-----	-----	Internal Improvement (State)	300,000	7	1791	
Income, convert.	1,000,000	7	-----	-----	2d Mortgage	574,000	-----	-----	-----	Free Land, 1st Mortgage	200,000	8	1791	
Atlantic and St. Lawrence :					3d Mortgage	158,000	-----	-----	-----	Fox River Valley :				
Dollar Bonds	988,000	6	1866		Income	250,500	-----	-----	-----	1st Mortgage	400,000	1	-----	
Sterling Bonds	484,000	6	1878		Tunnel Right	1,000,000	-----	-----	-----	2d Mortgage	180,000	-----	-----	
City of Portland Loan	2,000,000	6	-----	-----	Cleveland and Mahoning :					Galena and Chicago Union :				
Baltimore and Ohio :					1st Mortgage	694,500	-----	-----	-----	Litchfield	52,015	7	1859	
Maryland Sterling	3,000,000	5	-----	-----	2d Mortgage	469,000	-----	-----	-----	1st Mortgage (S. F.)	1,995,000	7	62-63	
Mortgage Coupons	2,500,000	6	1885		3d Mortgage	38,800	-----	-----	-----	2d Mortgage (S. F.)	1,735,000	7	1875	
" "	700,000	6	1880		Clev. Painesville and Ashtabula					Galveston, Houston and Henderson :				
" "	1,128,500	6	1875		1st Mortgage	564,000	7	1861						
" "	1,000,000	6	1868		2d Mortgage	303,000	7	1861						
Balt. City Loan	4,880,511	6	-----	-----	Special (Sunbury and Erie)	500,000	-----	-----	-----					
Bellevue and Indiana :					Cleveland and Pittsburgh :									
1st Mortgage convertible	791,000	7	1866		1st Mortgage (Main Line)	800,000	7	1860		*Great Western, Ill. :				
2d Mortgage	140,000	7	1870		2d Mort. (M. L.) or 1st Extension	1,188,000	7	1873		1st Mortgage (W. Div. 100 m.)	1,000,000	10	-----	
Real Estate (1861, '63, '68)	129,000	7	var.		3d Mort. (M. L.) or 2d Extension	1,165,000	7	1875		1st M. (E. D. 84 m.), 2d M. (W. D.)	1,350,000	7	-----	
Income (S. F.)	199,500	7	1859		4th Mort. (M. L.) or 3d Extension	1,154,000	-----	-----	-----	Old Sang. and Morg. Railroad	41,000	-----	-----	
Belvidere Delaware :					Income	118,000	-----	-----	-----	2d Mortgage	325,000	-----	-----	
1st Mort. (guar. C. and A.)	1,000,000	6	1877		Dividend Bonds and Scrip.	491,825	-----	-----	-----	Chattel (Equipment) Mortgage	374,426	-----	-----	
2d Mortgage	445,500	6	-----	-----	Cleveland and Toledo :					Greenville and Columbia :				
Camd. and Amb. R.R. Co.	244,000	6	-----	-----	Junction 1st Mortgage 1st Div.	377,000	1867	-----	-----	1st Mortgage, Coupon	1,145,000	-----	-----	
Black River and Utica :					Junction 1st Mortgage 2d Div.	305,000	1872	-----	-----	Hannibal and St. Joseph :				
1st Mortgage	370,000	7	1869		Junction 2d Mortgage	324,000	1862	-----	-----	Missouri State	3,000,000	6	-----	
Boston, Conc. and Montpel.					Tol. Nor. and Clev. 1st Mort.	522,000	1863	-----	-----	Land	3,509,500	7	-----	
1st Mortgage	200,000	6	1870		Tol. Nor. and Clev. 2d Mort.	299,600	1863	-----	-----	Income (convertible)	310,000	7	-----	
2d Mortgage	300,000	7	1870		Junction Income	61,500	1862	-----	-----	Plain	11,000	7	-----	
3d Mortgage Coupons	150,000	6	1870		C. and T. Income	192,950	1863	-----	-----	Harrisburg and Lancaster :				
4th Mortgage Coupons	200,000	7	-----	-----	C. and T. Income (convertible)	409,900	1864	-----	-----	New Dollar Bonds	459,872	6	1883	
Sinking Fund	200,000	6	-----	-----	C. and T. Income (convertible)	373,000	1864	-----	-----	Hartford and New Haven :				
Boston and Lowell :					C. and T. Dividend (convert.)	199,735	1865	-----	-----	1st Mortgage	1,000,000	-----	-----	
Mortgage	440,000	6	1873		C. and T. Income (convertible)	129,000	1870	-----	-----	Hartf'd, Providence and Fishkill :				
Boston and Worcester :					C. and T. (S. F.) Mortgage	640,000	1885	-----	-----					
Mortgage (plain)	100,000	6	1860		Junction (Lloyd's)	5,000	1862	-----	-----					
Mortgage (convertible)	500,000	6	1860		*Cleveland, Zanesville and Cin. :									
Buffalo and State Line :														
1st Mortgage	500,000	7	1866		*Columbus, Piqua and Indiana :					Houston and Texas Central :				
Income (½ in '59, ½ in '62)	200,000	7	var.		Columbus and Xenia :					State (1st Lien)	210,000	-----	-----	
Unsecured	200,000	7	1864		1st Mortgage	18,000	1859	-----	-----	Mortgage	125,000	7	1866	
Erie and North-East	149,000	7	-----	-----	Dividend (due 1860, '61, '62, '66) ..	272,700	var.	-----	-----	Hudson River :				
Burlington and Missouri :					Connecticut River					1st Mortgage	4,000,000	7	1869	
1st Mort. on 1st Division	590,000	-----	-----	-----	Mortgage (due 1859, 60, '62, '63) ..	210,000	6	var.	-----	2d Mortgage	2,000,000	7	1869	
Burlington Loan	75,000	-----	-----	-----	Connecticut and Passump. Rivers :					3d Mortgage	3,000,000	7	1867	
Camden and Amboy :					1st Mortgage	800,000	-----	-----	-----	Illinois Central :				
Mortgage	267,000	6	1864		Cumberland Valley :					Optional Right Scrip.	65,000	7	1868	
Mort. (chgd from Sterling)	888,000	5	1864		1st Mortgage	116,500	-----	-----	-----	Construction	12,885,000	7	1875	
Mortgage	800,000	6	1849		2d Mortgage	97,000	-----	-----	-----	Construction	4,115,000	6	1875	
Mortgage	1,700,000	6	1875		Dauphin and Susquehanna :					Free Land	3,000,000	7	1860	
Sterling (£210,000)	1,008,000	5	1864							Indiana Central :				
Sterling (£225,000)	1,080,000	6	1864							1st Mortgage (convertible)	600,000	7	1866	
New Loan (as'd \$337,000)	2,500,000	6	1887							2d Mortgage	284,500	10	-----	
Unsecured	800,000	6	1863							Income	281,500	10	-----	
*Catawissa, W'msp. and E. :					Dayton and Michigan :					Indianapolis and Cincinnati :				
1st Mortgage	1,500,000	7	1865		1st Mortgage					1st Mortgage	500,000	7	1866	
2d Mortgage	399,036	7	1886		2d Mortgage					2d Mortgage	400,000	7	-----	
Chattell Mortgage	380,000	10	1871		Dayton and Western :					Real Estate Mortgage	200,000	7	1858	
Cayuga and Susquehanna :					1st Mortgage	300,000	-----	-----	-----	Dividend	86,254	7	-----	
1st Mortgage	300,000	7	1865		2d Mortgage					Income and Domestic	176,000	var.	-----	
Unsecured	89,000	7	1862		Delaware :					Indianap., Pittsb. and Cleveland :				
Central of Georgia :					1st Mortgage	500,000	-----	-----	-----	1st Mortgage	656,000	7	-----	
Mort. (due 1859 to 1863)	158,767	7	var.		Guaranteed	65,000	-----	-----	-----	2d Mortgage	167,000	-----	-----	
Central of New Jersey :					State	170,000	-----	-----	-----	Income	166,000	-----	-----	
1st Mortgage	1,500,000	7	var.		Delaware, Lackawanna and W'n :					Domestic	34,200	-----	-----	
2d Mortgage	1,500,000	7	1875		1st Mortgage	900,000	1871	-----	-----	Jeffersonville :				
Income	375,000	7	var.		1st Mortgage (E. Extension)	1,500,000	1875	-----	-----	1st Mortgage	289,000	-----	-----	
*Central Ohio :					2d Mortgage	2,600,000	1881	-----	-----	2d Mortgage	392,000	-----	-----	
1st Mortgage	450,000	7	1861		2d Mortgage	1,263,170	var.	-----	-----					
1st Mortgage	800,000	7	1864		Income (due 1862, '65 and '67)					*Kennebec and Portland :				
2d Mortgage	800,000	7	1865		Detroit and Milwaukee :					1st Mortgage	230,000	-----	-----	
3d Mortgage	950,000	1885	-----	-----	1st Mortgage (convertible)	2,500,000	7	1875		2d Mortgage				
4th Mortgage (S. F.)	1,339,250	1876	-----	-----	2d Mortgage	1,000,000	8	1866		*Kentucky Centr. (Cov. and Lex.) :				
Income (1858, '59 and '60)	1,238,200	var.	-----	-----	3d Mortgage (convertible)	750,000	10	1863		1st Mortgage	160,000	6	-----	
Income (as. to Musk. Co.	100,000	-----	-----	-----	4th Mortgage (G. W. R. R.)	500,000	8	-----	-----	2d Mortgage	260,000	7	-----	
Charleston and Savannah :					Dubuque and Pacific :					3d Mortgage (convertible)	1,000,000	7	-----	
1st Mortgage (endorsed)	510,000	6	-----	-----	New Construction	500,000	1	-----	-----	Guaranteed by Covington	200,000	6	-----	
2d Mortgage	1,000,000	7	-----	-----	Dubuque Western :					Guaranteed by Cincinnati	100,000	6	-----	
Cheahire :					1st Mortgage	344,000	1	-----	-----	Income	400,000	10	-----	
Mort. (1860, '63, '75 and '77) ..	786,400	7	var.		Eastern (Mass.)					Income	210,000	6	-----	
Chic., Burlington & Quincy :					Income (due \$75,000 annually)	525,000	6	var.	-----	Kent'ky Centr. (Lex. and Danv.) :				
Consolidated 1st Mort.	1,660,000	8	1883		2d Mortgage (convertible)	710,000	5	1862						
Chic. and Aur. 1st Mort.	405,000	7	1867		3d Mortgage (convertible)	445,000	6	1874						
Ch. and Aur. 2d M. (S. F.)	303,000	7	1869		1st M. (State) \$75,000 a yr. after '65	500,000	5	var.	-----					
Cent. Mil. Tr. 1st Mort.	400,000	7	1864		East Tennessee and Georgia :					Keokuk, Ft. D. Moines and Minn. :				
Cent. M. Tr. 2d M. (Conv.)	281,000	8	1868		State, 1st Mortgage	970,000	-----	-----	-----	City of Keokuk, (special tax) ..	150,000	10	-----	
Cent. Mil. Tr. Unsecured	17,000	8	1868		Endorsed by State of Tennessee	150,000	-----	-----	-----	Lee County, 20 years	150,000	8	-----	
Cent. Mil. Tr. Unsecured	62,000	8	1876		Mortgage (ordinary)	790,688	-----	-----	-----	Keokuk, Mt. Pleasant and Muscat.:				
Chic., Alton and St. Louis :					East Tennessee and Virginia :					Lee County	150,000	8	-----	
1st Mortgage		1	-----	-----	State, 1st Lien	1,602,000	-----	-----	-----	City of Keokuk	200,000	8	-----	
2d Mortgage		1	-----	-----	Endorsed by State of Tennessee	200,000	-----	-----	-----	Henry and Louisa Company's ..	50,000	8	-----	
3d Mortgage		1	-----	-----	1st Mortgage (after State)	100,000	-----	-----	-----	Lehigh Valley :				
		1	-----	-----	Redeemable in Stock	66,950	-----	-----	-----	1st Mortgage	1,500,000	6	-----	

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (!) that the company is in default in its interest. "S. F.," Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
La Crosse and Milwaukee:					Montgomery and West Point:					Orange and Alexandria:				
1st Mortgage (Eastern Div.)	\$903,000	†			Alabama State Loan	\$122,622				State Loan	\$400,000			
2d Mortgage (Eastern Div.)	1,000,000	†			Mortgage (due 1860, '63 and '65)	350,000	6	var.		1st Mortgage	612,500	6		
1st Land Grant (Western Div.)	4,000,000	†			Mortgage	450,000	8	1866		2d Mortgage	1,587,500	8		
2d Land Grant (Western Div.)	353,600	†			Muskegon:					Pacific (Mo.)				
3d Mortgage (whole road)	1,700,000	†			1st Mortgage	249,000	7			State (Mo.) Loan	7,000,000	6		
Farm Mortgage	1,087,700	†			Nashville and Chattanooga:					State Loan (S. W. Branch)	1,900,000	6		
Unsecured Bonds	1,785,000	†			Mortgage (State endorsed)	1,500,000				Construction	4,500,000	6		
Lexington and Frankfort:					Chat. and Cleve. Subsc. (endors.)	150,000				Panama:				
Mortgage, due 1864, '69 and '74	130,000	6			Not endorsed	24,000				1st Mortgage Sterling	1750,000		1859	
Little Miami:					*New Albany and Salem:					1st Mortgage Sterling	1,250,000		1865	
Cincinnati Loan	100,000				Crawfordsville	175,000	7			2d Mortgage Sterling	1,000,000		1872	
1st Mortgage	138,000	6			1st Mortgage	500,000	10			Pennsylvania:				
2d Mortgage	7,600	6			New Haven and Hartford:	2,235,000	6			1st Mortgage (convertible)	4,905,000	6	1888	
3d Mortgage	981,000	6			*N. Hav., N. Lond. and Ston'ton:					2d Mortgage	1,028,000	6	1875	
Long Island:					Mortgage	450,000	7			2d Mortgage Sterling	1,539,840	6	1875	
State Loan (S. F.)	100,000	5	1878		Extension	200,000	6			For Canals, etc.	7,400,000	5		
1st Mortgage	500,000	6	1870		New Haven and Northampton:					Pennsylvania Coal Company:				
Louisville and Frankfort:					1st Mortgage	100,000	10			1st Mortgage	600,000	7		
Louisville Loan	174,000				2d Mortgage	500,000		1869		Penobscot and Kennebec:				
1st Mortgage	248,000				New Jersey:					Bangor City 1st Mortgage	800,000	6		
Louisville and Nashville:					Company's (various)	711,000		var.		2d Mortgage	250,200	7		
State (Tenn.) 1st Lien	300,000	6			New London, Willim. and Palmer:					3d Mortgage	156,600	7		
1st Mortgage	2,000,000				1st Mortgage	500,000	7†			Pensacola and Georgia:				
McMinnville and Manchester:					2d Mortgage	300,000	6†			State Internal Improvement		7	35 y's	
State (Tenn.)	372,000	6			Income (convertible)	152,000	6†			Free Land				
Mortgage	24,000	7			New London City	100,000	6†			Peoria and Oquawka:				
Mortgage	10,000	6			N. Ori'n, Jackson and Gt. North:									
Madison and Indianapolis:					State (Miss.) Loan	155,000				Peru and Indianapolis:				
State (Ind.) Loan					1st Mortgage	3,000,000	8	1886						
Mortgage					N. Ori'n, Opelousa and Gt. West:					Petersburg:				
*Marietta and Cincinnati:					Louisiana State Loan	621,000				Mortgage (due 1863 to 1872)	103,000	7	var.	
1st Mortgage [convertible]	2,496,000	7	1868		New Orleans City Loan	1,500,000				Petersburg and Lynchburg (S. Side):				
2d Mortgage	2,000,000				1st Mortgage (S. F. and Land)	2,000,000	7			State (Va.) Loan	800,000	7	S. F.	
3d Mortgage	1,500,000				New York Central:					Mortgage (due 1859 to 1875)	918,000	6	var.	
Sterling Income	333,000				Albany Loan—Alb. and Sch'dy.	127,000	5	1864		Mortgage (due 1861 to 1869)	133,500	8	var.	
Domestic	928,617		'69-'62		State Loan—Sch'dy. and Troy	100,000	6	1867		Phila., Germant'n and Norrist'n:				
Memphis and Charleston:					State Loan—Rochester and Syr.	77,852	5†			Consolidated Loan	274,800			
State (Tenn.)	1,100,000	6			State Loan—Buffalo and Roch.	65,300	5†	1865		Loan of 1842	100,000			
1st Mortgage	1,600,000	7	1880		State Loan—Roch., L. and N. F.	298,000	7	1861		Philadelphia and Reading:				
Memphis, Clarkesv. and Louisv.:					Stock Subscription	785,000	6	1883		Mortgage	705,000	5	1860	
State (Tenn.)	910,000	6			Premium Consolidated Stock	8,000,000	6	1883		Mortgage	1,572,800	6	1860	
Memphis and Ohio:					Real Estate	221,000	6	1883		Mortgage (convertible)	886,000	6	1860	
State (Tenn.)	1,340,000	6			New Convertible	3,000,000	7	1864		Mortgage (convertible)	154,000	6	1860	
Michigan Central:					1st Mortgage	3,000,000	7	1867		Mortgage (convertible)	85,000	6	1860	
1st Mortgage Sterling	467,480	6			2d Mortgage	2,000,000	7	1869		Mortgage (convertible)	3,200,000	6	1870	
1st Mortgage (convertible)	500,000	8			3d Mortgage	6,000,000	7	1871		Mortgage (convertible)	3,586,500	6	1886	
Unconvertible	258,000	8			4th Mortgage (convertible)	3,715,000	7	1880		Lebanon Valley R. R. (convert.)	1,500,000	7	1886	
1st Mortgage (convert.) Dollar	3,831,600	8			5th Mortgage	1,253,500	7	1889		Real Estate Mortgage	516,450		var.	
1st Mortgage (S. F.), convertible	3,087,000	8			Unsecured (convertible)	3,423,000	7	1871		Phila., Wilmington and Baltimore:				
Mich. Southern and N'n Indiana:					Unsecured (convertible)	3,001,000	7	1862		Mortgage Loan	688,920	6	1860	
Michigan Southern	993,000	7†	1867		Sinking Fund	3,925,500	7	1875		Mortgage Loan	1,696,500	6	1884	
Northern Indiana	985,000	7†	1861		New York and Harlem:					Improvement	119,000	6	1893	
Erie and Kalamazoo	300,000	†	1862		1st Mortgage	3,000,000	7	1873		Pittsburg and Connellsville:				
Michigan Southern	259,000	†	1863		2d Mortgage	1,000,000	7	1864		Pittsburg Loan	500,000			
Northern Indiana	209,000	†	1863		3d Mortgage	1,000,000	7	1867		Alleghany Co. Loan	750,000			
Jackson Branch	208,000	†	1865		New York and New Haven:					Connellsville Loan	100,000			
Goshen Air Line	1,335,000	†	1868		1st Mortgage	311,000	7	1860		McKeesport Loan	100,000			
Detroit and Toledo	336,000	†	1876		1st Mortgage	965,000	6	1866		Baltimore Loan	1,000,000			
General Mortgage (S. F.)	2,458,000	†	1885		1st Mortgage	929,000	6	1875		Cumberland Loan	200,000			
2d Mortgage	2,175,000	†	1877		N. York, Providence and Boston:					Real Estate	100,000			
*Milwaukee and Beloit:					1st Mortgage	331,000	6			Pittsburg, Ft Wayne and Chicago:				
1st Mortgage	630,000	8			North Carolina:					1st Mortgage (O. and P.)	1,000,000		1865	
Milwaukee and Chicago:					State Loan	2,000,000	6			2d Mortgage (O. and P.)	750,000		1863	
1st Mortgage	400,000	8			State Loan	1,000,000	6			Income (O. and P.)	1,991,000		1873	
2d Mortgage	200,000	7			North-Eastern (S. C.):					Bridge (O. and P.)	199,500		1873	
*Milwaukee and Horicon:					1st Mortgage	700,000				1st Mortgage (O. and I.)	1,000,000		1872	
1st Mortgage	420,000	8			2d Mortgage	224,500				2d Mortgage (O. and L.)	350,000		1873	
2d Mortgage	600,000	8			Real Estate	35,910				1st Mortgage (F. W. and Chic.)	2,250,000		1873	
Farm Mortgage	150,000	10			Northern Central:					Real Estate (F. W. and Chic.)	498,000		1874	
Milwaukee and Mississippi:					Balt. and Susq. R. R. (Coupons)	150,000	6	1866		Mortgage, Consolidated Comp'y	1,097,000		1887	
1st Mortgage (convertible)	74,000	10†	1861		Md. State Loan (B. and Susq.)	150,000	6			Pittsburg and Stenbenville:				
1st Mortgage (convertible)	520,000	8†	1862		York and Cumberland 1st Mort.	175,000	6	1870		Mortgage	800,000	†	1865	
1st Mortgage (convertible)	650,000	8†	1863		York and Cumberland 2d Mort.	25,000	6	1871		Potsdam and Watertown:				
1st Mortgage (convertible)	1,250,000	8†	1877		York and C. guar. by Baltimore	500,000	6	1877		1st Mortgage	800,000	7†	'64-'74	
South-West Branch	350,000	8†	1866		N. C. Contract	292,300	6	1875		Quincy and Chicago:				
2d Mortgage	600,000	10†	1862		Construction	1,908,500	6	1885		1st Mortgage	1,200,000		1873	
Construction	500,000	7†	1859		Northern (Ogdensburg):					Racine and Mississippi:				
3d Mortgage	500,000	8†	1862		1st Mortgage	1,500,000	7†	1859		1st Mortgage (Eastern Division)	680,000	†		
Mississippi Central:					2d Mortgage	3,077,000	7†	1861		1st Mortgage (West'n Division)	757,000	†	var.	
1st Mortgage	1,007,363	7			North Missouri:					Coupon	100,000		1862	
Income	91,200	10			State Loan	2,000,000				Rensselaer and Saratoga:				
Tennessee State	45,000	6			State Loan	2,000,000				1st Mortgage		7	1863	
Mississippi Central and Tenn.:					State Loan	1,500,000				Richmond and Danville:				
State (Tenn.)	529,000	6			North Pennsylvania:					State (Va.) Loan	600,000			
Income	95,500				Mortgage	2,500,000				Guaranteed by State	200,000		1875	
Mississippi and Missouri:					Chattel Mortgage	214,500	10			Mortgage (Coupons)	250,000		1859	
1st Mortgage (convertible)	1,000,000	7			Northern (N. H.):					Registered	150,000		1860	
2d Mortgage (S. F.)	400,000	8			Mortgage (due 1860, '64 and '74)	219,500		var.		Richmond, Fred. and Potomac:				
Oskaloosa Division	1,425,000	7			Norwich and Worcester:					Sterling (£67,000)	324,000		1860	
Land Grant	7,000,000	7			Mass. State Loan	400,000	6	1877		Convertible	54,500		1875	
Mississippi and Tennessee:					Mortgage	205,800	6	1860		Dividend Certificates	35,800		1857	
Tennessee State	98,000	6	1885		Dividend Scrip and Bonds	16,000	7	1860		Dividend Certificates	265,800		1869	
Mississippi State	202,796	6			Ohio and Mississippi (O. and Ind.):					Richmond and Petersburg:				
1st Mortgage	171,000	7	1876		1st Mortgage	2,198,500	†	1858		Coupon	150,000		1875	
City and Ohio:					2d Mortgage	316,995	†	1858		*Rutland and Burlington:				
City (Mobile) Tax	400,000	6			Construction	4,637,920	†	1858		1st Mortgage	1,800,000			
Tennessee State Loan	674,860	6			Income	3,591,185	†	1863		2d Mortgage	913,500			
Alabama State Loan	389,410	6			Ohio and Mississippi (Ill.):					3d Mortgage	426,400			
Income	759,415	8	1861		1st Mortgage					Sacramento Valley:				
Income	354,728	8	1862		2d Mortgage					1st Mortgage	400,000			
Income	375,132	8	1865		Construction					2d Mortgage	356,000			
Income	18,700	8	1867		Income									
Sterling	878,035	6	1883											
Mississippi State	200,970	6												

AMERICAN RAILROAD BOND LIST.

For explanations see preceding pages.

Description.	Amount.	Interest.	Due.	Price.
Sandusky, Dayton and Cincinnati:				
Mortgage	182,000	10	1856	---
Mortgage	997,000	7	1866	---
Mortgage	1,000,000	7	1875	---
Dividend	224,000	6	'60-'62	---
Sandusky, Mansfield and Newark:				
1st Mortgage	1,200,000	1	---	---
Saratoga and Whitehall:				
1st Mortgage	250,000	7 1/2	1858	---
1st Mortgage (R. and W. Br.)	100,000	7 1/2	1856	---
Unsecured	45,000	7 1/2	1858	---
Seaboard and Roanoke:				
1st Mortgage	300,000	---	1860	---
3d Mortgage	75,000	---	1870	---
4th Mortgage	60,000	---	1856	---
South Carolina:				
State Loan	200,000	5	1868	---
Sterling	153,333	6	1863	---
Sterling	2,000,000	5	1866	---
Auditor's	246,500	7	---	---
Southern Mississippi:				
1st Mortgage	500,000	---	---	---
South-Western (Ga.):				
1st Mortgage	631,000	---	1875	---
*Springfield, Mt. Vern. and Pittsb.:				
1st Mortgage	500,000	---	---	---
2d Mortgage	450,000	---	---	---
*Steuernv. and Ind. (P. C. and C.):				
1st Mortgage	1,500,000	---	---	---
2d Mortgage	900,000	---	---	---
St. Louis, Alton and Chicago:				
1st Mortgage	2,000,000	7 1/2	---	---
2d Mortgage	1,535,000	7 1/2	---	---
3d Mortgage (Income)	1,000,000	10 1/2	---	---
St. Louis and Iron Mountain:				
State (Mo.) Aid	3,600,000	---	---	---
St. Louis City Subscription	500,000	---	---	---
St. Louis County Subscription	1,000,000	---	---	---
Carondelet Subscription	60,000	---	---	---
Sunbury and Erie:				
Mortgage	1,000,000	7	---	---
Mortgage	7,000,000	5	---	---
Syracuse, Binghamton and N. Y.:				
Terre Haute, Alton and St. Louis:				
1st Mortgage (convertible)	1,000,000	7 1/2	'62-'72	---
2d Mortgage (convertible)	2,000,000	7 1/2	'68-'70	---
1st Mortgage (Bel. and Ill.)	517,000	7 1/2	1873	---
2d Mortgage (Bel. and Ill.)	494,000	7 1/2	1869	---
3d Mortgage (Bel. and Ill.)	503,000	10 1/2	1874	---
Tennessee and Alabama:				
State (Tenn.) Loan	814,000	---	---	---
Mortgage	46,000	---	---	---
Terre Haute and Richmond:				
1st Mortgage (convertible)	235,000	7	---	---
Toledo, Wabash and Western:				
1st M. (L. Er., Wab. and St. Louis)	2,500,000	7 1/2	1865	---
2d M. (L. Er., Wab. and St. Louis)	1,200,000	7 1/2	1869	---
3d M. (L. Er., Wab. and St. Louis)	1,200,000	7 1/2	1891	---
Real Estate (L. Er., W. and St. L.)	300,000	7 1/2	1861	---
1st Mortgage (Toledo and Ill.)	900,000	7 1/2	1865	---
2d Mortgage (Toledo and Ill.)	800,000	7 1/2	1865	---
3d Mortgage (Toledo and Ill.)	600,000	7 1/2	1865	---
*Vermont Central:				
1st Mortgage	---	---	---	---
2d Mortgage	---	---	---	---
Virginia Central:				
State (Va.) Subscription	1,869,595	---	---	---
Mort., guarantied by State of Va.	100,000	---	1880	---
Mortgage	206,000	---	1872	---
Mortgage (coupons)	941,000	---	1884	---
Dividend, due 1865, '66 and '75	246,866	var.	---	---
Income (1859 to 1863)	161,859	var.	---	---
Virginia and Tennessee:				
State (Va.) Loan	1,000,000	---	34 y's	---
1st Mortgage	500,000	---	1872	---
2d Mortgage	23,500	---	1878	---
Enlarged	1,000,000	---	1884	---
Salt Works Branch, due '68-'61	203,000	var.	---	---
Mortgage (Income)	431,000	---	1865	---
Warren (N. J.):				
1st Mortgage	568,500	---	1875	---
Watertown and Rome:				
Mortgage (due by instalments)	688,500	7	var.	---
Western (Mass.):				
Sterling (£899,900)	4,319,520	5	'68-'71	---
Albany City (Alb'y and W. S.)	1,000,000	6	'66-'76	---
*Western Vermont:				
1st Mortgage	700,000	---	1861	---
Williamsport and Elmira:				
1st Mortgage	1,000,000	1	---	---
2d Mortgage	700,000	1	---	---
Chattel Mortgage	495,000	1	---	---
Wilmington and Manchester:				
1st Mortgage	506,000	---	---	---
2d Mortgage	1,000,000	---	---	---
Income	177,000	---	---	---
Wilmington and Weldon:				
Mortgage, payable in England	222,667	---	---	---
Sterling, issued in 1858	144,500	---	---	---
Company's, endorsed by State	203,500	---	---	---
Winchester and Potomac:				
Mortgage	120,000	6	1867	---
York and Cumberland:				
1st Mortgage	398,000	1	---	---

Journal of Railroad Law.

LIABILITY OF CARRIERS TO CONSIGNEES.

It is both a convenient and common way of doing business, for owners of merchandise in various parts of our country to send their goods to eastern markets, and receive, at the time of sending, advance upon them; the consignee looking to the value of the goods to receive back again the money he has advanced. Thus wherever there is a demand for them, goods are brought to a market, and the community supplied with the necessities of life, which otherwise would often remain in the hands of the owner from his inability to pay the necessary freight upon them.

The case of *Adams vs. Bissell* determines the limits and extent of the rights of a consignee who has thus made advances on goods, as against the carrier to whom they are entrusted to be forwarded.

The plaintiffs in that case were commission merchants in the City of New York and received on assignment from one H. B. Smith, of Buffalo, three thousand bushels of wheat. The bill of lading was sent to the plaintiffs, and at the same time the plaintiffs made considerable advances to Smith in money, intending upon the receipt of the goods to sell them, and from the proceeds to reimburse themselves. But upon the arrival of the wheat in New York, it was found to be deficient in quantity to the amount of three hundred and forty bushels. Before however this was known, the consignees had paid the freight upon the whole amount, making an overpayment of one hundred and seventy dollars. For the value of the goods found to be deficient, and the amount thus overpaid, the consignees brought suit against the defendants who were common carriers.

The defendants demurred to the complaint, but the demurrer was overruled at Special Term. It was then carried to the General Term of the Supreme Court, and the decision of the Special Term sustained. The opinion of the General Term was as follows:

SUTHERLAND, J.—This is an appeal from an order made at the Special Term, overruling the defendant's demurrer to the plaintiffs' complaint.

The complaint purports to state two causes of action separately. After alleging that the defendants, in November, 1855, were co-partners, doing business as common carriers on the Erie canal and Hudson river, under the firm name of John Bissell & Co., the complaint substantially alleges as the first cause of action, that the defendants' received from one F. W. Patterson, at Buffalo, three thousand bushels of wheat, to be conveyed by them to the city of New York, for account of one H. B. Smith, to the care of the plaintiffs, under the firm name of Adams & Buckinghams, and that the defendants on receiving the wheat made and delivered a bill of lading therefor to Patterson, whereby they certified and acknowledged that they had received that quantity of wheat to be delivered in the city of New York, for account of the said H. B. Smith, to the care of the plaintiffs; that the plaintiffs were commission merchants, doing business in the City of New York, and that the wheat was consigned to them for sale; that about the first day of December, 1855, the plaintiffs as such consignees were the owners and holders of the bill of lading, and at or about that time made large advances on the wheat; that

the canal boat upon which the wheat was shipped arrived in the city of New York on or about the 20th of May, 1856, and so much of the wheat as she then had on board was discharged; that the wheat proved to be deficient in quantity to the extent of over three hundred and forty bushels, and that the plaintiffs are informed and believe that the defendants, their agents or servants, lost, wasted, or wrongfully converted to their own use, the three hundred and forty bushels and over of the wheat; that the defendants have never paid or accounted for the three hundred and forty bushels of wheat, although often requested so to do; that at the time of the loss, wasting, or conversion of the wheat, the plaintiffs were the owners of the same, and entitled to the possession of the same, and have ever since been entitled to the value of the same, and that the value was \$680.

The complaint alleges as the second cause of action, that when the canal boat arrived at New York, the plaintiffs, not knowing the extent of the deficiency in quantity of the wheat, paid the freight and charge upon the whole 3,000 bushels, to the defendants, thereby overpaying them to the amount of \$170.

The plaintiffs claim to recover the value of the 340 bushels of wheat, and damages for the conversion of the same, and the amount of the overpayment on account of freight, with interest on the same.

The defendants formally state three causes of demurrer to this complaint; but they appear to amount only to these two: *First*, that the facts stated as constituting the first supposed cause of action, do not constitute one; *Second*, that a cause of action for test is improperly joined with a cause of action arising on contract.

The demurrer appears to concede that sufficient facts are stated to constitute the second cause of action. The demurrer, on the ground of insufficiency, appears to be taken only to the first cause of action.

It is probable the plaintiffs could not have maintained an action on the bill of lading as a contract, for the non-delivery of the 340 bushels of wheat; for the contract was not made with them; and the mere possession of the bill of lading as consignees, would not have enabled them to bring an action on it as assignees. And this is not the theory of the plaintiffs' complaint. The shipment of the wheat, the execution and delivery of the bill of lading, and the advance made by the plaintiffs on it as consignees, are alleged, to show that the plaintiffs were the owners of the 340 bushels of wheat when it was lost, wasted, or wrongfully converted to their own use, by the defendants. The first cause of action is for a test, a wrongful conversion, and the facts as to the shipment of the wheat to the plaintiffs, their possession of the bill of lading, and their advance on it are alleged to show that the plaintiffs had such a vested interest in the wheat at the time of the wrongful conversion, that as owners they were entitled to bring the action for the wrongful conversion, and recover the value of the 340 bushels of wheat, with damages, &c.

The charge of the wrongful act, the loss, waste, &c., is certainly very indefinitely made, but that is not reached by the defendant's demurrer. It would have been better for the plaintiffs to have stated the amount advanced by them as consign-

ees; but indefinite as the complaint is in this and in some other respects, I think the facts alleged are sufficient to show that the *plaintiffs as consignees and holders of the bill of lading, who had made large advances on it, had an interest or property in the wheat at the time of its loss, waste or wrongful conversion, that gave them a right to bring the action.* The authorities appear to be quite clear and conclusive.

When there is an agreement between the consignor and consignee, that the consignee shall make advances on the credit of the goods consigned, and dispose of them on commission for his reimbursement, the consignee acquires a vested interest in the goods. It would appear that such an agreement might be inferred between the consignor and consignee, from the facts stated in the complaint in this case. I think, therefore, the first ground of demurrer—that of insufficiency—was not well taken. The second ground of demurrer—that there is a misjoinder of actions—presents more difficulties. It must be admitted that the first cause of action is for a test, and that the second on an implied assumpsit, to pay back money paid by the plaintiffs, under a mistake of facts. But the counsel for the plaintiffs insists that both causes of action arise out of the same subject of action, namely: the transportation of the wheat from Buffalo to New York, or arise out of transactions connected with that subject of the actions, and are therefore joined under the 1st subdivision of § 167 of the Code.

Cases throw but little light on the unmeaning generality of the 1st subdivision of this section of the code, which is that the plaintiff may invite several causes of action, legal or equitable, or both, where they all arise out of "the same transaction, or transactions, connected with the same subject of the action." Now I do not think the transportation of the wheat to New York is the subject of the plaintiff's action. The plaintiffs have two causes of action; the subject of the first would appear to be the loss, waste, or wrongful conversion of the 340 bushels of wheat by the defendants, their wrongful neglect or act by which the plaintiffs lost their property; the subject of the second cause for action would appear to be the \$170 of the plaintiff's money which the plaintiff's overpaid the defendants, on account of freight, and which the defendants ought to have paid back to the plaintiffs. But have both these causes of action, or subjects of action, arisen out of the same transaction; or are they both connected with the same transaction, within the meaning of this provision of the code? I do not want to nullify the code, and I have no right to nullify it; and this provision has, or was intended to have, some meaning. Why then should I not say that the transaction in this case, out of which has arisen the plaintiff's two causes of action and subjects of action commenced with the shipment of the wheat at Buffalo, and has not ended yet, even by the commencement of this action; the plaintiff's two causes of action being links of the chain of facts constituting the transaction, and thus arising out of, or connected with, the same transaction. By the "subject of action," in this section of the code, must be intended not the subjects of the different courts, or of the several causes of action, but of the action as a unit. To say that by the "subject of action" is meant the several causes of action, nullifies this

provision of the code. To give force and effect to it, it appears to me you must say that it means that the plaintiff can unite several causes of action against the same party, arising out of the same transaction, and nothing more; and you must treat the concluding words, "or transactions connected with the subject of the action," as useless and meaningless surplusage.

Upon the whole I have come to the conclusion that the plaintiffs had a right to unite the two causes of action in this complaint; but I have done so knowing that no reasoning on this point can have much logical precision, or lead to a satisfactory result.

The judgment of the special term, overruling the demurrer, should be affirmed with costs.

Wilmington and Weldon Railroad.

The earnings of this road for the fiscal year ending September 30, 1859, were:

From through passengers	\$144,630 75
" way	109,795 37
" freights	161,666 72
" mails	48,000 00
" miscellaneous sources	12,861 91
	<hr/>
	\$477,554 75

And the expenditures were:

Repairs of track	\$55,867 06
" bridges, etc.	4,692 03
" locomotives	28,018 81
" cars	20,513 75
Train expenses	32,112 84
Fuel	15,137 20
Oil, tallow and waste	4,003 56
Station expenses	28,162 72
Salaries	8,500 01
General expenses	25,933 09
New equipment	3,990 15
	<hr/>
	\$226,931 22
Add for permanent improvements	15,422 53
	<hr/>
	242,353 75

Net earnings

.....	\$235,201 00
Compared with the previous year, the gross receipts show an increase of	\$30,971 45
With a decrease in expenses of	6,164 62

Making an increase in net receipts of

It will be observed that the operating expenses proper are but \$226,931 22. This includes about \$8,000 paid on account of operating expenses of previous year, while there is scarcely half that sum now outstanding on account of the operations of the past year. Deducting the difference, will reduce the year's actual expenses to \$22,931 22. The operating expenses proper are about 47¼ per cent. of the gross receipts. These facts are referred to for the purpose of showing the gradual but steady reduction in the working expenses consequent upon the improvement in the machinery and track. The reduction of the trestle work to less than one mile, the improvement of the repair shops, and the increased efficiency given to the motive power, have contributed largely to this result.

There have been placed in the track the past year 300 tons of new rails of the best quality of American iron, which have been laid down with the Phoenix rolled chair: 100 tons of the old rails have also been supplied with the same chair. The track is in good order for winter.

The total mileage made by all the trains was 323,069. No serious accident happened to any

train. Only 13 failures to connect regularly at either end occurred. The number of through passengers carried was 27,964; a decrease of 740. The number of way passengers was 68,498; an increase of 9,186. The increase in receipts from the former was \$7,773 14; and from the latter, \$13,265 62. This is the largest amount ever received from way travel in any one year. The increased receipts from freight were \$3,834 25.

The net profits the past year have been about 18 per cent. on the capital stock, of which four per cent. has been absorbed in the regular contribution to the sinking fund; 5 per cent. to the payment of interest, including premium and exchange; and 8 per cent. in dividends to the stockholders—leaving a small balance on hand.

INCOME ACCOUNT

for the year ending September 30th, 1859.

Received from transportation of passengers, freight, mail, etc., for 12 months to date	\$477,554 75
Received from other sources	194,176 53
	<hr/>
	\$671,731 33

Cr.

Paid current expenses of road this y'r, \$242,353 75

Decreased debt of company " " 127,733 73

Interest and premium on exchange

paid this year

Dividends No. 14 and 15

Amount paid for bonds of the State

of North Carolina, purchased

Loss on State bonds, sold

Balance sundry accounts carried to

profit and loss, by order

Company's proportion, cost 2d street

bridge, paid

Cash balances

Cash to pay interest

Cash in bank to purchase bonds

Cash on hand

GENERAL STATEMENT. Cr.

Am't received from capital stock

Mortgage bonds, payable in England,

Sterling bonds issued in 1858

Bonds endorsed by State of North

Carolina

Other items

Profit and loss account

Construction

Cost of 12 negro slaves

Amount paid for bonds

State of North Carolina

—par value \$20,000

Stock of the Wilmington

& Manchester R. R. Co. 100,000 00

Stock of the Wilm. and

Weldon R. R. Co. (pur-

chased)

Stock of the Washington

and New Orleans Tele-

graph Co.

Cash balance

Counterfeit and uncurrent money on

hand

Cash to pay interest

Cash in Bank to purchase State b'ds

Cash on hand

The officers are:—

Hon. WM. S. ASHE, President.

JAMES S. GREEN, Secretary and Treasurer.

S. L. FREMONT, Chief Engineer and Sup't.

South Side Railroad.

The 10th annual report of this company gives the following statement of the operations of the road for the fiscal year ending September 30, 1859:

RECEIPTS.			
From	Main Stem.	City Point Branch.	Total.
Passengers...	\$174,930 07	\$1,086 75	\$179,016 82
Freights...	177,329 86	33,820 20	211,150 06
Mails.....	19,400 00	600 00	20,000 00
	\$371,659 93	\$38,506 95	\$410,166 88
EXPENSES.			
Conduct'g transportation.	\$139,451 17		
Maintenance of way.....	39,793 92		
General management.....	32,107 01		
	\$211,352 10		
Less stock on hand.....	2,529 58		
			208,022 51

Making the net earnings.....\$201,344 36
—showing a gain of 18½ per cent. upon the net earnings of the previous year; and of 28½ per cent. upon those of 1856 7.

The above net earnings are about 6 per cent. on the cost of the road; and, after deducting interest, and 1 per cent. Sinking Fund on \$800,000 due the State, leaves a balance of \$74,700, or 5½ per cent. on the capital stock. Allowing \$50,000 as an annual depreciation fund, and deducting 51 per cent. for operating expenses, etc., would still leave a sum equal to 4½ per cent. upon its cost. Had the road been built by a subscription of stock sufficient for its completion, the stockholders would have been in the receipt of a dividend; but the finances of the company have been constantly embarrassed by the large and disproportionate amount of debt contracted in construction; and its whole net receipts have been exhausted in the payment of interest, and finishing and furnishing the road.

It will be seen by the annexed balance-sheet, that the capital subscribed and actually paid in is only \$1,365,300; the whole of the balance of the cost is debt, upon which an annual interest of \$126,600 has to be provided. This debt is now rapidly maturing, and the whole revenues of the company are necessary to meet it. It is believed that they will be sufficient for that purpose. Provision was made for the payment of \$37,000 of the Dunlop bonds, which fell due in July last; leaving still \$35,000, upon which a temporary extension was granted. The interest and sinking fund upon the amount due the State has been promptly met.

A comparison of the different items that make up the transportation, with those of the previous year, shows that the receipts from passengers increased \$41,521 57, and the mail pay \$5,028 71; while the freight receipts fell off \$11,680 90—the net increase being \$34,869 38. Of the above falling off in freights, \$4,175 32 was in the business of the City Point branch alone; there was also a falling off in the receipts from passengers on that branch of \$1,404 13—making the total loss on it \$5,575 45. This loss of receipts from freight on the branch, was caused exclusively by the success of the enterprise of deepening the Appomattox river. Since 8 feet water has been secured in the channel, a large proportion of the business previously done over the road has been transferred to the river, and is taken in vessels to the Petersburg wharves. This may in time reduce the receipts of the branch below the cost of maintaining it.

Whether the company will be reimbursed for this loss by the increased business which the improvement of the river will necessarily throw upon the Main Stem, is a question which time alone can determine.

The number of tons transported over the road exceeded those of the previous year by about 25 per cent. The diminution in receipts was caused by a reduction in the rates of transportation, amounting to from 25 to 30 per cent. This, together with the low price of wheat, which caused the withholding of it from market, will more than account for the diminution in the freight receipts; while the smallness of the loss, shows that there must have been a large increase in the other tonnage. A table of comparative receipts from transportation, given by the Treasurer, demonstrates this. It shows an increase of over \$20,000 in the freight receipts of several of the depots—\$8,020 69 of which was at Lynchburg alone, where the reduction of the rates of transportation was the greatest. The whole increase of the tonnage was in fact over 12,000 tons.

CONDENSED BALANCE-SHEET.

	Dr.	
Capital stock.....	\$1,365,300 00	
COUPON BONDS.		
<i>First mortgage, 6 per cent.—</i>		
Payable January 1, 1870....	\$150,000	
" January 1, 1875 ..	150,000	
" July 1, 1859.....	65,000	
	365,000 00	
<i>Third mort., 6 per cent.—</i>		
Payable January 1, 1862....	\$78,000	
" January 1, 1872....	100,000	
" January 1, 1870....	200,000	
	378,000 00	
<i>Special mortgage, 6 per cent.—</i>		
Payable January 1, 1865....	\$87,500	
" January 1, 1868....	87,500	
	175,000 00	
<i>Last mortgage, 8 per cent.—</i>		
Payable January 1, 1861....	\$68,000	
" January 1, 1863....	28,000	
" January 1, 1866....	13,500	
" January 1, 1867....	6,000	
" January 1, 1869....	18,000	
	133,500 00	
Loan made by State of Virginia....	800,000 00	
Transportation earnings.....	1,224,450 20	
Rent of company's property.....	6 166 65	
Miscellaneous receipts.....	4,997 73	
Bills payable	\$63,692 16	
Hiring b'ds, mat'g 1860.	28,460 18	
Accumulated Interest....	180,500 00	
Open accounts	18,102 61	
Due connecting roads....	974 56	
Suspended debt	1,112 64	
	292,842 15	
	\$4,745,256 73	
Cr.		
Construction	\$3,040,636 80	
Equipment of road to Oct. 1st, 1859.	374,996 18	
Maintenance of way	210,809 95	
General management	185,752 43	
Discount for lost and damaged, etc..	169,095 75	
Interest account	646,808 06	
Real estate	8,000 00	
Cash balances.....	\$47,687 84	
Bills receivable maturing now on hand.....	22,322 00	
Cash in banks of City and Treasurer's hands.....	39,147 72	
	109,157 56	
	\$4,745,256 73	

The officers are:

THOMAS H. CAMPBELL, *President.*

JAMES E. CUTBERT, *Treasurer.*

H. D. BIRD, *Engineer and Gen'l Supt.*

Crescent Iron Works.

The *Wheeling Gazette*, of 17th ult., gives the following statement in relation to the origin, progress, etc., of the Crescent Mill, together with the operations and prospects of its present owners:

The Crescent Rail Mill, situated on the south bank of Wheeling Creek, about one-fourth of a mile from its mouth, is one of the leading establishments in the country for the manufacture of Railroad Iron. It was built in 1852 by Messrs. Gill, Hardman & Stephens, and continued in their possession until 1855, when it was bought by the Crescent Iron Manufacturing Co., to whom it now belongs.

The principal building of the mill is 400 feet long by 100 wide; has 30 boiling furnaces; 14 heating furnaces; 3 trains of muck-rolls; 2 Burden's patent coffee mill squeezers; one train of sheet rolls, and complete sets of rail rolls, with all the necessary fixtures for manufacturing railway iron to the amount of 15,000 tons per annum. Its location is one of the best that could be selected, being at the base of a hill rich in coal and other minerals. The mouth of the coal mine is connected by railway with the mill, and the coal is furnished to the furnaces at a very small cost; when in full operation about 2,600 bushels of coal are consumed daily, and employment is given to between 300 and 400 hands.

Previous to the 1st of January last, the mill had not been in operation for some time. At that date it was leased by C. D. Hubbard & Co., and has since continued in successful operation. Among other contracts they have made between 5,000 and 6,000 tons of tubular rails for the Louisville and Nashville Railroad, and 1,600 tons of street rails for the St. Louis Street Railway Co. A short time since a contract was made with the Toxica and Petersburg Railroad Co., for 2,000 tons tubular rails, 45 lbs. per yard, upon which contract the mill is now working. This tubular rail is one newly introduced, and is patented by M. E. W. Stephens, Superintendent of the works, and R. Jenkins, Covington, Ky. We saw the process of working it a few days since, and think, from the manner of its being rolled, that it is superior to the solid T rail, now generally in use—for these reasons: The solid rail—T pattern—is rolled on its side, the chief pressure being upon the next or web of the rail, and the head receiving little or none, while the tubular T rail is rolled upon its head with the tongue of the upper roll working inside of the iron, thereby giving a uniform density throughout, which will prevent it from lamenating—a defect to common with rails of the solid pattern.

Subjoined we give a test of the comparative elasticity of the solid T rail, 45 lbs. to the yard, in weight, and the tubular, with some exterior dimensions.

Two bars of thirty feet long—of solid T rail, 45 lbs. to the yard—were laid upon bearings 20 feet apart and loaded with rails in the centre—under a load of 4,500 lbs. they sank 4½ inches, and upon removal of the load returned towards a horizontal line 2¾ inches, showing a permanent deflection of 1¾ inches.

Two tubular rails of same exterior dimensions and same length, were placed upon the same bearings. Under a load of 4,500 lbs., they sank 53-16 inches, and upon removal of the load regained 45-16 inches, showing a permanent deflection of 7/16 of an inch. Result, 1¾—3/8—1 inch in favor of the tubular. We understand that this form of rail is becoming very popular throughout the country.

Alexandria, Loudon and Hampshire R. R.

The Directors of the road have determined that the road shall be formally opened as soon as the rails reach Farmwell, a point immediately opposite Belmont, two miles from the turnpike and five from Leesburg. The track-laying has nearly reached Broad Run, 28 miles from the Alexandria depot, and the necessary rails for completing the track to the Gap are upon the company's grounds in Alexandria. A few thousand cross-ties only

are wanting for the track to Leesburg, 36 miles, which important town, it is hoped and expected, will be reached by January next. The Board expects soon to have in active use that portion of the road which extends from Alexandria to Broad Run.

American Railroad Journal.

Saturday, December 3, 1859.

SHARE AND BOND LIST.

We give this week a full and corrected *Share and Bond List* of the Railroads of the United States—by far the most perfect and complete one ever published. It embraces about 375 different roads, and states their condition and operations in such detail as will enable our readers to form a pretty correct idea of their financial positions, and the value of their securities. We have already made a large number of corrections. A few weeks more, when we receive the report of the railroads of New York and Massachusetts, will enable us to give their operations for the current fiscal year, which, with the former, terminates Sept. 30th, and with the latter, 30th of Nov. We solicit from all Railroad Companies a careful examination and criticism of our Tables. For the purpose of obtaining such information as will enable us to complete them, one of the publishers of the JOURNAL proposes making a trip to the South and West during the ensuing winter, to visit the offices of the various companies, and to go over such portions of their roads, as time, etc., will permit.

Pittsburg, Fort Wayne and Chicago R. R.

We publish in another column the plan submitted by the President of this company to relieve it of embarrassment. It contemplates a very radical change in the form of the securities of the road. We may estimate the value of the plan proposed by seeing how it would work when applied to a new scheme. Would it not be far better than our present unmethodical manner of proceeding?—of issuing a dozen different kinds of securities upon the same road, and to an amount so large, that the interest cannot be regularly paid on some of them, whereby discredit is thrown upon all. The failure to pay on an inferior security often leads to a failure to pay on a superior. The credit of a company being once dishonored, no additional stigma results from default on more important matters.

Now a failure to pay an accustomed dividend on a *preferred* stock would not necessarily embarrass or injure the credit of a company. It has done all it could, and all it agreed to do. The only uncomfortable result would be a fall in the price of shares. But the efficient action of the company would be in no degree impaired.

We now see clearly that the bonds issued by most of our railroad companies cannot be paid. In other words, a railroad, like a bank, can never return its capital in its original form to its owners, by being wound up. Such being the case, (as its existence must be perpetual,) should not the capital invested in it be a *perpetual* investment. The stock is capital so invested. We think that a portion of its indebtedness should be invested in the same manner. The company would thus be relieved of all anxiety about making provision for it at some future day. The very fact that it constituted a perpetual lien on the road, would cause it

to be the more sought after than *terminable* securities. It is always expensive and hazardous to *re-invest* funds. If we had in this country a class of securities unredeemable, we have no doubt that they would have a higher market value from this fact alone.

The plan proposed does not alter the relations of the different parties interested in the road. It secures to them all the road can earn. At the same time it promises to cure for all time the chronic tendency which all our roads manifest, to get into hot water every few years. On that account it is certainly well worthy of consideration, and, we believe, of adoption.

New York and Erie Railroad.

This company have found means for the completion of the Long Dock without devoting thereto the revenues of the company. The amount set apart for the purpose, in the recent plan of settlement of the company's affairs, will be applied toward the payment of interest on the first and second mortgage bonds. The interest on the first is already advertised to be paid. This result will give the company sensible relief, and has already had the effect to advance largely the market value of its shares and securities.

We hear little of the plan proposed by the committee of English Bondholders—we presume it is already abandoned. There appears to us to be only one course to be pursued—to let the present relations of bonds and stock remain undisturbed—to pay the interest on the former, which we are confident will be done before any great length of time. This is the shortest, most equitable, and easiest path to relief.

We learn that the road is doing a very heavy business. The want of accommodations on this end of the line is very severely felt. Long Dock completed would prove of the greatest use and benefit.

Warming and Ventilation of Railway Cars.

We insert the following communication from Henry Ruttan, Esq., of Cobourg, Canada, upon the subject of *ventilating and warming* railway cars. No man in this country, as an *amateur*, has given so much and careful attention to the subject, and we are confident that no man among us possesses so much practical experience, or whose views and ideas have greater value in reference to the matter on which he writes:

To the Editor of the AM. RAILROAD JOURNAL:

COBOURG, Canada, 23rd Nov., 1859.

SIR,—With the increase of lines of railways, competition for the patronage of the public becomes greater; and consequent upon this, must follow a desire on the part of proprietors to make their roads popular. In this view, it is not surprising that great efforts are making to introduce every appliance possible in order to make their passenger cars comfortable.

One of the most important for this object, in all the northern part of this continent, is that of *warming* cars in cold weather. The common mode, by *stoves*, manage how you will, inflicts upon passengers great discomfort, and is, in fact, the prominent inconvenience of winter travel by rail.

I have lately introduced upon the Grand Trunk Railway of Canada, and upon the Boston and Lowell, and Nashua and Lowell lines, the warming of cars by air, and I invite all parties interested to

view the operation. They cannot fail at once to perceive the superiority of the new mode over the other.

The air-warming of a car necessarily includes its thorough ventilation, as well as the diffusion of the warmth *throughout every part of it*. The air-warmer takes up no more room than the present stove, and the whole cost need not exceed sixty dollars a car, including the warming machine.

I am willing to thus warm one car on any road, upon the mere payment of disbursements, and I shall feel obliged to you if you will insert this letter or make my wish known in such other way as you think proper.

Truly yours,

HENRY RUTTAN.

N. B.—The universal warming of cars by *air* is a mere question of *time*, and the sooner it is begun the better for all parties concerned. The extra expense will be saved in one winter, where wood is \$4 a cord.

H. R.

Virginia Central Railroad.

This road, when finished, will extend from the city of Richmond, westwardly, through the centre of the State to Covington, 205 miles. At Covington, it will connect with the Covington and Ohio Railroad, which forms a continuation of the route to the Ohio river. The distance by this route from the capital of Virginia, to the Ohio, near the mouth of the Big Sandy, is 429 miles. In our Stock List, the length of the Central is stated at 178 miles; and the number of miles operated at 195. The former figure is the length of the company's road proper, and does not include the Blue Ridge Railroad, extending from Mechum's river, the eastern base of the Blue Ridge, to Waynesboro', the western base, a distance of 17 miles, which was built by the State, but which has been transferred to this company, and forms a part of their road, they keeping it in repair and paying a fixed toll on each passenger and ton of freight passing over it, until the aggregate of such tolls amounts to a sum equal to the cost of the road, when it becomes the property of the Virginia Central Railroad Company. The length of this company's road from Richmond to the eastern base of the Blue Ridge is 107 miles.
Blue Ridge Railroad 17 "
Virginia Central west of the Blue Ridge, completed 71 "

Total in operation 195 miles.
Unfinished 10 "

Total when completed 205 miles.
The receipts per mile are for the road operated, viz: 195 miles.

We are indebted to the Superintendent of the Virginia Central Railroad, for the data from which a portion of the above is compiled. Similar explanations in reference to other roads would be of value to us, and to our readers, as well as to the companies themselves.

Hudson River Railroad.

The following is a comparative statement of the receipts upon the Hudson River Railroad for the fiscal years 1858 and 1859, ending 30th September:

1859	\$1,862,074 57
1858	1,585,771 24

Increase \$276,303 33

Selma and Gulf Railroad.

The first annual meeting of the stockholders of this company, was held at Allenton, Wilcox Co., Ala., on the 25th of October, at which 2,453 shares were represented. The report of the President, W. T. Minter, Esq., was read and approved. It gives a gratifying statement of the progress made in obtaining subscriptions and surveying and locating the line, during the year that has elapsed since the organization of the company. Early in November of last year field operations were commenced. Thorough surveys were made of the several proposed routes, and a report accompanied by maps, profiles, and estimates of cost, submitted to the Board in June last. The result was the adoption of the Eastern or Bear Creek route. The Engineers are now engaged in the actual location of the line, with the expectation of having it in readiness for letting, as far as Midway, in all of the present month. The remainder will be located when the route of the Mobile and Great Northern Railroad, with which it proposes to connect, shall have been determined on. The route adopted is very favorable for the construction of the road. It is but 5 per cent. longer than an air line. The grades will not exceed 39.6 feet to the line; and no curve exceeding three degrees. The estimated cost for a distance of 50 miles from Selma, is \$800,000. The right of way and depot grounds have been obtained, on most of the line, free of cost. The means of the company in actual subscriptions were stated at \$380,000. The Alabama and Tennessee River Company has also made a subscription of \$50,000, payable in freights; and the Alabama and Mississippi Rivers Company will subscribe \$20,000—making in all \$450,000. The Board have also assurances that subscriptions to the amount of \$60,000 will be obtained on the north side of the river, provided an equivalent amount shall be subscribed on the east side.

Efforts are now being made to increase the subscriptions to \$500,000; and as this amount was incorporated in, and became a part of the terms upon which the above subscriptions were made, it is now indispensable that this sum should be reached.

It is confidently believed from good data, that with a reliable cash subscription of \$500,000 and upwards, with the subscriptions of the railroads above named, say \$70,000, and subscriptions in work, which many parties will offer in the lettings to contract, probably \$100,000, making the stock list, eventually, upwards of \$700,000, the entire line, as far as from near Midway to Selma, can be placed under contract on very advantageous terms, to be completed, perhaps, within two years, and the remainder of the line to its connection with the Mobile and Great Northern and Alabama and Florida roads, so soon as the Board shall have the necessary facts, and it shall be deemed expedient to locate that portion of it.

After the reading of the report an additional subscription of \$30,000 was made. The following gentlemen were elected Directors for the ensuing year: Col. W. T. Minter, Hon. J. M. Calhoun, J. W. Lapsley, Esq., Dr. D. C. Smyly, J. Wesley Purifoy, J. R. Hawthorn, Wm. H. Linam, Capt. J. A. Crook, Major S. S. Andress, John Green, Sr., Dr. Wm. Cunningham.

The new Directors elected Col. MINTER, President, and Wm. S. BURR, Secretary.

Madden's Rival Heaters.

The superiority of portable heaters, as a warming apparatus for dwellings, railroad depots, offices, churches, etc., is established. The means by which this object is effected, is by placing the furnace in the lower room, which it not only warms sufficiently, but by means of a radiator placed within the stove, the cold air which enters at the opening provided for that purpose, either beneath or at the side of the stove, is caused to circulate through all its compartments; and thence, after becoming heated, is, by means of a hot-air pipe, and a register in the floor above, carried up, and diffused through all the apartments of the house. In order that there may be no admixture of the gases, a down draft, as well as a direct one, is essential. The modern oval shape is the most approved pattern; while the iron fire pot is coming into general use. All these requisites are combined in the "Rival Heater and Radiator," manufactured by Mr. N. T. MADDEN. For heating the room where it is located, as well as those in other portions of the building—for safety from conflagration, and an abundant supply of wholesome hot-air—for healthful ventilation, and economy of fuel, this heater is unrivalled.

Full particulars regarding these improvements, and testimonials as to their efficiency in the promotion of the objects claimed for them, with a list of prices, may be obtained on application to the proprietor, either personally or by letter, at 451 Eighth Avenue, New York.

Richmond and York River Railroad.

This road was completed, and the trains commenced running to White House, a distance of 23 miles from Richmond, on the 3rd of October. By this time the necessary buildings have been erected for the accommodation of freight and passengers. The remainder of the road from White House to West Point, 15 miles, including the Pamunkey River Bridge, and the requisite wharves, etc., has been let on favorable terms to a responsible contractor, to be completed by the first of June next. The whole cost of construction is payable in the first mortgage bonds of the company, at 92½ cents. The contractor has commenced work both at White House and West Point, including the driving of the piles for the bridge. The President has been authorized by the board to procure the iron whenever he shall deem it expedient to do so. He however prefers waiting until the work is so far advanced as to give assurance that the road will be in readiness to receive it when purchased. It is expected that the bridge will be completed in the spring, by which time the iron will be purchased and in place to lay down the track.

There has been expended during the fiscal year ending Sept. 30th last, the sum of \$277,342 71—leaving at that date a balance in cash of \$24,233.28, and the sum of \$8,500 in the registered bonds of the State, and due from individual stockholders of the State, on subscription to the old stock, the sum of \$39,937 76, making in the aggregate the sum of \$72,671 04, which, with the \$313,000 of mortgage bonds before mentioned, will be amply sufficient to complete the road to West Point.

The subscription of \$200,000 made by the State at the last session of the Legislature, rendered it necessary to cancel \$100,000 of the first and only mortgage bonds of the company, which has been done, leaving the mortgage for only \$400,000. And

to give to these bonds a greater marketable value, it has been deemed advisable that it may be convertible into a registered debt of the company, at the pleasure of the holders, at any time before maturity. To accomplish this, the old mortgage has been released, and a new mortgage duly executed and recorded, from which it will appear that this object has been fully provided for.

Of the \$100,000 of mortgage bonds, the directors have sold the sum of \$75,000, and paid away \$12,000, leaving now on hand, applicable to the further prosecution and equipment of the road, the sum of \$313,000 in the first mortgage bonds.

The officers of the company are:

ALEXANDER DUDLEY, President.

D. S. WALTON, Chief Engineer.

A. W. MORTON, Secretary.

Midland Railroad.

The stockholders of this corporation recently met in Boston for the purpose of choosing directors and for the transaction of general business. The following statements were made by the President, relating to the financial condition of the corporation at the present time. The liabilities of the Boston and New York Central Railroad, March 19, 1858, amounted to \$4,587,835.25. The liabilities of the Midland Railroad Company at the present time amount to \$1,313,060 16. The balance of the liabilities have been converted into stock to the amount of \$1,259,648 24. This will make the stock, when all claims shall have been converted into stock, \$2,572,908 40. Of the \$312,000 in bonds not yet converted, about one-half could be converted into stock at this time, but for an injunction. Of the debts about \$200,000 were shut out by not being presented in season. The receipts from the road from October, 1858, to August, 1859, including receipts upon the upper end of the road, as furnished by Mr. Pickering, amount to \$6,881 75; balance on hand \$209 39.

The following gentlemen were elected directors for the ensuing year: H. N. Slater, Joseph W. Clark, Warren Hunt, William Edwards, A. G. Farwell, Holmes Ammidown, D. N. Pickering, L. Spinner, and Thos. E. Graves.

Railroads in Texas.

We learn from the Houston Telegraph that two new locomotives for the Houston and Texas Central Railroad had arrived; that but four miles of grading remained to be done to complete the road to Millican's, in Brazos Co., and that the company had received bills of lading of the iron required to complete it to that point. The Beason's Creek bridge is up, and the cars will soon commence running to Navasota.

Work is also progressing on the Galveston, Houston and Henderson Railroad, with the prospect of opening the road between Galveston and Houston this winter.

But little has been done on the Brazoria road for some weeks past.

The bridge across the Brazos on the Buffalo, Bayou Brazos and Colorado railroad has been rebuilt, and the cars are again crossing.

Fremont and Indiana Railroad.

We learn that track-laying has been resumed on this road, and that the work is progressing between Arcadia and Findlay. Iron is on the way to lay the track to Lima, and the work will be pushed with renewed energy.

Alleghany City and County Bonds.

Two cases have recently been tried before Judge Grier, of the United States Court, involving the validity of the bonds issued by the City and County of Alleghany for railroad purposes. The case was for coupons issued to the Pennsylvania and Ohio Railroad Company, since consolidated into the Pittsburg, Fort Wayne and Chicago Railroad Company. The amount of bonds issued by Alleghany City to this company was, we believe, \$750,000, and the decision in this case rules the whole of the Alleghany City cases. The Court overruled the whole defense, and decided that the city was liable for the bonds issued. Judge Grier also administered a severe rebuke to the councils of Alleghany City for the attempt to repudiate these bonds.

The next case was that of Wood vs. The County of Alleghany for coupons upon bonds issued to the Alleghany Valley, the Chartiers Valley, and the Steubenville Railroad Companies. The defense was overruled in all the cases, and the court decided that the various acts of the Legislature authorized the issue of the bonds in every case, that the bonds were issued legally, and that the plaintiff was entitled to recover.

Judge Grier charged the jury in substance:

That this suit was brought on coupons given for railroad subscriptions. The Supreme Court of the State have assumed the constitutional validity of such subscriptions, and that question is not one now open for discussion. It was not for courts to inquire whether the subscriptions were wise or unwise, but to enforce the law and maintain the inviolability of contracts. Whatever regret there might be at the amount of debt that had been imposed upon the community for railroads, it is too late now to set up objections that ought to have been made before the bonds were issued, and had gone into the hands of innocent holders, who had advanced the money to carry on the work.

Repudiation of such debts is immoral; and a set of principles have been pushed forward in this community that are destructive to all morality, and have brought shame and dishonor on this city and reproach on the State. The objections made in this case to a recovery, have therefore been argued, discussed and overruled. I overrule the whole of them, and instruct you to return a verdict for the plaintiffs for the amount of the coupons that have been given in evidence, and interest upon the coupons from the time they were payable until the present time.

The defendant's counsel objected that interest could not be charged on the coupons, for that would be compounding interest.

Judge Grier—Each coupon is a debt payable on a certain day; and for the non-payment at that day the plaintiff is entitled to interest. It is a mistake to call this compounding interest. The plaintiff is entitled to the amount of the coupons and interest thereon from the time they were payable, and the jury will calculate the amount.

The verdict was for the plaintiff, for the full amount claimed, \$978 21.

Tyrone and Clearfield Railroad.

We learn that the Hon. William B. Foster, jr., Vice President, and H. J. Lombard, Esq., Auditor of the Pennsylvania Railroad Company, have been elected Directors of this road. The object of which is to give the Pennsylvania Company a better opportunity of pushing the road to an early completion as far as Phillipsburg, for which purpose it has agreed to advance \$200,000.

South-Western Railroad.

Seven hundred tons of iron for the extension of this road, arrived at Savannah from Bristol on the 24th ult.

Bonds issued by the City of Milwaukee in Aid of Railroads.

We copy from the Milwaukee City Comptroller's Report to the Common Council the following statement of the amount of the bonds issued to the several railroad companies by that city, and of the unpaid coupons thereon:

	Bonds.	Unpaid Coupons.
Milwaukee & Mississippi R. R.	\$84,000	.....
" " " "	150,000	.....
" " " "	300,000	.....
Total	\$534,000	\$35,070
Milwaukee & Watertown R. R.	200,000	20,284
LaCrosse and Milwaukee R. R.	200,000	.....
Milwaukee, Fond du Lac and G. B. Railroad	114,000	.....
Total	\$314,000	14,653
Milwaukee and Horicon R. R.	166,000	13,273
" " Beloit " "	100,000	26,883
" " Superior " "	100,000	19,833
Green Bay, Milwaukee and Chicago Railroad	200,000	.....
Total	\$1,614,000	\$129,946

Kenosha, Rockford and Rock Island R. R.

The Division on this road, between the Chicago and North-western Railroad and Rockford, 27 miles, has been opened for business, forming a new route between Rockford and Chicago—a short, if not shorter, than the one by the Galena and Chicago Railroad. The Eastern Division of the K., R. & R. I. R. R., from Kenosha to Geneva, a distance of 28 miles, is also in operation. From Geneva to the line of the Chicago and North-western Railroad, 16 miles, the grading is nearly completed, and the road will be in operation by July, 1860, making a continuous line from Rockford to Lake Michigan of 71 miles. It is designed to extend the road to Rock Island, using the Sterling and Rock Island Railroad, which is nearly ready for the rails. The whole distance from Kenosha to Rock Island is 176 miles.

Pontchartrain Railroad.

The earnings of this road for the last year were \$110,000; expenses and incidental repairs were \$60,000; net gains \$50,000, out of which there has been paid 8 per cent. on the capital stock, \$40,000, which makes the stock now worth the quotation, \$80 per share.

Little Miami Railroad.

The Board of Directors of this company have declared a dividend of 4 per cent. on the capital stock out of the earnings of the company for the five months ending the 30th inst., payable at the office of the company on and after Monday, December 5th.

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending Nov. 12,	
were	\$56,154 40
Week ending Nov. 13, 1858	50,688 92
Increase	\$5,465 48
Total traffic from July 1st	\$960,512 56
Same period last year	865,719 90
Net increase	\$94,793 66

Covington and Ohio Railroad.

The tunnel on this road is 4,700 feet in length, and 700 feet below the summit of the mountain ridge it pierces. The width is 27 feet and height 23 feet.

Victoria Bridge.

A train, drawn by a locomotive engine, passed through this grand structure on the 24th ult. It is the first work of the kind on the continent, and unites in one the two great arms of the Grand Trunk Railway—one resting on Portland; the other on Detroit—the two separated by a distance of about 875 miles. The construction of this bridge completes the design upon which the Grand Trunk is based, and we shall soon see its influence upon the business of the line. The bridge will be formally opened for traffic on the 19th instant.

Charleston and Savannah Railroad.

This road is now open to Pocotaligo, about 55 miles from Charleston, and the cars made their first trip to that point on the 24th ult.

A dividend of 4 per cent. has been declared on the capital stock of the Lexington and Frankfort Railroad Company.

Pennsylvania Central Railroad.

This company have declared a semi-annual dividend of three per cent., clear of State tax, payable on and after the 15th inst.

Hudson and Lake Superior.

Forty thousand dollars' worth of supplies have been recently shipped to Hudson to prosecute the work on the road this winter. Four parties are now at work, and grade, on an average about a quarter of a mile per day.

Memphis, Holly Springs and Mobile R. R.

A bill has been introduced in the Legislature of Mississippi to charter the Memphis, Holly Springs and Mobile Railroad Company. The contemplated road is to run from Memphis, via Holly Springs, to some point on the Mobile and Ohio Railroad.

Railroads in Africa.

The railway at the Cape of Good Hope was commenced lately under the Presidency of Sir G. Grey, and the work is being vigorously prosecuted. The first of eight locomotives that have been ordered for the new road has been completed, and has been making trial trips on one of the English railways. This will be the first road in Southern Africa, and its construction will inaugurate a new era in the reclamation and civilization of that great Continent.

Pottsville and Mahanoy Railroad.

Mr. J. Dutton Steele, the Vice President and Chief Engineer of the Philadelphia and Reading Railroad Company, who has recently been in Schuylkill county, making surveys for railroads chartered at the last session of the Legislature, has made a report to R. D. Cullen, Esq., the President. The project particularly alluded to is for a road from Pottsville to Mahanoy, or Second Coal Field, and thence to connect with the Philadelphia and Sunbury Railroad, with a view of reaching a portion of the coal east of Broad Mountain—of opening the New Boston coal basin—of attaining such a central position in Mahanoy Valley as will develop the Girard lands and command the entire basin, should it be required; and at the same time effect a connection between the bend of the Philadelphia and Reading road and the Sunbury and Erie Railroad at Sunbury. The report says:—

Diverging from the Mount Carbon Railroad, near Fishback Rolling Mill, 1½ miles above Pottsville Depot, our line ascends the Valley of Nor-

Wegian Creek to Mount Lafayette, where it crosses the summit dividing the water of that stream from the West Branch of the Schuylkill, with a cutting of forty feet deep; then continuing the ascent along the slopes of Mine Hill, and turning its rough end in Mine Gap, we cross the Centre Turnpike in the town of New Castle at grade; thence continuing the ascent to the slopes of Mill Creek, pass 50 ft. above the head of Plane No. 2; 20 feet above the head of Plane No. 3 and 70 feet below the head of Plane No. 4, and join the Mud Run Bridge, midway between Planes No. 4 and 5, and on the broad flat summit of Broad Mountain. From Mine Gap it is proposed to pass off a branch to Hecksherville 1½ miles in length, which will accommodate the coal of that vicinity without adverse grades—and from the summit of Broad Mountain another branch 2½ miles long, and very favorable ground, will reach the New Boston coal mines.

In the ascent from Pottsville we have an average grade of 90 feet per mile, which may be increased to 100 on straight lines to cheapen construction, and, as the ground occupied is near the heads of the streams, no important structures, and but little heavy work is encountered. At the summit we connect with the light grade line of Mr. Hewson, and are near the head of Danville and Pottsville planes No. 5, which reaches directly into the Mahanoy Basin, near the centre of the Girard lands.

It is well known that this plane is avoided by the light grade line, without the use of Ys or other objectionable features—but with a loss of six miles of distance from Girardville, and the lower part of the basin. The plane, however, is so admirably located for accommodating the coal from the Girard Estate for which purpose it was originally constructed, that it must again be used, and the light grade line must also be built; which will first be required, is for future consideration. By each we reach the rich deposit of the Second Coal Field, and passing thence by Girardville, and Ashland, join the Philadelphia and Sunbury Railroad at Howelton, seven miles above the town of Shamokin.

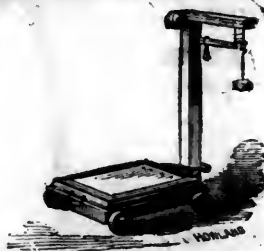
From the foot of Plane No. 5 to Howelton, I find the line described as "descending at the rate of 25 feet per mile for five miles—thence descending at the rate of 45 feet per mile for six miles; thence descending to Howelton at the rate of 75 feet per mile, and along the Philadelphia and Sunbury Railroad 4½ miles of descending grades at the rate of 73 feet per mile, before the lighter grades are reached." Your Engineers have not surveyed this section of the line, and we may hope for some improvement, but there is no doubt of its practicability within the limits stated. The length of new road to be constructed between Pottsville and Howelton as above described, is 22½ miles, 18 miles of which are on the coal, and 4½ miles on the slopes of Broad Mountain where there is no coal.

Its estimated cost is \$25,000 per mile, or \$562,500. If we add the branch to Hecksherville, (1½ miles long,) at \$25,000—and the branch to New Boston, (2½ miles,) at \$50,000, we have a total cost of \$637,500.

The important results which would flow from the construction of this link, have been so frequently discussed, and are so fully understood that it seems scarcely necessary to dwell upon them. Sunbury is 17½ miles nearer to Philadelphia by it than by way of Harrisburg if we take the light grade line, and by the inclined plane line it is 23½ miles nearer, though the grades are less favorable. It has a central and most commanding position in the Second Coal Field with 4-5 of its entire length lying upon the coal. For the coal from the Girard Estate it can have no successful competitor, and even from Ashland it will compare favorably with any line which has been projected or constructed. When finished it will be a feeder to the Philadelphia and Reading Railroad, and the Schuylkill Canal works which have a peculiar and undenied interest in the coal commerce of the city of Philadelphia. It is the work originally projected by Stephen Girard for the development of his coal

estate, and for sustaining that commerce; and is, therefore, especially entitled to the support and assistance of the commercial interests of the city, and for the Guardians of the Girard Trust.

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31.40

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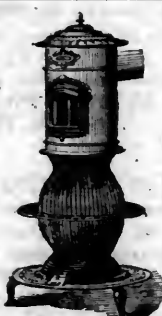
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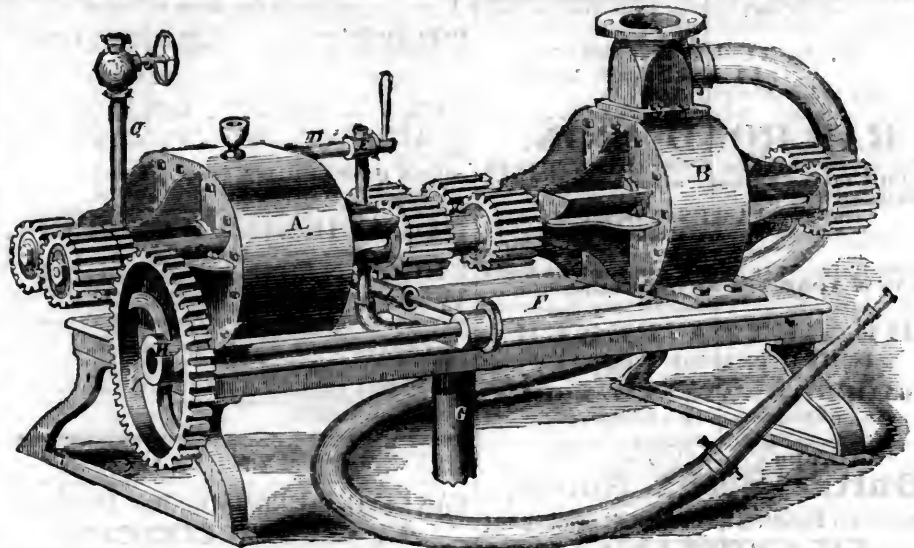
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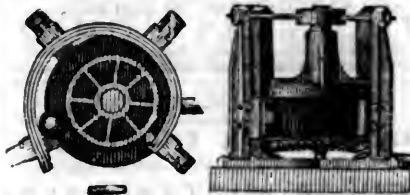
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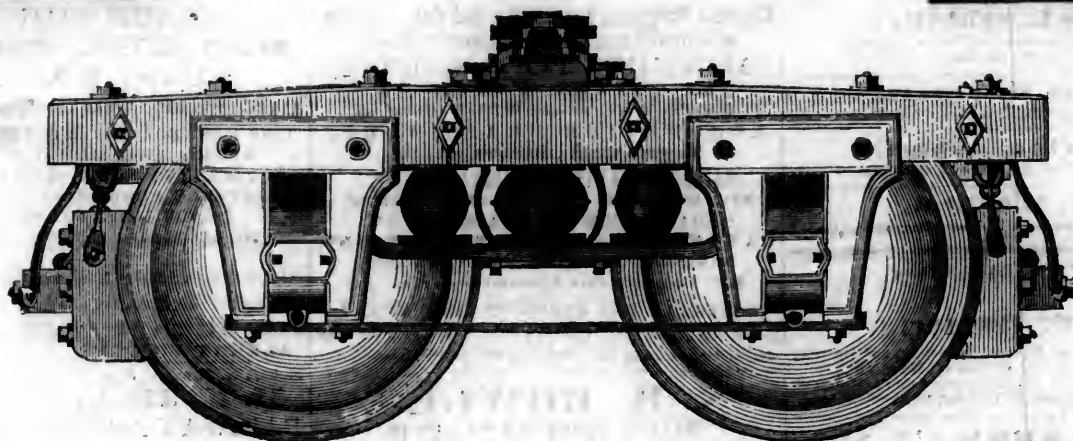


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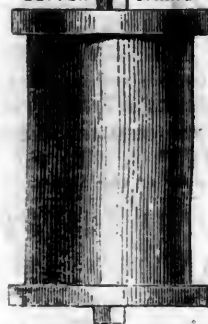
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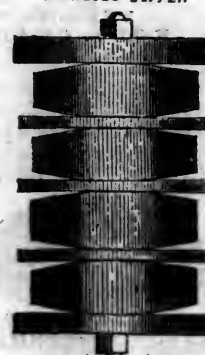


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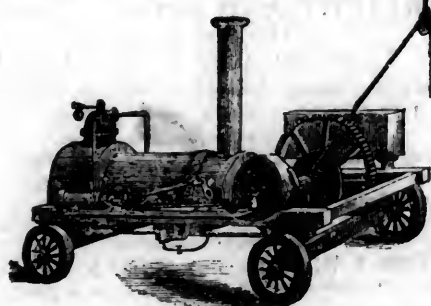
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
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ESTABLISHED IN 1831.

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SECOND QUARTO SERIES, VOL. XV., No. 50.]

SATURDAY, DECEMBER 10, 1859.

[WHOLE No. 1,234. VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, December 10, 1859.

The Gauge Question.

(Continued from p. 770.)

Major Brown next remarks that the letter of Rogers, Ketchum & Grosvenor, will be found to contain similar opinions. Now, after a careful reading of this letter, I can find no similar opinions in it. It intimates no limits to the use of the power of an engine; but the writers have in view the power of endurance of the iron on "the track." This is a very different mode of limiting the usefulness of an engine, from the one we have had under consideration, and is worthy of attention; for it is true that the wide gauge does not increase this power of endurance in the iron.

Messrs. Rogers, Ketchum & Grosvenor limit the weight on a single journal to 4 tons. Their first proposition is, that engines of 24 tons can be arranged for a gauge of 4 feet 8½ inches; and their second is, that such engines, either 8-wheeled, with 4 drivers, or 6-wheeled, all drivers, can be kept within that limit, and have but 4 tons on a journal.

In answer to the statement that an engine of 24 tons can be adapted to a narrow gauge, I must say that I have as yet seen none, nor can an engine of

24 tons be made as powerful on a narrow, as on a wide gauge. And in answer to the question of limit of the power of engines, for want of power of endurance of the iron rails, I will mention that we are now building an engine of 10 wheels, 6 of which are drivers. This engine will weigh but 25 tons; yet it might weigh 32 tons, and not exceed the limit fixed by those gentlemen, of 4 tons per journal, which is 24 tons on the drivers; and 8 tons on the trucks. So we see, that without exceeding the power of endurance of our present rails, we can go beyond what they assert as the limit of power on the narrow gauge, by several tons.

In my conversations with these gentlemen, this subject has been fully discussed; and I am convinced that we do not differ, except in the opinion that they have equal power up to 24 tons, on the narrow gauge.

But is it a settled thing that our rails are capable of as great endurance as they can be made to have? Suppose you have a road of extreme width; such, for instance, that engines of fair proportions, would have 10 tons on each journal, and power in equal ratio. Suppose then, that the traffic of the road should be so great that with all the trains admissible on a double track, you require the services of such engines, is it not probably you would contrive some way to get rails able to bear even 10 tons on a point? Should it become a question on this road whether you should increase the strength and durability of your iron rails, so as to carry all the weight which the best proportions and most effective engines of 6 feet gauge require, or to quadruple the number of tracks. I think, therefore, you would not be very long in deciding in favor of the former. I see nothing incompatible with the idea, that 10 years hence, this road will be called upon to transport in a year 1,000,000 tons; and if so, a heavier rail would be expedient, in order that the weight of the engine and size of car journals may be increased.

Major Brown next quotes Messrs. Hinckley & Drury, and as he denies their most important statement, I will here repeat it. They say—"In our opinion it is not good economy to connect trains of greater extent than can be drawn by an engine of 40,000 lbs. weight on the drivers; with steam power equal to the adhesion of the same;

and this we can do, with one on our narrow gauge, when you will submit to the low speed of 8 to 12 miles the hour; but with this weight on the drivers, if you should call for a speed of from 15 to 20 miles an hour, we should prefer the wide gauge for the accommodations of our machinery."

Major Brown remarks in answer to this, that engines have actually been made in this country and in England for the narrow gauge, equal to the performance of the highest amount of work stated in this extract. I must, however, differ with him here, and say that engines have not been made in either country capable of taking the full loads they can start, at even 8 miles per hour, much less at 20.

In my report I endeavored to show that the great advantage of the wide gauge was in enabling engines to take full loads at a greater velocity than upon the narrow gauge. This Messrs. Hinckley & Drury admit; and Major Brown still affirms the contrary. It is a thing susceptible of easy proof aside from the evidence of Hinckley & Drury. The experience of the Reading Railroad furnishes evidence to fully prove the fact, where engines having adhesion sufficient for 750 tons, are unable to move 650 tons, at more than 8 miles per hour; which is really more than they do as an average on any trip. We have narrow gauge engines on this road with 4 feet wheels, and they cannot perform over 8 miles, with a load very much less than the adhesion calls for.

Mr. Whitney in a letter to me, which is appended, states that his 27 tons engines are equal to move 1,250 tons on a level at 10 miles per hour; but that, if we required to move our freight at a velocity as high as 20 miles an hour, the load will have to be reduced nearly two-thirds; so that Major Brown claims much more for the narrow gauge engines, than does Mr. Whitney. I do not expect that with even a six feet gauge, we can make engines which will use all their adhesion at 20 miles per hour; but I do expect, and consider it a matter of certainty, that we can approach much nearer such point of perfection than can be done on the narrow gauge, for reasons given in my report.

That there is a want of power in engines upon the narrow gauge is proved from the fact, that so great efforts, and so many contrivances are made

to increase their power. Even in England, where they have level roads, a constant necessity is felt and yielded to, for more powerful engines, mostly to produce speed; and it is perfectly notorious that the wide gauges get greater speed with greater loads, than do the narrow ones; the greatest disparity being in the loads; but in England, for the speed of freight trains, they do not require so heavy engines; because, both grades and tonnage are less than here, and as their rates are higher, they can afford to spend more in operating their roads than we can.

Major Brown dismisses Messrs. Norris' letter by saying that they give a decided preference to a wide gauge. That Messrs. Hinckley & Drury do the same, under the conditions required by our trade, is likewise true. Messrs. Rogers, Ketchum & Grosvenor, have ample room for advocating either; and Messrs. Baldwin & Whitney are the only builders who can be claimed as sustaining the narrow gauge; and that upon such false premises as to give no value to their opinions.

They state that they have no trouble in building engines suited to the business of the Reading Railroad. The Superintendent of the engines on that road informed me that there was great difficulty, and that a wide gauge would enable them to have more effective engines, and cited these same engines as proof.

I have visited many other roads, and conversed freely with their managers, and though they generally advocate the narrow gauge, it is only on the ground that they connect with other roads. Nearly all admit the advantages of the wide gauge, and wish that it had been adopted. Such is the testimony of practical men, who have had long experience on railroads where the want of power has been felt.

Major Brown next refers to the report of the Gauge Commissioners in England, and his quotation is an admission that the broad gauge enables greater speed to be obtained; but these gentlemen do express the opinion that the public safety will be endangered by employing the greater capabilities of the broad gauge much beyond its present use, until they make the road better. Now as we propose in this country to use our power with less speed and greater loads, we need to look to that report only to see if *greater power* can be obtained on the broad gauge. If we can get the power, we know how to use it to the profit of the stockholders, without endangering public safety.

The quotation is conclusive on this point, and was reluctantly forced from the Commissioners, by the experiments made on the different gauge. But it would have been well, also, for Major Brown to have quoted the opinions of the Commissioners, as to the ability of the broad gauge to move larger loads at higher speed, compared with the narrow gauge. I took particular pains to do this, and will again repeat their final conclusions on this matter.

The Commissioners say—"After sanctioning the trials, and being present at the performance of them, a record of which will be found in the appendix, without entering into a minute detail of the results, or the discrepancies between the returns as furnished by the two parties themselves, that they (the Commissioners) consider them as confirming the statements and results given by Mr. Gooch in his evidence, proving, as they do, that

the broad gauge engines possess greater capabilities for speed with equal loads; and generally speaking, of propelling greater loads with equal speed; and moreover, that the working of such engines is economical where high speeds are required, or where the loads to be conveyed are such as to require the full power of the engines."

The conclusion seems to be inevitable against the position assumed by Major Brown. The Commissioners were notoriously prejudiced before entering upon their duties; and the whole investigation shows that they were disposed to give undue advantage to the narrow gauge interest, and yet they are compelled to admit plainly and unequivocally the superiority of the broad gauge, so far as the power of engines is concerned. No one can deny that the conditions required by the Commissioners, in order to reap the advantages of the greater power on the broad gauge, to wit: *full loads*, will be entirely fulfilled on this road.

Major Brown says that the peculiar features of our roads will not admit of the great velocity attained in England. This has no bearing upon the question now under consideration; for whatever may be the speed of our passenger trains hereafter, it will be economical to take heavy loads; and the greater power of the wide gauge engines, can be used in increasing the *load* as well as the speed. Since the date of the report of the Gauge Commissioners, still heavier engines have been put on the narrow gauge, and yet the broad gauge retains its superiority.

I have just now, since writing the above, received a letter from Daniel Gooch, Esq., the Superintendent of motive power on the Great Western Railway in England. Mr. Gooch sends me the results of experiments made with the latest constructed and most powerful engines of both gauges. I desire here to quote the language of the most prominent engineers in England, who advocate the narrow gauge, as well as others on the subject, of the power of engines, as affected by widening the gauge.

Mr. Stephenson says, "We may build engines upon the wide gauge, heavier, and larger in dimensions and more powerful." Joseph Lock says, "Certainly the broad gauge gives greater power for the conveyance of heavy trains of baggage." Mr. Cornell, when asked by the Gauge Commissioners if "greater power can be obtained by increasing the boilers of the broad gauge engines," says, "Certainly; the evaporating surface is the foundation of the power and speed of the engines." Mr. Edward Bury says, "That you may get a larger engine, and, of course, an engine of greater capability on the broad gauge, but thinks that about 5½ feet would be ample for all the power wanted in England, where grades are much less than here." Benjamin Cubitt, also advocating an intermediate gauge, says that "equal power cannot be obtained on the narrow, with the wide gauge." Mr. William Cubitt, has the same opinion and is in favor of a 6 feet gauge. John Gray says, "That the power of the engine is increased as the width of gauge, and will do a greater amount of work in proportion to the difference in the width of gauge." Mr. Gray is a narrow gauge man, so far as England is concerned; but if the question were to come up in a new country, would favor a 6 feet gauge.

Wm. Ferenhaugh says, in speaking of the Great

Western engines, that, "if their boilers were made in proportion to their gauge, it would produce the most stupendous result." Mr. Gooch's letter shows that since that date such engines have been made, and that they fully sustain Mr. Ferenhaugh's opinion. Capt. Mark Huish, manager of the Grand Junction Railway, admits also that greater power exists in the broad gauge engines, and would, if the question was an open one, take a wider gauge than 4 feet 8½ inches; say 5½ feet. Richard Roberts, Esq., engine builder, gives the same opinion as to the greater power of wide gauge engines. Gen. Pasley says that "the gauge of 4 feet 8½ inches does not admit of a boiler of sufficient diameter, or of a firebox of sufficient width, to give such power to locomotive engines as is required by the present state of railway traveling," and that Mr. Stephenson's attempt to get rid of this disadvantage, by lengthening the boiler, is, in his opinion, a failure.

So far, then, as the opinions of men competent to judge in this matter can be accepted as proof, it must, I think, be admitted that the broad gauge admits of engines of greater power than a narrow one, and that the gauge of 4 feet 8½ inches does limit the power of engines below what is required to secure the greatest economy on our roads. "All the power that can be necessary for the transaction of railroad business" is therefore not attained on the narrow gauge lines, even in England, much less in our country, where, by reason of steep grades, greater power is required than in England. The same arguments, which led a large majority of the engineers in England, to say that a gauge somewhere between 5 and 6 feet would be the best for that country, would decide them to take a still wider gauge in a case like ours. That we can use the extra power of our broad gauge is evident, from what has been said; for it has been shown that all the weight that a 6 feet gauge demands can be sustained by our rails, by increasing the number or bearing points; and trains requiring all the power of the engine to move them, can be connected without disadvantage. The opinion of the English engineers, when given, is decided "that powerful engines are the cheapest to work with" when the power is used. As to the cost of engines, ton for ton, it will be about the same on either gauge. The only way in which a broad gauge engine can be made more expensive than one of the same weight for the narrow gauge, is by putting in a larger proportion of the more valuable materials. The reason why Hinckley & Drury, for instance, say that broad gauge engines cost more than the smaller ones, is because they know that in making a 20 ton engine for our gauge, they would get in more surface of firebox, and more tubes, of course. They must put in more boiler plate, more copper, and less cast iron. I explained how this is in my report, and I beg leave here to introduce an extract from it, so as fully to set this matter again before you.

"I was in a shop, a few days since, where a vast number of engines are constructed, as good ones as any in this country, and there I saw two engines nearly finished, one of 17½ tons, and the other 22 tons; both had the same sized boiler and firebox—the extra weight of the latter being entirely made up by increasing the cast iron portions of the wheels, foot boards, &c., and the wrought iron in the axles, frame, and other parts. Both

these engines would slip their wheels at the same pressure, the one of the greater weight, having the larger cylinder. After a good deal of examination, I find this to be almost universally true on all our roads; but the lighter engines have generally all the fire surface the gauge will admit of, unless resort is had to a longer boiler, which, beyond the length now adopted, is almost useless, as the extra weight might be obtained from the increase in parts other than the boiler. But Messrs. Rogers, Ketchum & Grosvenor, who have just built two wide gauge engines for us, distinctly say that there is no difference in cost, if of the same weight. I therefore say, that engines of the same weight, and of the same effective fire surface, or power, are as cheap on the wide as on the narrow gauge; that heavy engines, say 20 to 25 tons, cannot have as much power on the narrow gauge as on the wide, and that the wide gauge engines, being more powerful, a less number will be required; therefore, the whole outfit of engines will cost much less for the wide, than for the narrow gauge.

(To be continued.)

Durability of American Ships.

Mr. Donald McKay, the well known East Boston ship-builder, who is now in Europe, has published a tabular statement, which is designed to be, and really is, a "practical refutation of the English prejudices regarding the durability of American-built ships and American timber." The point arrived at is, to show by facts that ships built with carefully-selected American timber, viz: "live oak, white oak, pitch pine," &c., will last as long as ships built with the best English oak, in contradiction to the views entertained by Lloyd's Committee, and in support of the favorable opinions entertained by British merchants in regard to the efficiency and safety of American ships. The recapitulation of the tables show the following facts:

1. 102 ships of an average age of 24 years.
2. 40 barques of an average age of 25 "
3. 54 brigs of an average age of 25 "
4. 12 steamers of an average age of 18 1/2 "

Of these were built in the principal ship-building States:

	102 Ships.	40 Barques.	54 Brigs.
New York.	25 per cent.	8 per cent.	2 per cent.
Massachusetts.	35 per cent.	47 per cent.	24 per cent.
Maine	8 per cent.	25 per cent.	52 per cent.
Maryland ..	8 per cent.	12 per cent.	7 per cent.
New Hamps.	12 per cent.		

The document also contains a list of United States men-of-war ships over fifteen years old, (the term assigned to the average duration of British-men-of-war, after which they require a complete and extensive repair,) in perfect preservation and in an efficient state up to October, 1859. The result of this statement is as follows:

1. 9 line of battle ships; average age.. 38 1/2 years.
2. 5 frigates; average age..... 26 "
3. 19 sloops of war; average age..... 22 "
4. 4 brigs; average age 20 "
5. 9 men-of-war steamers; average age. 14 1/2 "

Baltimore City Railroads.

The city passenger railroads in Baltimore are working very profitably, and to the great satisfaction of the citizens. From all appearances, and the reports that reach us, from time to time, of the earnings of the cars, we would not be surprised to find that, after a year or two, the Baltimore passenger railways will be in every respect superior to those of any other city in the country. The cars are beautifully constructed, and the horses especially well selected. There are upwards of twenty cars running on Baltimore street and Broadway, and ten on Green street and Pennsylvania avenue, while they are nearly ready for running on Eutaw and Madison streets.—*Balt. American.*

Railroads in Missouri.

Below we give some very interesting extracts from the Message of the Governor of this State in reference to its railroads.

ASSESSED VALUATION OF REAL AND PERSONAL PROPERTY IN THE CITY OF NEW YORK, FROM 1815 TO 1856.

Date.	Amount.	Remarks.
1819	\$70,113,061	
1820	69,530,753	
1821	68,282,070	
1822	71,289,144	
1823	70,940,820	
1824	83,075,676	
1825	100,160,046	Erie Canal open'd throughout.
1826	107,477,780	
1827	112,211,926	
1828	114,019,533	
1829	112,516,026	
1830	126,288,518	
1831	139,280,214	
1832	146,302,618	Ohio Canal completed to Ohio river.
1833	166,495,187	
1834	186,548,511	
1835	218,723,703	
1836	309,501,920	
1837	263,747,350	
1838	264,152,941	
1839	266,789,210	
1840	252,843,163	Western Railroad of Massachusetts completed--diverting trade from New York.
1841	251,777,748	
1842	237,806,901	
1843	227,997,091	New York Central R. R. completed to Buffalo--connecting Boston with Lake Erie.
1844	235,960,047	
1845	239,938,318	
1846	244,952,605	
1847	247,152,306	
1848	254,192,027	
1849	256,217,093	
1850	286,085,416	Hudson Riv. R. R. completed.
1851	320,108,358	N. Y. & Erie R. R. completed.
1852	351,706,796	

In addition to the two roads above named, 1,041 miles of railroad were completed in the years 1850 to 1855 inclusive.

1854	462,021,737
1855	486,998,178
1856	511,746,491

It will be seen, upon inspection, that no advance was made on the assessments from 1815 to 1823, (during which time New York had no internal improvements,) but that, on the contrary, they decreased in those eight years \$11,000,000. In 1824 a considerable part of the Erie Canal was in operation, and the assessments advanced \$12,000,000. In 1825 the Erie Canal was completed, and they increased \$18,000,000 about \$6,000,000 per annum, until 1832, when the completion of the Ohio Canal, which extended the influence of New York to the Ohio Valley, caused the assessment to rise for three years, at the rate of \$24,000,000 per annum; while, in the next year, 1836, they rose to the almost incredible amount of \$90,000,000. This was, however, an excessive and unwholesome growth, and the terrible financial crisis which followed, together with the great fire which destroyed such an immense amount of property, not only arrested the advance, but put back the dial of prosperity for a time, so that in 1840 the assessments had fallen \$57,000,000 below those of 1836; being less than \$253,000,000, though still \$106,000 more than in the year the Ohio Canal was completed. In the following year, the Western road was completed to Albany, connecting there with the Erie Canal, and in 1843 that road, now known as the New York Central, was extended to Buffalo. The New York assessments consequently fell to less than \$228,000,000, a lower point than they had touched since 1835—eight years before.

But New York, now seeing the advantages accruing to other points from direct railroad communication, in the increase of commerce and the enhanced value of property, became thoroughly aroused to the importance of a railroad system centering in that city, and commenced the Hudson River Railroad, revived the New York and Erie, which had been suspended, and began the construction of numerous other works of minor importance. Upon the completion of the first of these, in 1850, the assessments rose \$30,000,000, and with the opening of the second in the following year, \$34,000,000 more; and since that time, with similar gigantic strides that great city has marched forward without faltering. Ten hundred and forty miles of railroad, beside the two named, were opened to public use in the State of New York from 1850 to 1855, inclusive, all tributary to the great metropolis. No prophet is required to predict her future, for she holds her destiny in her own strong grasp; and the truth-telling figures above given, indicate the nature of the foundations upon which her prosperity is based. No man who examines them without prejudice, can doubt that it is the railroads and canals which bring the wealth of an empire to her doors.

The city of New York, in 1696, had a population of 4,300, which was about the same that St. Louis had in 1820. It took the first about 130 years to attain a population of 180,000, which St. Louis has reached in 39 years. In the past eight years, the assessments in St. Louis have increased from \$30,000,000 to \$96,000,000, being now \$3,000,000 more than those of New York in 1824, the year before the Erie Canal was opened throughout. With the completion of the carefully planned works which constitute the Missouri system of Internal Improvement, and their inevitable and almost illimitable extension into our sister States and Territories, a similar result to that which New York experience has foreshadowed, will in due time become a part of our own history. St. Louis by her geographical and commercial position must be the distributing and manufacturing centre of the great West—the Central Empire City—the real metropolis of a region whose agricultural and mineral resources are almost boundless in extent and richness.

Nor has St. Louis been unmindful of her obligations to aid in the construction of these works, which, while they enrich the whole country through which they pass, must also pour wealth into her own lap. She has contributed in municipal and individual subscriptions, \$7,500,000 to railroads, and also, without grudging, has paid her quota of taxation, which is a very large one, towards a relief of the State's burthen. With the additional power which the completion of these works will give, she will be enabled to aid more efficiently the further development of Missouri; and her past efforts indicate that she will not be wanting in liberality towards this important end.

The preceding figures prove conclusively that the canals and railroads leading to the city of New York far more than paid for themselves by the increased wealth of that city alone. The calculations have been confined to that city, on account of the space that would be required to extend the investigations to the whole State. If this were practicable, the result would be startling and almost incredible. It was estimated before the opening of the Western road of Massachusetts in 1840, that the Erie Canal, which had been opened through only fifteen years, had paid for itself in the increased value of real estate within the State of New York four hundred times over. Mr. Andrews, in his valuable report to the Secretary of the Treasury on the Colonial and Lake trade, estimates the increased value of agricultural lands in the United States by the construction of railroads as equal, on an average, to \$750 per acre on a belt extending ten miles wide on each side of the road, or \$96,000 per mile; (leaving out of the calculation the enhanced value of the property, less in amount, over a greatly extended area on either side and beyond the road;) and our own experience in Missouri proves this to be a very moderate estimate; for, as suggested above, the influence

of these works extend far beyond the distance named, and the average increase within the belt is larger here.

Since the surveys of the Pacific Railroad were made, the assessments of Pettis County have increased from \$649,000 to \$4,050,000; and those of Johnson County from \$749,000 to \$5,500,000, from 1852 to 1858—six years. This increase in these counties, which lie entirely inland, and away from the river navigation, has been, in a great measure, produced by the benefits received, or anticipated from this work. As the extent which the road runs through these counties will be about sixty miles, the increase already has been equal to \$135,800 per mile, although not a mile of road is in use in either county. It is a very moderate estimate to say that one-half of this advance is due to the railroad, directly or indirectly; yet this hardly indicates what may be expected from the completed road. And this is shown by the results along the whole line of the Hannibal and St. Joseph road, and on the others as far as built.

The roads of Massachusetts increased the valuation of that State, between the years of 1840 and 1850, from \$290,000,000 to \$580,000,000, and this in an old and populous State, where the lands are generally poor, compared with our own. The Nashville and Chattanooga Railroad, almost immediately after its completion, created a value by its influence on real estate, equal to about five times its cost. And these results, which appear so large, when applied to agricultural lands, are far exceeded when applied to mineral districts. It is believed that no State in the Union, east of the Rocky Mountains, contains such abundant and varied mineral wealth as Missouri. Iron, lead, copper, zinc, and coal, are scattered over the State and found in boundless profusion. We have every element that commerce requires, except the means of bringing our productions to a profitable means; and railroads only can supply the necessity. Already they have done much, but that which has been accomplished is nothing compared with the promise of the future, if we are only true to ourselves, and worthy of the rewards which have been placed within our reach by a bountiful Providence.

Before concluding my remarks upon the subject that is likely mainly to engross your attention during the present session, I beg leave briefly to refer to the opinion entertained by some, that we have no right to entail a public debt upon posterity. But if we undertake any public enterprise necessary for the common good, that will benefit our successors as much as ourselves, it is difficult to see any injustice in imposing upon them a part of the burthen, proportioned to the benefits. The rule of action forbidding this would greatly restrict our usefulness, because it would preclude the possibility of the accomplishment of many works of utility, permanent in their character, and therefore equally serviceable to posterity as to ourselves. By this rule of action we would be prevented from incurring a debt in the rearing of public edifices which are to last perhaps for ages, and subserve the interests of many generations; and so of city sewerage, culverts, water works, public landings, and many other public improvements, demanded by commerce, or needed for sanitary purposes, equally valuable to a future generation, and which the present generation could not altogether supply, except through the means of public credit. We would also be forbidden to incur a debt necessary in carrying on a defensive war, by which our liberties and sacred rights might be preserved and become the heritage of our children. It is not contended that we have any moral right to incur debt recklessly or needlessly, and it is clear that, beyond the measure of benefit, we have no right to encumber the heritage of those who take our places.

With agricultural resources unequalled by any other State in the Union; with soils of unsurpassed fertility, variously adapted to the production of nearly all the necessaries of life, and eminently so to most of the marketable staples, including all the cereals, corns, hemp, tobacco, the various

grasses, and every description of fruits, including the grape, for the production of which a portion of our State is equal to any portion of Europe; and with mineral resources boundless in extent, embracing all the most useful metals (the possession of which tends greatly more to the permanent prosperity of a country than the precious metals) together with many of the minerals of secondary importance, it becomes alike our duty and our interest to provide facilities for transportation suited to the development of these resources, and to the spirit of the age. A ten-fold increase of the population now in the State would add to the prosperity of those already here; and while the several States are all holding out inducements for immigration, shall we, with our superior advantages, remain listless, and let the active, eager millions of human beings who are thronging the thoroughfares of the country in pursuit of subsistence and a home, pass us by upon the right and left, and thus allow our millions of acres of virgin soil, and our inexhaustible mines of coal, and deposits of iron, lead, copper, and other minerals, to remain a useless expenditure of the munificence of Heaven? Do we not enhance the value of the heritage of our successors and contribute to the general good, by public works of permanent utility, that will bring these vast resources into use?

But the question, in the present state of things is not, virtually, whether we shall burthen posterity with debt; but rather, how much of the debt already incurred, can we, by judicious management, secure the liquidation of, in accordance with the original intention. I believe that every dollar of it can thus be provided for. It is only necessary that this General Assembly shall will it, and devote their abilities to its achievement.

One very important result accomplished by the construction thus far of our present railroads, is that of having made the people acquainted with their utility. The increased value of property and the general prosperity caused by the introduction of this system, has produced the conviction upon the public mind, that the best possible way of advancing individual interests, is to contribute a portion of their private means in aid of public enterprises. This result is already observable in various portions of the State, where railroad projects are received with great favor; and, where cash means can not be commanded, lands are freely subscribed or mortgaged, in the full belief that the portion of landed property reserved, will, with railroad facilities, be worth more than the whole estate would have been without them.

This fact is a verification of the axiom, that duty and interest go hand in hand. It is unquestionably true that public and private interests are so blended, that in promoting the former, according to our means, we also promote the latter. In the more ordinary demands upon our liberality in behalf of public measures—the building of school houses, churches, county buildings, and common roads and bridges—this principle of economy is more generally understood and appreciated. But it is equally applicable to this more modern economy. The magnitude of the enterprise at first excites timidity and distrust; but by a little experience these are dispelled, and the mind is aroused to the fact that this is an age of progress; that a stand-still policy is no longer safe or desirable; in fact, that it is impossible to stand still; that if we will not advance, we must retrograde in the various elements of prosperity. These are the convictions which our public works have forced upon the citizens of our State; and this single effect, in no very extended period, will add more to the wealth of Missouri than our roads have cost. And it insures the completion of our present enterprises with what the State can yet do.

It is hoped that the discussions of the great measure of the session, involving as it does momentous results, will be entered upon without regard to party considerations, and that your final action will accord with the dignity and responsibility with which you are invested.

The Capitol Grounds will, before your final adjournment, claim a share of your attention. The importance of making provision completing their

improvement, is too manifest to require any argument. In their present condition the labor already done is rapidly going to waste. In them can be seen, from the windows of the Capital, a practical illustration of what will be the condition of the State if the negative policy shall prevail.

If, after these matters are disposed of, the General Assembly determines to enter upon general subjects of legislation, I shall submit any facts or suggestions which, in my opinion, the public good demands.

Philadelphia, Germantown and Norristown Railroad.

The receipts of this company from operations of their road for the fiscal year ending Sept. 30th, were:—

	1858.	1859.
From Passengers	\$173,720 00	\$192,723 00
" Freight	72,467 34	64,709 61
" Rents, etc.	4,635 90	3,968 59
" Chester Val. R. R. 18,867 80		4,820 20
" Chestn. Hill R. R. 9,898 54		12,436 01
	\$279,589 64	\$288,657 41
Expenses	\$111,641 19	\$119,572 14
Running C. V. R. R. ..	15,595 58	5,354 43
" C. H. R. R. ..	5,993 50	6,536 69
Total ordinary exp. ..	\$133,230 27	\$131,463 46
Extraordinary do.		2,722 35
New engines, track and buildings	32,728 07	16,555 77
Interest	22,128 00	21,744 00
Dividends	128,053 00	121,427 50
State tax	6,172 95	6,097 37
	\$322,312 22	\$300,010 45

From the ordinary income of the past year, after deducting all necessary and incidental expenses, and making the usual appropriations to the sinking fund, interest on loan, taxes, etc., two dividends of 5 per cent. each were declared, one in April and the other in October, and the surplus, \$970, carried to the contingent fund.

The officers of the company are:

EDWARD C. DALE, *President*.

W. S. WILSON, *Secretary and Treasurer*.

H. K. SMITH, *Superintendent*.

Vermont and Canada Railroad.

The annual meeting of this company was held at Northfield, Vt., on the 17th ult. A report from the directors was presented and read. The committee appointed at the special meeting of the company in July last, to attend to its affairs in the courts of Vermont and the branch road into Burlington, reported, in substance, that the business before the court was making satisfactory progress, with prospect of a favorable termination, and they presented a copy of the act of the Legislature, just passed, in addition to an amendment of the original charter, authorizing a change of location of route for the branch, and adopting the much less expensive route through the sand bank in Burlington. The act is considered very beneficial to the company, as by this amendment of their charter they are relieved from all obligation to construct the branch on the route prescribed by the act of last year, which route is about thirteen and a-half miles in length, and if constructed with gradients not exceeding the maximum grades of the other parts of the road, would cost, as estimated, about \$600,000; or about \$300,000 if constructed as a surface road, having grades of about eighty feet to the mile, and with a pile bridge (of doubtful permanence) across the Winooski, while by the route authorized by the act

just passed, the construction of about one and a quarter miles of road only will be required, and the whole expense is expected not to exceed \$150,000. This change of line will also greatly benefit the Vermont Central road, by supplying to that road an outlet from Burlington, with a grade not exceeding forty to fifty feet to the mile, in place of the present line, which has a grade of about one hundred and ten feet to the mile.

J. Gregory Smith, Esq., one of the trustees of the first mortgage, Vermont Central Railroad, submitted a statement of the financial transactions of the trustees, from July 1, 1858, to October 31, 1859, from which it appears that they have received during that period as follows:

Balances due the Trustees, July 1, 1858.	\$76,676 37
Old accounts in suspense same date, (since charged off)	16,950 61
Difference between stocks of fuel and shop stock, viz.: stock on hand July 1, 1858, of	\$135,071 92
Stock on hand October 31, 1859, of	121,413 06
Earnings of road from July 1, 1858, to Oct. 31, 1859	996,507 62
	\$1,103,793 46
And have disbursed during same period as follows:	
General expenses	\$697,893 23
New rails and re-rolling rails	112,755 34
On acct of new bridge in Georgia	18,122 39
Vt & Canada R. R. Co.	17,421 01
Patent rights, Herrick Ex' on, land damage, etc.	15,893 24
Liabilities of July 1, '58	138,558 26
Old suspense accounts charged off as worthless	16,359 64
	1,017,594 11

Leaving balance as follows	\$86,199 35
Consisting of balances due from other roads, notes receivable, cash, etc., on hand Oct. 31st, 1859	\$108,282 14
Less present liabilities of Trustees	22,082 79
	\$86,199 35

The following named gentlemen were unanimously elected directors for the ensuing year: Edw. Mott Robinson of New Bedford; Gardner Brewer; and E. Blake of Boston; Lucius B. Peck, Montpelier, Vt.; John Porter, Hartford, Vt.; Worthington C. Smith of St. Albans, Vt.; Jed P. Clark of Burlington, Vt.

Council Bluffs and St. Joseph Railroad.

Ground was broken for the Council Bluffs and St. Joseph Railroad on the 12th.

Missouri River Valley Railroad.

It is designed to leave the North Missouri road at Reuick, and thence to Brunswick, and on nearly an air line to Weston, in Platte County, and thence to St. Joseph. The counties through which it passes—Randolph, Charlton, Carroll, Ray, Clay, and Platte—have within themselves abundant means, which they are ready to contribute, to build one-half the road. They ask the State to help them with the other half. The distance from the North Missouri, at Reuick, to Weston, is 146 miles. A company is already organized for the building of the road to Brunswick (forty miles) and \$500,000 subscribed. This road will be a feeder to the North Missouri road, and the distance between St. Joseph and St. Louis will be shorter, by some thirty or forty miles, than from St. Joseph to Hannibal.

The Car Wheel Works of Messrs. A. Whitney & Sons.

Prominent among the buildings in this city devoted to the purposes of mechanism, are those of Messrs. Asa Whitney & Sons, located on the square bounded by Callowhill street and Pennsylvania avenue, and Sixteenth and Seventeenth streets, having a front of 400 feet on the former street, and extending back 200 feet.

In order that the yards of the establishment should conform to the grade of the avenue they were filled in, causing an elevation in front of about eight feet, thus adding materially to the picturesqueness of the buildings.

Before commencing their erection the Messrs. Whitney carefully matured their plans with a view to economise labor and add facilities in keeping with the spirit of the age, whereby the best work could be performed.

A fire proof building 40 by 50 feet is erected in the centre of the Callowhill street front, the upper stories of which are used for counting rooms, reception rooms, drawing rooms and private offices. The furniture was made expressly for the rooms, and so constructed as to afford every convenience, and occupy the least space. The drawings and papers are kept in such order that any one at all conversant with the affairs of the establishment can place his hand immediately upon them.

The extent of the works cannot be measured by the manual force employed, as nearly every operation is performed, or largely assisted by the most perfect mechanical fixtures. With but one hundred men the works can produce 40,000 wheels yearly.

The main foundry building, built of smooth pressed brick, and two stories in height, is 250 feet by 60 feet. This, as well as all the other buildings comprised in the works, is covered by a corrugated metallic roof, with iron rafters, purlines and tie-rods, the whole having been made by the Messrs. Whitney. Every portion of the foundry and other buildings is fire-proof, the floors being of earth or of brick, supported on ground arches below, while all the stairs and other light parts are of iron.

At right angles, from the main building, two wings (or rather L's) project as to form, in all, three sides of a hollow square. At the centre of the junction of each wing with the main building, a chimney of elegant design, rises 120 feet in height. Built of pressed brick these chimneys are fluted throughout their length, and are surmounted by ornamental brick work capitals, with cast iron tops. The latter are each 14 feet in diameter, and weigh, singly, five and a half tons.

In the great iron yard are assorted and piled several varieties of choice iron, ranging from the tenacious grey to the hard and almost flint-like white.

The cupola furnaces, five in number, are adequate to the discharge of 4 tons of metal daily. The furnaces are blown by two blowing cylinders of 44 inches diameter and 44 inches stroke. The reservoirs placed in front of the furnaces are capable of holding some sixteen tons, yet they may be readily tilted on their trunnions by a single man, working a wheel and pinton. Their contents are thus delivered, through suitable openings, to the casting ladles, each holding sufficient iron for an ordinary wheel, and are placed on trucks, whereby they may be easily trundled by one man to any part of the building.

Two railroad tracks, about 25 feet apart, run from the furnaces to the opposite end of the building. On each track are two traveling cranes, or hoisting machines, either of which can be easily worked by one man, to lift a flask, a ladle, or a wheel, from any part of the floor. The iron patterns used in moulding, the iron chills, the flasks, the casting-ladles, the red-hot wheel just poured, and barely solid, are all lifted and transported with the greatest ease by the aid of these useful machines. The flasks, in which the wheels are moulded and cast, are ranged on both sides of these tracks.

In no part of the works need a single pound of

iron or materials be lifted by hand, with the exception of the ordinary tools made for the use of the workmen.

The exact regularity exhibited in all the operations of the casting room is remarkable.

The wheels are barely allowed to become solid when they are taken from the flasks, burning hot, and carried to the lower end of the building to the great annealing kilns. These are four structures of brick-work, placed in an immense vault, with their tops level with the foundry floor. These kilns are circular in form, and are about 20 feet in diameter, and 14 feet high. In each kiln are sunk eight circular pits or ovens, seven of which are large enough to receive three-foot wheels, while one is large enough for driving wheels of five feet diameter. At the bottom of each pit is a grate, upon which a fire is built, and above which, upon proper supports, a tier of sixteen wheels may be laid. Intervening rings are used, to prevent actual contact of the wheels. An iron door opens from the bottom of the great vault to the interior of each kiln. In the morning one of these kilns is opened, and hot anthracite coal fires built in each furnace. During the day, the whole interior becomes red hot. As the wheels are cast in the afternoon, they are placed by a crane, within the ovens. When the last wheel is deposited these are closed above, and the iron door also in the vault below, and every crack luted with clay, leaving the heat from each of the outer furnaces to ascend among and around the wheels above it, and to escape into the central oven, in which it descends and passes out through a lateral flue near the bottom. This flue is of boiler iron, lined with brick, and has a damper to regulate the escape of heat.

Thus, nearly 130 wheels, taken red hot from the flasks, may be buried in each of these great kilns and kept in a gradual process of cooling for four days, at the end of which they are ready to be bored for use. One kiln is thus opened and another closed daily, there being four in all.

The great result secured by these kilns, is the cooling of the wheels without any strain; every part of the wheel, without regard to its relative disposition of iron, being cooled alike. Besides adding greatly to the strength of the casting, it admits of a most important saving of iron, and consequent reduction of weight and cost, and permits also a much deeper and harder chill, (which the process of annealing does not soften.) The wheels cast at these works weigh from thirty to fifty pounds less than all other wheels of similar form and equal strength, and are chilled, on an average, one-quarter of an inch deeper.

We use the word "anneal" because it is commonly applied to the process to which these wheels are subjected, although it is not to be understood as depriving them of their hardness, or as affecting the chill in the least degree. The chill occurs at the moment of entering the solid state, and no temperature less than at the verge of melting can afterwards soften it.

On the opposite side of the yard from the annealing kilns, is the machine shop. Here the wheels are bored and their hubs squared to exact lengths; the axles turned, and the wheels drawn on at the same time. The wheels are bored and the axles turned to Whitworth's celebrated standing gauges, by which thousands of wheels and axles may be bored, and turned, and fitted indiscriminately to each other. The wheels are forced upon the axles by a power forcing-press, of a corresponding perfection of construction. No keys or splines are used, the power with which the wheels are drawn on being just sufficient to obliterate the marks of the turning tool, and to leave new lines in the direction of the pressure.

The system of tests and inspections, carried into every part of the work, is worth attention. The iron is assorted and mixed under careful inspection, and the quality of the mixture is tested in strength, soundness and depth of chill, by trial-ends, cast, broken, numbered and registered at every melting. The wheels are tested, separately, at every point in their "tread," and in the "plate." Every cut of the boring and turning tools, and

every pressure of the forcing press is gauged and verified.—*Phila. News.*

Finances of Virginia.

We copy herewith such portion of the recent message of the recent message of the Governor of this State as relates to its finances and public improvements.

Debt due on the first Jan'y, 1852. \$11,971,838 30
Debt created since 19,480,321 33

Total of old and new debt... \$31,452,159 63

Redeemed of old... \$1,261,843 00

Investment in bonds

for redemption of

new 1,083,657 20

Total redeemed and

invested for re-

demption 2,345,500 20

Leaving of old debt, \$10,709,995 80

Leaving of new debt, 18,396,664 18

Total of old and new

unredeemed and

uninvested \$29,106,659 43

The annual interest to be provided

for as the whole debt now stands,

adding unredeemed and invested

together is \$1,786,829 36

For each half year 893,414 63

The resources of the treasury are thus stated:

Balance in Treasury, (Commonwealth proper,) on

the 1st of October, 1859. \$104,018 86

Estimated receipts for fiscal year

1859-60. 3,774,068 96

Total \$3,878,082 32

Disbursements for fiscal year 1859-60 3,660,239 15

Estimated surplus, 1st Oct., 1860 \$214,843 11

The Governor recommends that all taxes, State and corporation, on State bonds shall be repealed and forbidden; that the Commissioners of the Sinking Fund shall be required to make their investments in the bonds at par; that the interest upon the State bonds, so far as it can be done consistently with existing arrangements, shall be paid only at Richmond; that the mode and rate of borrowing money and selling their securities, by joint stock companies, be prescribed and regulated by law so as to conform better to the conservation of State credit; and that the Legislature shall provide by general law against the failure to pay interest punctually on the bonds guaranteed by the State. On this last subject he remarks.

The bonds of the State at one period the present year went up above 99 in New York, and so continued until about \$67,000 only of the interest due on the guaranteed bonds of the James River and Kanawha Company fell due in July, and failed to be paid. The last General Assembly had made provision up to that day only; and though there was plenty of money in the treasury there was no authority of law in any functionary to pay this interest. Our bonds sank immediately to 96, and since to 93 in the market. I recommend that authority be given the Executive to pay the interest on them, as it may happen to fall due.

The total indebtedness of the State is as follows:

Bonded debt as given above \$29,106,659 43

Floating debt 265,013 35

Total \$29,371,672 78

The State has paid of \$950,565 of its floating debt since 1857, and has paid and invested in the sinking fund, since 1852, \$2,345,500 of its funded debt.

The Governor recommends the appropriation of

\$5,000,000 towards the completion of the public works, to be distributed as follows:

To the Covington and Ohio Road \$1,000,000

To the Manassas Gap Road 200,000

To the extension of the Danville Road. 200,000

To the clearing of James and Appomattox Rivers 150,000

To all other works, as it may be distributed 450,000

Total recommended \$5,000,000

Railroads of Missouri.

We have received from Jefferson City the following statement:

Semi-annual interest due by the several Railroad Companies, 1st January, 1860, which the State has to pay.

Pacific Railroad \$7,000,000 \$210,000

Do. S. W. Br. 2,200,000 70,660

North Missouri 4,350,000 130,500

St. Louis and Iron Mount'n 3,501,000 105,030

Total \$105,190

As at present advised, the State will have to provide for this interest, and the Fund Commissioners will be in this city to-day for the purpose. If, as may be the case, the State should be able to realize the amount due by the United States, largely in excess of \$300,000, there need be no difficulty in making payment of all interest. As it is, with the certainty of obtaining from the mill tax specially levied for this purpose about \$100,000 by the 1st of January, the Fund Commissioners will have no difficulty in putting the money in New York before the interest coupons are due. We hear, however, and regret it, that projects are on foot in Jefferson to extend the time for the collection of the revenue to the first of March of each year. We regret to see this constant desire to interfere with our revenue system. It ought never to be interfered with, except for most urgent reasons. The effect is to derange all the plans of the financial officers of the government and bring about confusion. Especially will this be the case if any such law should be made to apply to the present year's revenue, all of which ought to be in the treasury by the 1st of January. This would do great injury to the public service. If a change must be made, to operate hereafter, let the time of assessment be changed, and the money be made payable into the Treasury by the 1st of December. This will enable the Fund Commissioners to be always in readiness to meet the January interest.

We have also received the following statement of the debt of the State on all accounts, up to the present time:

Bonds issued, and authorized to be issued, for the several Railroad Companies.

Name of Co. authorized.	Amount issued.	Am't due.
Pacific R. R. \$7,000,000	\$7,000,000	
Pacific S. Br. 4,500,000	2,800,000	\$1,700,000
Han. & St. Jo. 3,000,000	3,000,000	
Nor. Missouri. 5,500,000	4,350,000	1,150,000
St. L. & Iron M 3,600,000	3,501,000	99,000
Cairo & Fulton 650,000	650,000	
Platte County. 700,000	300,000	400,000
	\$24,950,000	\$21,601,000
		\$3,349,000

Am't bonds issued to Railroad Co's as

above stated is shown to be \$21,610,000

Add State debt proper 602,000

Add revenue bond issued 400,000

Add am't forfeited by North Missouri. 1,150,000

Add am't forfeited by Iron Mountain.. 99,000

Add amount due Platte County 400,000

Add amount due South-west Branch.. 1,700,000

..... \$25,952,000

Balance unappropriated by Legislature 4,048,000

..... \$30,000,000

It will be seen that the total amount which may be applied, by legislation, to the aid of railroads,

is \$1,048,000. The "revenue bonds issued" amounting to \$400,000, are redeemable in the early part of 1861; and in addition to this sum there are bonds appropriated, but not issued, to the North Missouri Railroad, amounting to \$1,150,000, and \$99,000 to the Iron Mountain road. Both these roads stand forfeited to the State; and should it be the pleasure of the Legislature, they might be appropriated to other railroads. But in the present temper of the Legislature this is not likely to be done.

The railroad feeling at Jefferson City is decidedly better than it was at the close of the last session. The plan most discussed, and which finds a good deal of favor, proposes to give the Pacific road \$1,500,000; the extension of the Iron Mountain road, \$1,000,000; the Missouri Valley road, \$1,000,000; and to reinstate the North Missouri road, by relieving it from forfeiture, thereby giving it the control of the bonds already secured to it by law. Something of this kind will be pressed by the friends of the roads, as a compromise, and they should be willing to give and take as far as possible.—*St. Louis Republican, Dec. 2.*

South Carolina Railroad.

The income of this road for October, 1859, was as follows: Freight, \$114,345 35; passage, \$43,502 99; mails, \$1,250; minor sources, \$1,413 12. Compared with the same month last year we have the following results: Increase, \$12,472 74; in down passage, \$6,053 85; in up freight, \$3,845 70—total, \$27,372 29. Decrease in down freight and minor sources, \$18,634 17; net difference in favor of October, 1859, \$8,738 12.

The receipts of cotton for October, 1859, were 58,653 bales; for October, 1858, 73,164; for the ten months, ending October 31, 1859, the receipts 459,316; for the same period in 1858, 325,825. Difference in favor of 1858, 66,509 bales.

The comparative statement of the receipts of other produce is as follows:

	1858.	1859.
Merchandise, bales.....	8,293	8,670
Grain, bushels.....	264,433	118,496
Flour, barrels.....	61,803	33,599
Flour, sacks.....	112,640	58,068
Naval Stores, barrels.....	14,204	29,777
Live Stock, head.....	8,924	9,960

The income of the first ten months, 1859, as compared with that of the corresponding period last year, shows the following results: Increase in up passage, \$45,201 30; in down passage, \$33,342 84; in up freight, \$74,765 15; in minor sources, \$573 99. Decrease in down freight, \$87,876 07. Difference in favor of the 10 months, 1859, \$66,007 22.—*Columbia Guardian.*

Knightstown and Shelbyville Railroad.

The Indiana Central and Jeffersonville companies propose to unite in the re-construction of the road from Knightstown to Shelbyville, to be operated by the two companies in the transportation of freights, chiefly between Louisville and the East. The route will be from Jeffersonville to Edinburg, over an arm of the Jeffersonville line to Shelbyville, where the Indianapolis and Cincinnati road is crossed, and from thence to Knightstown to the Indiana Central. The new route will save about half of the distance between Edinburg and Knightstown, which now has to be traveled through Indianapolis.

Phila., Wilmington and Baltimore Railroad.

During the twelve months ending the 1st of November, the following amount of freight has been carried over the Philadelphia, Wilmington and Baltimore Railroad, exclusive of that which passed over the Delaware branch: Merchandise, 171,520 tons; coal, 5,643 do.; lime, 297,700 bushels; pig and bar iron, 6,399 tons; iron ore, 2,419 do.; live stock, 6,768 do.; lumber, 10,266 do.; barrels of flour, 152,360 do.—making the gross amount of tonnage 218,831 tons. During the same time there were brought to Philadelphia from points this side of Wilmington, 765,300 gallons of milk.

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (.....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.			or projected.	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.			
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.		Engines.	Cars.			Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Gross.		Dividends.	Price of shares.
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.			
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.		
ALABAMA.																						
30 Jun. '59	43.3	—	—	72.3	3	2	19	Alabama and Florida	1,086,278	*	—	539,396	473,500	101,205	1,127,174	27.3	—	59,430	22,359	—	—	
28 Feb. '59	30.3	—	—	58.1	2	2	19	Alabama and Mississippi	461,505	30,991	—	335,010	109,500	21,632	518,965	30.3	—	55,791	31,852	—	—	
31 May '59	99.2	—	—	68.4	7	7	84	Ala. and Tennessee Rivers	2,101,007	144,549	—	1,054,915	713,226	212,496	2,264,468	99.2	—	155,628	78,907	—	—	
30 Jun. '59	57.0	—	—	171.3	—	—	—	Mobile and Girard	1,500,000	—	—	—	—	—	—	57.0	—	76,773	21,006	—	—	
1 Jan. '59	319.2	14.7	—	213.0	25	18	361	Mobile and Ohio	7,252,801	681,859	114,894	3,441,859	4,051,547	726,546	8,360,702	319.2	—	769,787	420,000	—	—	
28 Feb. '59	88.5	28.4	—	296.8	20	14	272	Montgomery and West Point	1,819,403	279,435	100,000	1,419,672	922,621	18,956	2,462,492	292.0	—	446,153	211,880	6	—	
16 Dec. '59	—	—	—	26.1	—	—	—	North East and South West	728,000	—	—	105,760	—	—	—	—	—	—	—	—	—	
—	—	—	—	28.1	—	—	—	Tennessee and Ala. Central	—	—	—	—	—	—	—	—	—	—	—	—	—	
ARKANSAS.																						
30 Nov. '58	38.5	—	—	107.5	—	—	—	Cairo and Fulton	553,877	*	—	351,524	446,000	10,725	511,949	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	Memphis and Little Rock	—	—	—	—	—	—	—	—	—	—	—	—	—	
30 Sep. '58	22.5	—	—	41.8	—	—	—	Sacramento Valley	1,547,100	*	—	791,100	756,000	—	1,547,100	22.5	—	185,108	102,726	—	—	
CALIFORNIA.																						
31 Jan. '59	23.9	—	—	—	3	6	30	Danbury and Norwalk	333,237	49,773	—	279,050	85,000	3,502	404,622	23.9	—	56,044	20,618	6	—	
30 Sep. '59	122.4	—	—	75.1	16	20	250	Hartford, Provid. and Fishkill	3,903,455	302,511	—	1,936,740	1,510,500	319,443	4,323,922	122.4	246,523	333,500	152,777	—	—	
31 Aug. '59	61.4	10.6	—	—	—	—	—	Hartford and New Haven	3,108,018	254,000	102,880	2,350,000	964,000	16,463	3,932,432	72.0	314,763	723,460	204,134	10	124	
31 Dec. '58	74.0	—	—	—	11	19	212	Housatonic	2,438,847	*	8,559	2,000,000	278,500	76,675	2,555,837	159.0	—	271,273	66,330	—	—	
31 Dec. '58	57.0	—	—	—	7	15	178	Naugatuck	1,578,301	*	—	1,031,800	437,550	30,713	1,708,802	57.0	—	199,836	314,068	—	—	
30 Nov. '58	62.3	—	—	—	—	—	—	N. Haven, N. London and Ston.	1,470,661	*	11,050	738,538	757,000	—	1,488,538	60.1	—	76,758	8,946	—	—	
31 Dec. '58	46.4	8.8	—	—	—	—	—	New Haven and Northampton	1,400,000	*	—	922,500	600,000	—	1,481,723	55.2	—	172,369	70,487	5	—	
30 Nov. '58	66.0	—	—	—	5	5	167	N. Lond., Willimant. & Palmer	1,561,241	*	5,453	510,900	1,055,600	272	1,575,147	66.0	91,134	104,464	30,512	—	—	
31 Mar. '58	62.2	63.8	—	29	72	368	—	New York and New Haven	4,593,698	661,547	—	3,000,000	2,219,002	79,722	5,582,071	74.0	432,024	932,550	231,560	8	—	
31 Mar. '58	59.0	7.0	—	—	—	—	—	Norwich and Worcester	2,245,406	176,792	—	2,522,300	324,130	59,614	2,595,672	66.0	—	265,417	44,587	41	—	
DELAWARE.																						
31 Dec. '58	71.0	—	—	19.4	—	—	—	Delaware	1,146,311	*	—	252,561	735,000	123,750	1,146,311	71.0	—	66,628	—	—	—	
30 Nov. '58	14.3	—	—	—	—	—	—	Newcastle and Frenchtown	699,514	*	25,000	762,320	—	—	767,278	14.3	—	19,895	—	—	—	
FLORIDA.																						
—	59	154.2	—	—	—	—	—	Florida	—	*	—	—	—	—	—	—	—	—	—	—	—	
30 Apr. '58	—	—	—	45.1	—	—	—	Florida and Alabama	292,291	*	—	317,847	154,000	70,620	543,237	—	—	—	—	—	—	
30 Jun. '59	31.3	—	2.0	28.6	2	1	24	Flo., Atlantic and Gulf Central	396,310	28,608	—	205,781	204,600	164,670	594,836	19.3	—	10,255	1,504	—	—	
—	26.5	3.9	—	227.0	—	—	—	Pensacola and Georgia	—	—	—	—	—	—	—	29.4	—	—	—	—	—	
GEORGIA.																						
31 July '58	86.7	—	—	—	15	11	105	Atlanta and La Grange	1,179,381	*	—	1,000,000	187,500	23,384	1,459,075	86.7	—	362,061	197,357	7 1/2	—	
—	59	30.0	—	133.5	—	—	—	Atlantic and Gulf—M. Trunk	—	—	—	—	—	—	—	30.0	—	—	—	—	—	
31 Dec. '57	53.0	—	—	—	—	—	—	Augusta and Savannah	1,032,200	*	—	733,700	298,500	—	1,032,200	53.0	—	125,427	69,679	—	—	
30 Apr. '59	43.5	—	—	23.7	—	—	—	Brunswick and Florida	755,000	*	—	151,887	—	—	—	31.0	—	—	—	—	—	
30 Nov. '58	191.0	—	—	—	52	28	633	Central of Georgia	3,750,000	*	550,152	3,750,000	199,851	—	5,645,001	229.0	714,787	1,363,722	755,615	10	—	
31 Mar. '59	171.0	61.0	—	—	—	—	—	Georgia (and Bank)	4,174,492	*	829,550	4,150,000	373,000	—	7,368,665	202.0	—	1,154,621	544,263	4	—	
31 July '59	102.5	—	—	—	18	16	171	Macon and Western	1,500,000	*	5,073	1,438,800	52,500	—	1,851,721	102.5	—	325,192	163,124	7 1/2	100	
31 July '59	50.0	—	—	—	3	2	107	Muscogee	774,244	162,534	—	669,950	249,000	—	1,026,868	50.0	—	202,714	110,516	8	—	
1 May, '58	68.1	—	—	—	7	4	33	Savannah, Albany and Gulf	1,386,634	52,373	—	1,275,901	10,200	180,621	1,475,140	71.6	—	—	—	—	—	
31 July '59	106.1	56.5	14.8	44.3	15	18	166	South Western	3,165,000	*	—	2,254,000	631,000	—	—	147.2	171,758	547,876	337,760	—	—	
30 Sep. '58	138.0	—	—	—	52	24	705	Western and Atlantic	5,901,497	*	—	—	—	—	—	138.0	—	852,139	457,916	—	—	
ILLINOIS.																						
—	220.0	—	—	—	—	—	—	Chicago, Alton and St. Louis	10,000,000	—	—	3,500,000	4,500,000	—	10,000,000	220.0	—	—	—	—	—	
30 Apr. '59	138.0	—	—	—	62	31	990	Chic., Burlington and Quincy	6,068,054	1,400,872	680,158	4,629,340	2,990,000	—	8,149,084	210.0	—	1,044,573	171,515	—	—	
31 Dec. '58	45.0	—	—	—	6	14	101	Chicago and Milwaukee	1,799,894	67,889	120,000	988,000	762,865	188,085	2,050,065	45.0	14 mo.	243,282	135,284	—	—	
—	138.0	—	—	75.0	—	—	—	Chicago and Northwestern	—	—	—	4,250,000	6,350,000	2,500,000	13,330,000	138.0	—	—	—	—	—	
30 Jun. '58	181.8	—	—	—	58	57	960	Chicago and Rock Island	6,776,119	*	175,165	5,603,000	1,397,000	5,651	7,543,140	228.4	—	1,407,846	629,029	60 1/2	—	
10 Nov. '58	33.2	—	—	—	—	—	—	Fox River Valley	590,000	—	—	580,000	—	—	—	84.0	—	—	—	—	—	
31 Dec. '58	121.0	138.5	73.6	—	60	63	1,369	Galena and Chicago Union	8,027,473	1,311,917	211,003	6,026,400	3,783,015	292,466	10,300,517	326.5	808,231	1,547,561	630,328	4	67 1/2	
—	175.0	—	—	—	—	—	—	Great Western	5,022,926	—	—	1,600,000	3,088,426	334,500	5,022,926	175.0	—	—	—	—	—	
31 Dec. '58	454.8	252.5	—	113	96	2,305	—	Illinois Central	19,074,214	3,347,799	—	10,249,210	20,000,000	1,297,277	31,596,487	708.3	—	1,976,578	556,624	55 1/2	—	
—	—	—	—	81.5	—	—	—	Illinois River	—	—	—	—	—	—	—	—	—	—	—	—	—	
—	148.0	—	—	—	—	—	—	Ohio and Mississippi	4,870,598	*	—	1,780,295	3,292,403	—	—	148.0	—	—	—	—	—	
—	46.6	—	—	—	—	—	—	Peoria and Bureau Valley	—	—	—	—	600,000	—	—	oper by Chic.	—	—	—	—	—	
—	186.0	—	—	129.0	—	—	—	Peoria and Hannibal	—	—	—	—	—	—	—	oper by Chic.	—	—	—	—	—	
—	100.0	—	—	—	—	—	—	Peoria and Oquawka	5,400,000	*	—	1,569,889	2,200,000	—	—	186.0	—	—	—	—	—	
21 Dec. '58	100.0	—	—	—	—	—	—	Quincy and Chicago	1,978,555	*	—	800,000	1,200,000	—	2,000,000	100.0	oper by Chic.	—	—	—	—	
—	1.0	—	—	—	—	—	—	Rock Island Bridge	—	—	—	—	—	—	—	oper by Chic.	—	—	—	—	—	
31 Dec. '58	168.5	39.8	12.2	—	31	30	424	Terre Haute, Alton & St. Louis	7,608,958	628,487	—	3,026,903	5,035,615	741,040	8,865,252	208.3	—	823,767	—	—	—	
INDIANA.																						
—	108.0	—	—	—	—	—	—	Cincinnati and Chicago	2,080,433	*	—	1,196,679	1,006,125	—	—	108.0	—	—	—	—	—	
—	29.0	—	—	—	—	—	—	Cincinnati, Peru and Chicago	—	—	—	—	—	—	—	29.0	—	—	—	—	—	
31 Aug. '57	109.0	—	—	—	—	—	—	Evansville and Crawfordville	2,233,413	*	—	986,061	1,219,100	—	—	109.0	—	—	—	—	—	
1 Jan. '58	72.4	—	—	—	19	21	278															

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil."
 Running dots (....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.				or projected.	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
	Main Line.	Lateral and Branch Lines.	2d Track and Sidings.	Engines.		Cars.		Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.						
						Passenger.	Freight, etc.	Railroad and Appurtenances.		Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.				Gross.	Net.					
																				No.	No.	No.	No.	
M.	M.	M.	M.	No.	No.	No.									M.	M.	\$	\$	P. c.	P. c.				
MAINE.																								
31 Dec. '58	32.0			6.0	4	25	Androscoggin	645,271	*			145,787	511,500			32.0		30,957	17,263					
31 May, '59	55.0				9	10	128	Androscoggin and Kennebec	2,210,947		27,925	457,900	1,748,457	101,209	2,307,566	137.0		281,929	89,760					
30 Jan. '59	149.0		25.0		41	17	349	Atlantic and St. Lawrence	6,066,375	857,506		2,494,900	3,472,000	9,572	6,976,472	149.0	429,791	545,741	150,226	6				
31 Dec. '58	12.5				4	2	45	Bangor, Oldtown and Milford	175,232	*		135,000			175,516	12.5		33,050	16,530					
31 Dec. '58	63.0	9.0			12	11	169	Kennebec and Portland	2,871,264	*		1,107,526	1,763,738			72.6		145,074	70,746					
31 Dec. '58				23.0				Penobscot	308,413	*		180,000	143,678											
31 May, '59	54.7				4	10	93	Penobscot and Kennebec	1,611,413	104,019	78,014	555,228	1,206,900	128,576	1,890,604	54.7	oper. by	An. & K.	67,324					
31 May, '59	51.3				11	13	118	Portland, Saco and Portsmouth	1,494,792	*	5,208	1,500,000			1,500,000	51.3	141,664	208,299	104,029	6	96			
31 May, '59	37.0							Somerset and Kennebec	783,763	*		169,200	556,000			37.0		55,403	28,404					
31 May, '59	18.5			33.5				York and Cumberland	1,090,000	*		370,000	450,000	270,000	1,090,000	18.5								
MARYLAND.																								
30 Sep. '58	279.6	7.2			228	87	3,489	Baltimore and Ohio	20,019,286	3,538,360	2,981,982	13,111,500	10,668,645	412,483	29,400,161	280.8	3,626,905	3,856,485	1,325,280		68 1/2			
30 Sep. '58	30.0				7	33	167	Washington Branch	1,050,000			1,650,000			1,824,806	39.0	187,427	469,423	266,060	6	00			
31 Dec. '58	138.0	4.0			42	38	1,455	Northern Central	6,843,457	733,934	220,965	2,300,000	5,295,800	655,507	8,681,557	154.5	606,482	810,604	304,649		20 1/2			
MASSACHUSETTS.																								
30 Nov. '58	21.2				6	4	80	Berkshire	600,000	*		600,000			600,000	oper. rat. by	Housat.	42,000	7					
30 Nov. '58	26.8	1.8	43.6		20	26	544	Boston and Lowell	2,239,253	183,345		1,830,700	440,000	21,965	2,619,210	28.6	274,656	407,399	166,109	6	90			
31 May, '59	74.3	7.4	50.8		30	39	540	Boston and Maine	3,847,004	368,357	105,937	4,076,570			81.7		818,681	399,657	7 1/2	100 1/2				
31 Dec. '57	74.5		2.1					Boston and New York Central	3,622,203	69,941		2,241,000	374,550	1,299,039	3,923,319	74.5		88,483	7,052					
30 Nov. '58	43.5	12.0	22.8		22	27	200	Boston and Providence	3,333,807	191,175		3,160,000	195,220		3,355,220	55.5	292,649	527,764	259,176	6	103			
30 Nov. '58	44.7	24.0	59.2		31	64	607	Boston and Worcester	4,251,682	437,416	100,000	4,500,000	600,000	60,774	5,678,160	68.7	498,325	923,233	332,270	6	100 1/2			
30 Nov. '58	46.1	1.1	2.7		7	10	100	Cape Cod Branch	907,781	123,864		681,689	144,600	114,417	75.4	158,815	238,390	90,877	2					
30 Nov. '58	50.0	2.4	8.9		12	13	330	Connecticut River	1,614,364	187,558	20,000	1,591,100	223,000	28,000		47.2	78,282	106,846	49,483					
31 May, '59	44.2	36.4	19.4		28	46	320	Eastern	4,134,475	456,223	262,102	2,853,400	2,105,500	172,218	5,128,719	100.5	373,641	663,135	319,526		57 1/2			
30 Nov. '58	19.9	1.3	2.8					Essex	742,592	4,416		299,107	277,961		774,492	oper. rat. by	Eastern	12,295		40 1/2				
30 Nov. '58	50.9	16.8	70.1		29	28	643	Fitchburg	3,189,851	350,149		3,540,000			131,453	67.7	303,392	572,967	278,855	6	99			
30 Nov. '58	14.0		2.4		3	3	45	Fitchburg and Worcester	293,658	40,226		210,000	64,200		65,735	26.0	35,557	35,476	12,849	6				
30 Nov. '58	9.0		9.0					Grand Junction (Boston)								9.0								
30 Nov. '58	24.9		2.0					Hampshire and Hampden	598,299			292,651	200,000	105,649		oper. r. by N.	H. & N. h.	23,294						
30 Nov. '58	12.4		2.3		2	3	28	Lowell and Lawrence	332,883	30,275		300,000	100,000		12.4	22,455	42,784	18,540	3					
30 Nov. '58	14.6		17.1		12	11	301	Nashua and Lowell	558,919	95,684		600,000			14.6	123,395	180,085	71,505	8					
30 Nov. '58	20.1	1.4	1.1		7	18	144	New Bedford and Taunton	490,059	51,906		600,000		12,000	21.5	52,220	137,914	28,098						
30 Nov. '58	26.9		2.4		5	9	43	Newburyport	570,086	59,096		220,240	198,520	221,335	36.0	20,236	44,974	9,257						
30 Nov. '58	8.6		0.4	23.4				N. York and Boston Air Line	416,133			223,176	673,210	4,643	8.6	18,093	16,606	1,647						
30 Nov. '58	79.5	7.8	25.1		25	46	359	Old Colony and Fall River	3,028,445	334,503		3,015,100	161,500	30,935	3,748,970	87.3	365,197	551,399	257,060	6	107 1/2			
30 Nov. '58	18.5		0.8		1	2	1	Pittsfield and North Adams	432,430	11,247		450,000			oper. r. by Western		27,000							
30 Nov. '58	43.4	14.9			12	18	374	Providence and Worcester	1,534,911	254,565		1,550,000	300,000	46,500	1,897,369	43.4	199,595	270,492	110,344	6	97			
30 Nov. '58	10.9		1.7		3	3	108	Salem and Lowell	366,987	82,543		243,305	220,000		16.9	29,822	50,856							
30 Nov. '58	21.9							Stockbridge and Pittsfield	444,600	4,100		448,700			450,000	oper. r. by Housat.		31,409	7					
30 Nov. '58	7.1			35.5				Troy and Greenfield	329,741			288,428	169,000	9,854										
30 Nov. '58	69.0	8.0	5.5		12	8	194	Vermont and Massachusetts	3,309,287	207,343		2,214,225	1,003,675	6,500	77.0	99,256	225,079	105,037		11				
30 Nov. '58	173.4		94.3		72	47	1,149	Western (incl. Alb. & W. S. etc.)	9,785,569	1,095,713	15,120	5,150,000	6,032,520	243,800	13,528,766	210.6	944,951	1,700,298	809,363	8	110			
30 Nov. '58	45.7		8.8		10	8	145	Worcester and Nashua	1,279,936	140,961		1,141,000	200,000	31,210	1,416,555	45.7	152,803	185,127	83,849	5 1/2				
MICHIGAN.																								
1 Jan. '59	17.3				27	2	1	Bay de Noquet and Marquette	built and	equipped by	G. Tr. & R.	R. Co. of	Canada											
30 Sep. '59	57.0							Chic. Detroit & Can. G. T. Junc.	8,270,623	647,596		2,329,155	4,707,500		9,008,269	188.0		365,038	144,270					
1 Jan. '59	188.0							Detroit and Milwaukee																
				183.0				Flint and Pere Marquette																
								Grand Rapids and Indiana																
31 May, '59	284.0				98	123	1,528	Michigan Central	12,847,238	*	1,149,009	6,057,840	8,284,063	119,089	14,548,411	329.0		2,417,915	886,697		39			
1 Mar. '59	246.0	293.0			91	135	976	Mich. S. th'n & N. th'n Indiana	14,517,892	1,607,906	1,312,534	8,975,400	9,343,000	816,460	19,595,407	639.0		2,019,425	777,273		6 1/2			
MINNESOTA.																								
								Minnesota and Pacific					600,000											
								Southern Minnesota					375,000											
								Minneapolis and Cedar Rapids					600,000	191,130										
								Minnesota Transit					600,000											
								Root River Valley																
MISSISSIPPI.																								
1 May, '59	146.5				41.7	11	6	Mississippi Central	3,395,965	*		1,641,947	1,346,363	383,129	3,717,469	146.5		239,585	117,371					
1 Oct. '59	71.4				27.8	7	4	Mississippi and Tennessee	1,254,894	159,018		798,285	456,949	275,060	1,974,444	59.7		176,462	116,433					
31 Dec. '58	83.2				90.4			Southern Mississippi	2,750,000	*		1,000,000	1,400,000		83.2		250,047	121,659						
MISSOURI.																								
30 Nov. '58	12.0				65.5	1		Cairo and Fulton	281,645	9,200		50,493	327,000	50,892	128,386	12.0								
1 July '58	171.0				36.0			Hannibal and St. Joseph	8,164,559	330,422		1,064,773	6,830,500	37,500	8,533,228	171.0								
31 Oct. '58	168.8				68.0			North Missouri	5,396,527	235,994		2,020,000	3,250,000	48,006	6,018,106	168.0		256,159						
								Platte County																
23 Feb. '59	163.0	19.0		119.0	26	26	413	Pacific	8,621,659	614,782		3,330,657	8,203,000	754,837	12,288,404	182.0		676,310	301,503					
31 Oct. '58	19.0			264.0				South-Western Branch	1,226,010			66,974	1,400,4											

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

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Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.							Earnings.						
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected.	Engines.	Cars.			Property and Assets.			Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.		Dividends.	Price of shares.
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.			
	M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.	
NEW YORK.																						
30 Sep. '58				140.0				Albany and Susquehanna	227,356			275,793		8,697								
30 Sep. '58	32.9		3.3		5	12	53	Albany, Vermont and Canada	1,557,502	136,038		439,005	1,575,099	50,000		32.9	93,894	84,119	11,215			
30 Sep. '58	38.3		34.0					Albany and West Stockbridge	2,289,934			1,000,000	1,289,934			ope. r. by W. estern.				6		
30 Sep. '58	34.9	2.6		73.6	4	6	39	Black River and Utica	1,153,099	81,405		804,648	662,500	52,570		37.5	54,424	60,524	32,413			
30 Sep. '58	14.6		1.6					Blossburg and Corning	496,661			250,000	220,000			14.8	16,530	23,554	9,204			
30 Sep. '58	142.0	73.6	13.6		26	32	353	Buffalo, New York and Erie	2,975,325			680,000	2,490,593	164,938		230.0	355,480	429,754	128,122			
30 Sep. '58	63.3		18.0		28	34	312	Buffalo and State Line	2,460,251	312,736		1,913,000	1,049,000	172,378		87.8	356,145	514,116	359,609			
30 Sep. '58	24.6		38.1					Cayuga and Susquehanna	1,016,058			687,000	426,000	7,042		34.6	59,539	59,421	5,092			
30 Sep. '58	17.4		2.1					Chemung	400,000			380,000	70,000			ope. r. by N. Y. & E. R. eceivers.			24,000			
30 Sep. '58	46.8		2.9		10	8	83	Elmira, Canandaigua & N. Falls							ope. r. by Re. ceivers.							
30 Sep. '59				63.2				Erie and New York City	297,708			352,742	14,000	28,716	396,416	ope. r. b. B. N. Y. & E.						
30 Sep. '59				15.0				Genesee Valley	91,839			59,374	38,500	23,404		17.3	49,519	58,207	10,840	6		
30 Sep. '58	17.3		0.5					Hudson and Boston (West'n)	148,000	27,000		175,000				150.9	700,224	1,626,412	594,639		394	
30 Sep. '58	144.0		106.5		57	107	537	Hudson River	10,146,617	1,182,372		3,758,466	8,942,000	455,008								
30 Sep. '58				73.8				L. Ontario, Auburn & N. York	74,203			75,771										
30 Sep. '58				182.0				L. Ontario and Hudson River	3,497,538	178,320		2,715,186	870,000	115,856		101.5	213,414	334,038	111,531		11	
31 Mar. '59	84.0	2.5		8.5	19	34	185	Long Island	2,211,659	354,611	1,000	1,852,715	639,497	144,566		555.9	3,068,194	6,528,412	3,041,120	8	80	
30 Sep. '58	297.8	258.1	313.8		218	258	2,899	New York Central	25,475,490	5,257,077	8,193,000	24,182,400	14,402,635	43,079	40,633,635	495.0	3,000,369	5,151,616	1,086,575		81	
30 Sep. '58	446.0	19.0	282.5		210	183	2,684	New York and Erie	29,908,749	4,148,585	973,083	11,000,000	26,371,511	1,707,575	39,079,086	152.9	621,747	975,535	358,792		94	
30 Sep. '58	180.8	2.1	30.9		33	89	430	New York and Harlem	7,303,339	634,777		5,717,100	5,151,287	147,640		12.8	311,404	410,806	127,013			
30 Sep. '58	118.0	3.8	17.7		28	8	417	Northern (Ogdensburg)	4,086,712	702,079			1,494,000			35.9	68,445	115,990	61,347	8		
30 Sep. '58	55.9		2.2		7	6	44	Owego and Syracuse	600,919	100,462		396,340	197,000	16,415		75.4	98,686	94,385	44,715			
30 Sep. '58	75.4		2.0		6	4	33	Pottsdam and Watertown	1,525,646	63,382		663,077	818,500	180,138		46.2	59,380	208,223	33,946			
30 Sep. '58	25.2		2.1		5	13	70	Rensselaer and Saratoga	743,977	156,573		610,000	140,000			18.4	32,980	37,280	18,500	2		
30 Sep. '58	13.4		1.3	32.6				Rochester and Genesee Valley	653,539			555,450	150,000			18.0	17,620	12,025				
30 Sep. '58	18.0		1.0		2	2	32	Sacketts Harbor and Ellisburg	371,556	17,714		187,485	278,400	56,810		ope. r. by Ken. & Sar. R. eceivers.			30,150	24		
30 Sep. '58	21.0		1.6		9	12	84	Saratoga and Schenectady	430,564			300,000	86,500			54.5	107,506	139,388	32,196			
30 Sep. '58	40.9	6.6	3.9					Saratoga and Whitehall	820,518	74,904		600,000	395,000	6,456								
30 Sep. '58				13.2				State Island	40,000			40,000										
30 Jun. '59	11.0							Brooklyn and Jamaica	369,856			284,850	85,000			ope. r. by Lo. ng Isl.			37,500	9		
30 Sep. '58	81.3		7.1		13	12	117	Syracuse, Binghampt. & N. Y.	2,857,607			1,200,130	1,500,000	59,418		81.3	148,240	177,627	74,359			
30 Sep. '58	27.2		3.2	7.7	7	4	65	Troy and Boston	1,296,302	125,887		568,297	797,500	231,083		27.2	61,614	125,042	53,289			
30 Sep. '58	6.0		0.1					Troy and Greenbush	253,658	36,073		275,000				ope. r. by Ind. & A. River.				6		
30 Sep. '58	2.1		2.1					Troy Union	732,114			30,000	680,000			ope. r. by other Co's.						
31 Dec. '58	96.8		11.0		7	11	298	Watertown and Rome	2,159,295		28,000	1,498,500	690,000	85,071	2,278,611	96.8	215,695	397,712	187,000	6		
NORTH CAROLINA.																						
—	58	95.2	2.0					Atlantic and North Carolina	1,850,000			1,600,000	400,000			95.2						
—	58	23.0						North Carolina	4,235,000			4,000,000				23.0						
—	59	97.0						Raleigh and Gaston	1,240,241			973,300	126,200			97.0						
30 Sep. '58	161.0				22	20	144	Wilmington and Manchester	2,548,363		223,150	1,125,315	973,000	259,621	2,830,239	171.0	323,069	382,191	159,124			
30 Sep. '58	161.9				24	32	144	Wilmington and Weldon	2,869,223		107,060	1,340,213	791,055	102,391	3,114,954	171.0	323,069	477,554	235,201	8		
15 Mar. '58				43.0				Western North Carolina	190,793		4,700	290,212		70,860	364,072							
OHIO.																						
31 Dec. '58	118.2				17	12	208	Atlantic and Great Western	613,231			866,939		77,294								
1 Aug. '58	137.0				41	39	508	Bellefontaine and Indiana	3,008,919		11,000	1,879,370	1,274,828	39,028	3,370,281	118.2		332,226	146,812			
31 Mar. '59	60.3				22	28	432	Central Ohio	5,578,518	806,633	106,133	1,627,906	3,969,300	1,252,440	6,894,557	141.0		570,092	164,097			
—	59	37.0			62.1			Cine. and Indianapolis	2,648,266	504,892	26,500	2,155,800	1,411,000	32,618	3,650,710	60.3		489,437	249,666	7	63	
1 May. '59	131.8				31.0	16	10	Cine. and Indianapolis	6,250,841			2,441,176	3,032,000	228,973		131.8	304,168	190,745	19,180		49	
31 Dec. '58	135.4	5.8			42	31	439	Cleveland, Columbus and Cine.	4,087,571	684,955	67,422	4,746,100	38,000	8,242	5,343,275	141.2		1,113,639	575,159	7	93	
31 Dec. '58	67.0							Cleveland and Mahoning	1,920,953			580,000	1,202,300	161,200	1,943,500	67.0		237,106	142,855			
31 Dec. '58	95.4	1.2	37.9		31	39	453	Clev. Painesville & Ashtabula	3,338,114	620,532	523,000	3,000,000	1,367,000	119,812	4,558,932	96.0	402,935	1,251,537	596,948	15		
30 Nov. '58	101.0	102.5			42			Cleveland and Pittsburgh	9,320,288			3,942,368	4,916,325	653,821	9,061,102	203.5	643,418	772,093	332,063	4	74	
30 Apr. '59	109.2	79.4			32	52	430	Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720	358,005	7,558,918	188.6		795,155	414,450	6	194	
31 Dec. '58	61.4			53.0	5	6	99	Clev., Zanesville and Cincln.	1,574,693			269,673	575,250	632,486		61.5	75,120	66,128	19,763			
31 Dec. '58	72.0			31.0	6	9	103	Columbus and Indianapolis	2,555,000			750,000	1,600,000	205,000		72.0	144,000	84,000	17,760			
30 Nov. '58	54.5		10.4					Columbus and Xenia	1,376,250	392,909	112,734	1,490,000	290,700	50,500	1,965,539	ope. r. by W. L. t. Miami.				8	84	
31 Dec. '58	72.0			72.0				Dayton and Michigan	3,746,000			1,620,000	2,126,000			72.0	144,000	134,569	66,779			
31 Aug. '58	36.6				5	3	87	Dayton and Western	930,262	104,912		289,692	700,000	90,482	1,080,174	36.6		125,940	66,253			
31 Dec. '58	16.0			47.0	3	2	71	Dayton, Xenia and Belpre	860,496			437,838	422,658			16.0	40,064	64,000	23,000			
31 Dec. '58	45.																					

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (.....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected.	Engines.	Cars.			Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trailers.	Earnings.				
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.	Dividends.			
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.			
PENNSYLVANIA, (Continued.)																							
31 Dec. '58	28.0						Philadelphia and Trenton	1,000,000			1,000,000				1,000,000	28.0	oper. oy	Cam. &	Amboy	7			
30 Nov. '58	98.0	6.0			31	60	Phila., Wilmington and Balt.	7,235,522	762,225	76,081	5,000,000	2,547,379	198,961		8,782,996	194.0		1,095,847	344,152	5			
31 Oct. '57	48.0						Pittsburg and Connellsville	2,286,606			1,031,173	1,100,000	513,403		2,644,756	48.0		45,586	4,318				
30 Sep. '57	10.3						Pittsburg and Erie									10.3							
31 Dec. '58	167.0				94	96	Pittsburg, Ft. Wayne & Chicago	14,631,110		91,100	6,260,555	9,029,765	1,057,594		17,046,252	467.0	1,394,029	1,567,232	601,658				
30 Sep. '57	31.0						Pittsburg and Steubenville	1,947,462			1,221,277	280,000											
	25.0						Schuylkill Valley									25.0							
1 Jan. '59	40.2						Sunbury and Erie	5,517,841	37,933		3,903,843	527,000	309,591		8,876,132	40.3							
	29.7						Tioga	1,093,263															
31 Mar. '59	78.0						Williamsport and Elmira	3,650,682	380,847		1,500,000	2,361,973	161,272		4,148,920			191,970	96,308				
RHODE ISLAND.																							
31 Aug. '58	50.0		2.0		9	13	N. Y., Providence and Boston	2,158,000			1,508,000	366,500			2,158,000	50.0	147,231	208,439	96,571	5			
30 Nov. '58	13.6		0.5			3	Providence, Warren & Bristol	434,698	1,588		287,917	109,937	36,139			13.6	23,514	23,005	1,278				
SOUTH CAROLINA.																							
31 Dec. '58	13.2	1.5			182.4	2	Blue Ridge	2,126,539			1,916,515	217,577			2,134,092	13.2							
31 Dec. '58	54.9				47.4	4	Charlotte and Savannah	801,615	34,372	250,000	708,265	195,266	197,905		1,099,536	51.9							
31 Dec. '58	109.6				13	9	Charlotte and South Carolina	1,719,045			1,201,000	384,000				109.6		283,263	151,536	0			
	40.3						Cheraw and Darlington	600,000			400,000	200,000				40.3							
1 Jan. '59	143.2	21.3					Greenville and Columbia	2,439,709	324,161		1,429,008	1,145,000	343,546		2,919,554	143.2		341,190	125,971				
31 Aug. '58	22.5						Kings Mountain	196,230			200,000				200,000	22.5							
31 July '58	32.0						Laurens	543,403			400,000	106,213			575,729	32.0		27,568	8,527				
28 Feb. '59	102.0						North-Eastern	2,011,652			985,743	960,410	108,172		2,067,325	102.0		230,014	96,145				
31 Dec. '58	136.0	106.0			62	59	South Carolina	5,517,384	1,103,130	374,060	4,179,475	2,770,463	193,086		7,701,337	242.0		1,501,008	820,511	7			
31 July '58	25.1				41.9		Spartanburg and Union									25.1							
TENNESSEE.																							
	30.0						Cleveland and Chattanooga	867,210															
	46.7						Edgefield and Kentucky																
30 Jun. '58	110.8						East Tennessee and Georgia	3,376,943			1,289,155	1,910,688	278,319		3,501,197	110.8		264,959	156,195				
30 Jun. '58	130.3				10	13	East Tennessee and Virginia	2,629,418	117,512		629,800	1,968,950	406,659		3,041,940	130.3		191,198	95,251				
30 Jun. '58	271.0	28.0					Memphis and Charleston	5,276,573	694,776	109,066	2,255,115	2,594,000	837,992		6,354,752	271.0		1,336,812	775,036				
	82.0						Memphis and Ohio	3,200,000								82.0							
30 Jun. '59	73.0						Memphis, Clarksv. & Louisv.	195,364															
30 Apr. '59	48.1				24.9	4	Mississippi Central and Tenn.	1,023,470			309,562	624,500	118,659		1,052,721	48.1			43,436				
30 Nov. '58	34.2				2	3	McMinnville and Manchester	565,459			140,097	406,000			565,459	34.2		run by	Nash. & Chattanooga				
30 Nov. '58	151.0	8.0			38	20	Nashville and Chattanooga	3,733,472		160,000	2,262,405	1,674,000	85,944		4,121,557	151.0		641,552	279,267	3			
							Nashville and Northwestern	1,000,000															
30 Jun. '58	43.6				68.3		Tennessee and Alabama	955,097			309,754	626,559	83,037			43.6		55,775	29,405				
	15.0				9.5		Winchester and Alabama								operated			Nash. & Chatt.					
TEXAS, (all aided by State).																							
	32.0				158.0		Buffalo Bayou, Braz. & Col'do									32.0							
	56.0				184.0		Galveston, Houston & Henderson									56.0							
	43.0				31.0		Houston and Brazoria									43.0							
1 May '59	50.0				306.0	2	Houston and Texas Central	1,132,747			1,270,123	335,000	128,205		1,691,443	50.0		76,938					
	25.0				110.0		San Antonio & Mexican Gulf									25.0							
	28.0				756.0		Southern Pacific									28.0							
VERMONT.																							
31 Aug. '58	90.7				19.6	7	Connect. & Passumpsic Rivers	2,345,724	185,421		1,200,000	800,000			90.7	95,256		171,625	67,853				
31 Aug. '58	119.9		13.0		26	18	Rutland and Burlington	3,989,708	554,275	92,559	2,233,376	3,145,001	1,013,764		6,392,141	119.9	395,762	354,258	81,561				
31 Aug. '58	62.0		3.4		10	6	Rutland and Washington	1,771,683			960,000				1,780,683	62.0		154,997	174,429	1,566			
31 Aug. '58	122.0		20.0		42	28	Vermont Central	8,402,055			5,000,000	3,863,000	1,423,299		10,276,299	122.0		569,323	705,837	127,388			
31 Aug. '58	47.0						Vermont and Canada	1,380,693			1,350,000				1,380,693	47.0		oper. by Vt. Central					
31 Aug. '58	23.7		0.7		4	4	Vermont Valley	1,212,274	89,612		515,664	793,200			1,308,864	23.7		47,324	43,996	10,493			
31 Aug. '58	54.0	10.5					Western Vermont	1,083,500			332,000	700,000			1,083,500	54.0		oper. r.b. Troy & Boxt.	55,868				
VIRGINIA.																							
31 Aug. '58	36.0				127.4		Alex. Loudoun & Hampshire	902,787			844,653		58,134		902,787	36.0							
30 Sep. '58	75.8				63.5	9	Manassas Gap	3,262,990	209,901		8,038,500	418,000	292,956		3,939,729	75.8							
31 Mar. '58	79.2						Norfolk and Petersburg	1,696,097	64,027	10,500	1,346,876	456,893			1,803,769	79.2							
30 Sep. '58	103.5						Northwestern Virginia	6,322,150			468,006	5,719,229				103.5		345,427	248,004	108			
30 Sep. '58	112.5	9.1	4.5	36.0	12	10	Orange and Alexandria	4,339,375			1,899,329	1,480,500	371,590		5,134,475	97.8		150,536	258,875	151,872			
30 Sep. '58	123.3	10.1			19	13	Petersburg and Lynchburg	3,040,636	374,996		1,365,300	1,881,500	292,842		4,745,256	123.3							
31 Dec. '58	59.2	21.3			14	17	Petersburg and Roanoke	988,791	192,940		883,200	127,427	34,344		1,318,057	59.2		310,988	186,085	5			
30 Sep. '58	140.5	1.8			23	18	Richmond and Danville	3,588,653			1,981,017	1,126,407	25,133		4,424,671	140.5		263,693	491,674	267,192			
31 Mar. '58	75.1						Richm., Frederick & Potomac	1,985,579		52,800	1,033,600	680,115	116,550		2,183,232	75.1		269,126	145,656	7			
30 Apr. '59	22.2	2.7			10	16	Richmond and Petersburg	1,087,949			836,100	201,408	34,681		1,250,186	22.2	79,921	157,542	82,485	6			
30 Sep. '58	38.3				14.3	2	Richmond and York River	488,190	22,810		657,812	85,000			742,812	38.3							
31 Aug. '58	80.0				10	11	Seaboard and Roanoke	1,360,988		33,700	644,000	473,940	59,776		1,449,037	80.0		240,817	105,725				
30 Sep. '58	178.0	17.0			10.9	27	Virginia Central	4,835,729	527,181		3,132,445	1,485,346	43,605		8,816,522	178.0	304,195	65					

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(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F.," Sinking Fund. "var.," that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	
Alabama and Florida :					Chicago and Milwaukee :					Eaton and Hamilton :					
Mortgage	\$300,000	7	1867		1st Mortgage (convertible)	\$512,000				1st Mortgage	\$757,734	†	var.		
Convert. (gnar. by Dir.)	150,000	7	1863		Income	62,000				Erle and North-E.	149,000				
Land Mortgage	22,500	7	1869		Real Estate 2d Mortgage	183,864	1863			Exchanged for Buff. and St. L.					
Alabama and Miss. Rivers :					Chicago and Rock Island :					Evansville and Crawfordsville :					
State (Ala.) Loan	123,171				1st Mortgage	1,297,000	7	1870							
Mortgage	109,500				Chic. St. Paul and Fond du Lac					Florida :					
Alabama and Tenn. Rivers :					1st Mortgage (on 1st Division)	3,000,000	†			Internal Improvement (State)	1,655,000	7	1891		
1st Mortgage convertible	526,000	7	1872		2d Mortgage (1st Land Grant)	3,000,000	18			Free Land, 2d Mortgage	1,500,000	8	1891		
2d Mortgage	225,705	8	1864		Real Estate	350,000	18			Florida and Alabama :					
Albany, Vt. and Canada :					Cincinnati, Hamilton and Dayton :					Internal Improvement (State)		7	1791		
1st Mortgage	500,000	7	1867		1st Mortgage	461,000	1867	92		Free Land, 2d Mortgage		8	1791		
Albany and West Stockbridge :					2d Mortgage	950,000	1880	84		Florida, Atlantic and Gulf Centr.					
Albany City (S. F.)	1,000,000	6	'66-'78		*Cincinnati, Wilm. and Zanesville :					Internal Improvement (State)	200,000	7	1791		
Androscoogin and Kennebec					1st Mortgage	1,300,000				Free Land, 2d Mortgage	200,000	8	1791		
1st Mortgage (Coupon) '60-'64	1,000,000	6	'62-'64		2d Mortgage	574,000				Fox River Valley :					
Income, convert. (Coupon)	710,000	6	'63-'66		3d Mortgage	158,000				1st Mortgage	400,000	†			
Atlantic and St. Lawrence :					Income	250,500				2d Mortgage	150,000				
Dollar Bonds (Coupon)	988,000	6	1866		Tunnel Right	1,000,000				Galena and Chicago Union :					
Sterling Bonds (Coupon)	454,000	6	1878		Cleveland and Mahoning :					Litchfield	52,015	7	1859		
City of Portland Loan (Coups.)	1,500,000	6	'68-'70		1st Mortgage	694,500				1st Mortgage (S. F.)	1,963,000	7	'62-'63	02	
Baltimore and Ohio :					2d Mortgage	469,000				2d Mortgage (S. F.)	1,738,000	7	1875	86	
Maryland Sterling	3,000,000	5			3d Mortgage	38,800				Galvest'n, Houston and Henderson :					
Mortgage Coupons	2,500,000	6	1885		Clev. Painesville and Ashtabula :										
"	700,000	6	1880		1st Mortgage	564,000	7	1861	99						
"	1,128,500	6	1875	88	2d Mortgage	303,000	7	1861							
"	1,000,000	6	1868		Special (Sunbury and Erie)	500,000									
Balt. City Loan	4,886,811	6			Cleveland and Pittsburgh :										
Bellefontaine and Indiana :					1st Mortgage (Main Line)	800,000	7	1869	67		*Great Western, Ill. :				
1st Mortgage convertible	791,000	7	1866		2d Mort. (M. L.) or 1st Extension	1,188,000	7	1873	58		1st Mortgage (W. Div. 100 m.)	1,000,000	10		
2d Mortgage	140,000	7	1870		3d Mort. (M. L.) or 2d Extension	1,165,000	7	1875			1st M. (E.D. 84 m.), 2d M. (W.D.)	1,350,000	7		
Real Estate (1861, '63, '68)	129,000	7	var.		4th Mort. (M. L.) or 3d Extension	1,154,000					Old Sang. and Morg. Railroad	41,000			
Income (S. F.)	199,500	7	1859		Income	118,000					2d Mortgage	323,000			
Belvidere Delaware :					Dividend Bonds and Scrip	491,825					Chatte (Equipment) Mortgage	374,420			
1st Mort. (guar. C. and A.)	1,000,000	6	1877		Cleveland and Toledo :						Greenville and Columbia :				
2d Mortgage	445,500	6			Junction 1st Mortgage 1st Div.	377,000	7	1867			1st Mortgage, Coupon	1,145,000			
Camd. and Amb. R.R. Co.	244,000	6			Junction 1st Mortgage 2d Div.	305,000	7	1872			Hannibal and St. Joseph :				
Black River and Utica					Junction 2d Mortgage	324,000	7	1862			Missouri State Loan	3,000,000	6		
1st Mortgage	376,000	7	1869		Tol. Nor. and Clev. 1st Mort.	522,000	7	1863	70		Land	3,509,500	7		
Boston, Concord and Montreal :					Tol. Nor. and Clev. 2d Mort.	299,800	7	1863			Income (convertible)	310,000	7		
1st Mortgage	200,000	6	1870		Junction Income	61,500	7	1862			Plain	11,000	7		
2d Mortgage	800,000	7	1870		C. and T. Income	192,950	7	1863			Harrisburg and Lancaster :				
3d Mortgage Coupons	150,000	6			C. and T. Income (convertible)	409,900	7	1864			New Dollar Bonds	459,875	6	1883	03
4th Mortgage Coupons	200,000	7			C. and T. Income (convertible)	373,900	7	1864			Hartford and New Haven :				
Sinking Fund	200,000	6			C. and T. Dividend (convert.)	199,735	7	1865			1st Mortgage	1,000,000	6	1873	06
Boston and Lowell :					C. and T. Income (convertible)	129,000	7	1870			Hartf'd, Providence and Fishkill				
Mortgage	440,000	6	1873		C. and T. (S. F.) Mortgage	640,000	7	1855							
Boston and Worcester :					Junction (Lloyd's)	5,000	7	1862							
Mortgage (plain)	100,000	6	1860		*Cleveland, Zanesville and Cin.										
Mortgage (convertible)	500,000	6	1860												
Buffalo and State Line :															
1st Mortgage	500,000	7	1866	90	*Columbus, Piqua and Indiana :										
Income (1/2 in '59, 1/2 in '62)	200,000	7	var.		Columbus and Xenia :										
Unsecured	200,000	7	1864		1st Mortgage	18,000		1859			Houston and Texas Central :				
Erle and North-East	149,000	7			Dividend (due 1860, '61, '62, '66)	272,700		var.			State (1st Lien) Loan	270,000			
Burlington and Missouri :					Connecticut River						Mortgage	125,000	7	1866	
1st Mort. on 1st Division	590,000				Mortgage (due 1859, 60, '62, '63)	210,000	6	var.			Hudson River :				
Burlington Loan	75,000				Connecticut and Passump. Rivers :						1st Mortgage	4,000,000	7	1869	104
Camden and Amboy :					1st Mortgage	800,000					2d Mortgage	2,000,000	7	1860	99
Mortgage	367,000	6	1864		2d Mortgage						Illinois Central :				
Mort. (chgd from Sterlg)	888,000	5	1864		Cumberland Valley :						Optional Right Scrip	65,000	7	1863	
Mortgage	800,000	6	1849		1st Mortgage	116,500					Construction	12,885,000	7	1876	84
Mortgage	1,700,000	8	1875		2d Mortgage	97,000					Construction	4,115,000	6	1876	94
Sterling (\$210,000)	1,008,000	6	1864		Dauphin and Susquehanna :						Free Land	3,000,000	7	1860	
Sterling (\$225,000)	1,080,000	6	1864		Dayton and Michigan :						Indiana Central :				
New Loan (as'd \$337,000)	2,500,000	6	1887								1st Mortgage (convertible)	600,000	7	1866	
Unsecured	800,000	6	1863								2d Mortgage	254,500	10		
*Catawissa, Williamsport and Erie :											Income	291,500			
1st Mortgage	1,500,000	7	1865	32							Indianapolis and Cincinnati :				
2d Mortgage	399,636	7	1886								1st Mortgage	500,000	7	1866	
Chattel Mortgage	380,000	10	1871								2d Mortgage	200,000	7	1868	
Cayuga and Susquehanna :											Dividend	90,284		var.	
1st Mortgage	300,000	7	1865								Income and Domestic	176,000			
Unsecured	89,000	7	1862								Indianap., Pittsh. and Cleveland :				
Central of Georgia :											1st Mortgage	656,000			
Mort. (due 1859 to 1863)	158,767	7	var.								2d Mortgage	167,000			
Central of New Jersey :											Income	166,000			
1st Mortgage	1,500,000	7	var.								Domestic	34,200			
2d Mortgage	1,500,000	7	1875								Jeffersonville :				
Income	375,000	7	var.								1st Mortgage	289,000			
*Central Ohio :											2d Mortgage	392,000			
1st Mortgage	450,000	7	1861												
1st Mortgage	800,000	7	1864												
2d Mortgage	800,000	7	1865												
3d Mortgage (S. F.)	850,000	1885													
4th Mortgage (S. F.)	1,329,250	1876													
Income (1858, '59 and '60)	1,238,200	var.													
Income (as to Muskingum Co.	100,000	1862													
Charleston and Savannah :															
1st Mortgage (endorsed)	510,000	6													
2d Mortgage	1,000,000	7													
Cheshire :															
Mort. (1860, '63, '75 and '77)	786,400	7	var.												
Chicago, Burlington & Quincy :															
Consolidated 1st Mort.	1,660,000	8	1883												
Oh. and Aur. 1st Mort.	405,000	7	1867												
Oh. and Aur. 2d M. (S. F.)	303,000	7	1869												
Cent. Mil. Tr. 1st Mort.	400,000	7	1864												
Cent. M. T. 2d M. (Conv.)	281,000	8	1868												
Cent. Mil. Tr. Unsecured	17,000	8	1868												
Cent. Mil. Tr. Unsecured	62,000	8	1876												
Chicago, Alton and St. Louis :															
1st Mortgage															
2d Mortgage															
3d Mortgage															

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F.," Sinking Fund. "var.," that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
La Crosse and Milwaukee:					Montgomery and West Point:					Orange and Alexandria:				
1st Mortgage (Eastern Div.)	\$903,000	↑			Alabama State Loan	\$122,622				State Loan	\$400,000			
2d Mortgage (Eastern Div.)	1,000,000	↑			Mortgage (due 1860, '63 and '65)	350,000	6	var.		1st Mortgage	612,500	6		
1st Land Grant (Western Div.)	4,000,000	↑			Mortgage	450,000	8	1866		2d Mortgage	1,587,500	8		
2d Land Grant (Western Div.)	353,600	↑			Muscouge:					Pacific (Mo.):				
3d Mortgage (whole road)	1,700,000	↑			1st Mortgage	249,000	7			State (Mo.) Loan	7,000,000	6		
Farm Mortgage	1,087,700	↑			Nashville and Chattanooga:					State Loan (S. W. Branch)	1,900,000	6		
Unsecured Bonds	1,785,000	↑			Mortgage (State endorsed)	1,500,000				Construction	4,500,000	6		
Lexington and Frankfort:					Chat. and Cleve. Subsc. (endors.)	150,000				Panama:				
Mortgage, due 1864, '69 and '74	130,000	6			Not endorsed	24,000				1st Mortgage Sterling	175,000		1859	
Little Miami:					*New Albany and Salem:					1st Mortgage Sterling	1,250,000		1865	100
Cincinnati Loan	100,000				Crawfordsville	175,000	7			2d Mortgage Sterling	1,000,000		1872	
1st Mortgage	138,000	6			1st Mortgage	500,000	10			Pennsylvania:				
2d Mortgage	7,000	6			1st Mortgage	2,235,000	6			1st Mortgage (convertible)	4,905,000	6	1888	
3d Mortgage	951,000	6			New Haven and Hartford:					2d Mortgage	1,928,000	6	1875	
Long Island:					*N. Hav., N. Lond. and Stonington:					2d Mortgage Sterling	1,539,840	6	1875	
State Loan (S. F.)	100,000	5	1876		Mortgage	450,000	7			For Canals, etc.	7,400,000	6		
1st Mortgage	500,000	6	1870		Mortgage	200,000	6			Pennsylvania Coal Company:				
Louisville and Frankfort:					Extension	100,000	10			1st Mortgage	600,000	7		
Louisville Loan	174,000				New Haven and Northampton:					Bangor City 1st Mortgage	800,000	6		
1st Mortgage	248,000				1st Mortgage	500,000		1869		2d Mortgage	250,200	7		
Louisville and Nashville:					New Jersey:					3d Mortgage	156,600	7		
State (Tenn.), 1st Lien	300,000	6			Company's (various)	711,000		var.		Pensacola and Georgia:				
1st Mortgage	2,000,000				New London, William and Palmer:					State Internal Improvement		7	35 y's	
McMinnville and Manchester:					1st Mortgage	500,000	7			Free Land				
State (Tenn.)	372,000	6			2d Mortgage	300,000	6			Peoria and Oquawka:				
Mortgage	24,000	7			Income (convertible)	152,000	6			Ferru and Indianapolis:				
Mortgage	10,000	6			New London City	100,000	6			Petersburg:				
Madison and Indianapolis:					N. Orlns, Jackson and Gt. North:					Mortgage (due 1863 to 1872)	103,000	7	var.	
State (Ind.) Loan					State (Miss.) Loan	155,000				Petersburg and Lynchburg (S. Side):				
Mortgage					1st Mortgage	3,000,000	8	1886		State (Va.) Loan (S. F.)	800,000	7		
*Marietta and Cincinnati:					N. Orlns, Opelousa and Gt. West:					1st Mortgage (1855-70-'75)	305,000	6	var.	
1st Mortgage (convertible)	2,496,000	7	1868		Louisiana State Loan	821,000				3d Mortgage (1862-70-'72)	378,000	6	var.	
2d Mortgage	2,000,000	7			New Orleans City Loan	1,500,000				Special Mortgage (1865-'68)	175,000	6	var.	
3d Mortgage	1,500,000				1st Mortgage (S. F. and Land)	2,000,000	7			Last Mortgage (1861 to 1869)	133,500	8	var.	
Sterling Income	333,000	4			New York Central:					Phila., Germant'n and Norrist'n:				
Domestic	928,617		59-62		Albany Loan—Alb. and Sch'dy.	127,000	5	1864	102	Consolidated Loan	274,800			
Memphis and Charleston:					State Loan—Sch'dy and Troy	100,000	6	1867		Loan of 1842	100,000			
State (Tenn.) Loan	1,100,000	6			State Loan—Rochester and Syr.	77,382	54	1861		Philadelphia and Reading:				
1st Mortgage	1,600,000	7	1880		State Loan—Buffalo and Roch.	55,300	54	1865		Mortgage	705,000	6	1860	91
Memphis, Clarkesv. and Louisv.:					State Loan—Roch., L. and N. F.	298,000	7	1861		Mortgage	1,572,800	6	1860	91
State (Tenn.) Loan	910,000	6			Stock Subscription	785,000	6	1883		Mortgage (convertible)	886,000	6	1860	91
Memphis and Ohio:					Premium Consolidated Stock	8,000,000	6	1883		Mortgage (convertible)	134,000	6	1860	
State (Tenn.) Loan	1,340,000	6			Real Estate	221,000	6	1883		Mortgage (convertible)	85,000	6	1860	
Michigan Central:					New Convertible	3,000,000	7	1864		Mortgage	3,209,600	6	1870	78
1st Mortgage Sterling	467,489	6			*New York and Erie:					Mortgage (convertible)	3,586,500	6	1886	
1st Mortgage (convertible)	500,000	8			1st Mortgage	3,000,000	7	1867	91	Lebanon Valley R. R. (convert.)	1,500,000	7	1886	
Unconvertible	258,000	8			2d Mortgage	2,000,000	7	1859	85	Real Estate Mortgage	616,450		var.	
1st Mortgage (convert.) Dollar	3,831,000	8			3d Mortgage (convertible)	6,000,000	7	1871		Phila., Wilmington and Baltimore:				
1st Mortgage (S. F.), convertible	3,087,000	8			4th Mortgage (convertible)	3,715,000	7	1880	48	Mortgage Loan	688,929	6	1860	
Mich. Southern and N'n Indiana:					5th Mortgage	1,253,500	7	1883	70	Mortgage Loan	1,696,500	6	1884	
Michigan Southern	993,000	17	1857		Unsecured (convertible)	3,423,000	7	1871	26	Improvement	119,000	6	1863	
Northern Indiana	985,000	17	1861		Unsecured (convertible)	3,601,000	7	1862	26	Pittsburg and Connellsville:				
Erie and Kalamazoo	300,000	↑	1862		Sinking Fund	3,925,500	7	1875		Pittsburg Loan	500,000			
Michigan Southern	259,000	↑	1863		New York and Harlem:					Alleghany Co. Loan	750,000			
Northern Indiana	299,000	↑	1863		1st Mortgage	3,000,000	7	1873	92	Connellsville Loan	100,000			
Jackson Branch	203,000	↑	1865		2d Mortgage	1,000,000	7	1864	91	McKeesport Loan	100,000			
Goshen Air Line	1,335,000	↑	1868		3d Mortgage	1,000,000	7	1867		Baltimore Loan	1,000,000			
Detroit and Toledo	336,000	↑	1876		New York and New Haven:					Cumberland Loan	200,000			
General Mortgage (S. F.)	2,458,000	↑	1885		1st Mortgage	311,000	7	1860	91	Real Estate	100,000			
2d Mortgage	2,175,000	↑	1877		1st Mortgage	665,000	6	1866		Pittsburg, Ft. Wayne and Chicago:				
*Milwaukee and Beloit:					1st Mortgage	629,000	6	1875		1st Mortgage (O. and P.)	1,000,000		1865	
1st Mortgage	630,000	8			N. York, Providence and Boston:					2d Mortgage (O. and P.)	750,000		1866	
Milwaukee and Chicago:					1st Mortgage					Income (O. and P.)	1,601,000		1873	
1st Mortgage	400,000	8			N. York, Providence and Boston:	331,000	6			Bridge (O. and P.)	199,500			
2d Mortgage	200,000	7			North Carolina:					1st Mortgage (O. and L.)	1,000,000		1872	
*Milwaukee and Horicon:					State Loan	2,000,000	6			2d Mortgage (O. and L.)	380,000		1873	
1st Mortgage	420,000	8			State Loan	1,000,000	6			1st Mortgage (F. W. and Chic.)	1,250,000		1873	
2d Mortgage	600,000	8			North-Eastern (S. C.):					Real Estate (F. W. and Chic.)	498,000		1874	
Farm Mortgage	150,000	10			1st Mortgage	700,000				Mortgage, Consolidated Comp'y	1,229,000		1887	
Milwaukee and Mississippi:					2d Mortgage	224,500				Pittsburg and Steubenville:				
1st Mortgage (convertible)	74,000	10	1861		Real Estate	35,910				Mortgage	800,000	↑	1865	
1st Mortgage (convertible)	526,000	8	1862		Northern Central:					Potsdam and Watertown:				
1st Mortgage (convertible)	650,000	8	1863		Balt. and Susq. R. R. (Coupons)	150,000	6	1866		1st Mortgage	800,000	7	64-74	
1st Mortgage (convertible)	1,250,000	8	1877		Md. State Loan (B. and Susq.)	150,000	6			Quincy and Chicago:				
1st Mortgage (convertible)	1,250,000	8	1877		York and Cumberland 1st Mort.	175,000	6	1870		1st Mortgage	1,200,000		1873	
South-West Branch	350,000	8	1860		York and Cumberland 2d Mort.	25,000	6	1871		Racine and Mississippi:				
2d Mortgage	600,000	10	1862		York and C. guar. by Baltimore	500,000	6	1877		1st Mortgage (Eastern Division)	680,000	↑		
Construction	500,000	7	1859		N. C. Contract	292,500	6	1875		1st Mortgage (West'n Division)	757,000	↑		
3d Mortgage	500,000	8	1862		Construction	1,903,800	6	1885		Coupon	100,000		1862	
Mississippi Central:					Northern (Ogdensburg):					Rensselaer and Saratoga:				
1st Mortgage	1,007,363	7			1st Mortgage	1,500,000	7	1859		1st Mortgage		7	1863	
Income	91,200	10			2d Mortgage	3,077,000	7	1861		State (Va.) Loan	600,000			
Tennessee State	45,000	6			North Missouri:					Guaranteed by State	200,000		1875	
Mississippi Central and Tenn.:					State Loan	2,000,000				Mortgage (Coupon)	250,000		1859	
State (Tenn.) Loan	529,000	6			State Loan	1,500,000				Registered	150,000		1860	
Income	95,500				North Pennsylvania:					Richmond, Fred. and Potomac:				
Mississippi and Missouri:					Mortgage	2,500,000				Sterling (£87,000)	324,000		1860	
1st Mortgage (convertible)	1,000,000	7			Chattel Mortgage	214,500	10			Convertible	54,500		1875	
2d Mortgage (S. F.)	400,000	8			Northern (N. H.):					Dividend Certificates	35,800		1857	
Oskaloosa Division	1,425,000	7			Mortgage (due 1860, '64 and '74)	219,500		var.		Dividend Certificates	265,809		1860	
Land Grant	7,000,000	7			Norwich and Worcester:					Richmond and Petersburg:				
Mississippi and Tennessee:					Mass. State Loan	400,000	6	1877		Coupon	169,000		1875	
Tennessee State Loan	98,000	6	1885		Mortgage	205,800	6	1860		*Rutland and Burlington:				
Mississippi State Loan	202,799	6			Mortgage	16,000	7	1860		1st Mortgage	1,800,000			
1st Mortgage	171,000	7	1876		Dividend Scrip and Bonds	102,330	6	var.		2d Mortgage	913,600			
Mobile and Ohio:					Ohio and Mississippi (O. and Ind.):					3d Mortgage	426,400			
City (Mobile) Tax Loan	400,000	6			1st Mortgage	2,193,500	↑	1858		Sacramento Valley:				
Tennessee State Loan	674,860	6			2d Mortgage	316,995	↑	1858		1st Mortgage	400,000			
Alabama State Loan	389,410	6			Construction	4,687,920	↑	1858		2d Mortgage	356,000			
Income	759,415	8	1861		Income	3,591,155	↑	1858						
Income	354,723	8	1862		Ohio and Mississippi (Ill.):									
Income	375,132	8	1865											
Income	18,700	8	1867											
Sterling	878,035	6	1883											
Mississippi State Loan	200,970	6												

AMERICAN RAILROAD BOND LIST.

For explanations see preceding pages.

Description.	Amount.	Interest.	Due.	Price.
Sandusky, Dayton and Cincinnati:				
Mortgage	182,000	10	1866	---
Mortgage	967,000	7	1866	---
Mortgage	1,000,000	7	1875	---
Dividend	224,000	6	'60-'62	---
Sandusky, Mansfield and Newark:				
1st Mortgage	1,200,000	7	---	---
Saratoga and Whitehall:				
1st Mortgage	250,000	7	1863	---
1st Mortgage (R. and W. Br.)	100,000	7	1866	---
Unsecured	45,000	7	1868	---
Seaboard and Roanoke:				
1st Mortgage	300,000	---	1860	---
3d Mortgage	75,000	---	1870	---
4th Mortgage	60,000	---	1866	---
South Carolina:				
State Loan	200,000	5	1863	---
Sterling	183,333	6	1863	---
Sterling	2,000,000	5	1866	---
Auditor's	246,500	7	---	---
Southern Mississippi:				
1st Mortgage	500,000	---	---	---
South-Western (Ga.):				
1st Mortgage	631,000	---	1875	---
*Springfield, Mt. Vern. and Pittab.:				
1st Mortgage	500,000	---	---	---
2d Mortgage	450,000	---	---	---
*Steubenville and Ind. (P. C. and C.):				
1st Mortgage	1,500,000	---	---	---
2d Mortgage	900,000	---	---	---
St. Louis, Alton and Chicago:				
1st Mortgage	2,000,000	7	---	---
2d Mortgage	1,535,000	7	---	---
3d Mortgage (Income)	1,000,000	10	---	---
St. Louis and Iron Mountain:				
State (Mo.) Aid	3,600,000	---	---	---
St. Louis City Subscription	500,000	---	---	---
St. Louis County Subscription	1,000,000	---	---	---
Carondelet Subscription	50,000	---	---	---
Sunbury and Erie:				
Mortgage	1,000,000	7	---	---
Mortgage	7,000,000	5	---	---
Syracuse, Binghamton and N. Y.:				
Terre Haute, Alton and St. Louis:				
1st Mortgage (convertible)	1,000,000	7	'62-'72	55
2d Mortgage (convertible)	2,000,000	7	'68-'70	---
1st Mortgage (Bel. and Ill.)	517,000	7	1873	---
2d Mortgage (Bel. and Ill.)	484,000	7	1869	---
3d Mortgage (Bel. and Ill.)	503,000	10	1874	---
Tennessee and Alabama:				
State (Tenn.) Loan	814,000	---	---	---
Mortgage	46,000	---	---	---
Terre Haute and Richmond:				
1st Mortgage (convertible)	235,000	7	---	---
Toledo, Wabash and Western:				
1st M. (L. Er. Wab. and St. Louis)	2,500,000	7	1865	---
2d M. (L. Er. Wab. and St. Louis)	1,200,000	7	1869	---
3d M. (L. Er. Wab. and St. Louis)	1,200,000	7	1891	---
Real Estate (L. Er. W. and St. L.)	300,000	7	1861	---
1st Mortgage (Toledo and Ill.)	900,000	7	1865	---
2d Mortgage (Toledo and Ill.)	800,000	7	1865	---
3d Mortgage (Toledo and Ill.)	600,000	7	1865	---
*Vermont Central:				
1st Mortgage	---	---	17	---
2d Mortgage	---	---	---	---
Virginia Central:				
State (Va.) Subscription	1,869,595	---	---	---
Mort., guaranteed by State of Va.	100,000	---	1880	---
Mortgage	206,000	---	1872	---
Mortgage (coupons)	941,000	---	1884	---
Dividend, due 1865, '66 and '75	238,246	var.	---	---
Income (1859 to 1863)	161,359	var.	---	---
Virginia and Tennessee:				
State (Va.) Loan	1,000,000	6	1887	---
1st Mortgage	500,000	6	1872	---
Fractional Mortgage	23,500	6	1868	---
2d or Enlarged	1,000,000	6	1884	---
Salt Works Br. Mort. due '58-'61	203,000	6	var.	---
3d Mortgage (Income)	431,000	6	1865	---
Warren (N. J.):				
1st Mortgage	568,500	---	1875	---
Waterbury and Rome:				
Mortgage (due by instalments)	688,500	7	var.	---
Western (Mass.):				
Sterling (£899,900)	4,319,520	5	'68-'71	---
Albany City (Alb'y and W. S.)	1,000,000	6	'66-'76	---
*Western Vermont:				
1st Mortgage	700,000	---	1861	---
Willamport and Elmira:				
1st Mortgage	1,000,000	7	---	---
2d Mortgage	700,000	7	---	---
Chattel Mortgage	495,000	7	---	---
Wilmington and Manchester:				
1st Mortgage	596,000	---	---	---
2d Mortgage	1,000,000	---	---	---
Income	177,000	---	---	---
Wilmington and Weldon:				
Mortgage, payable in England	443,555	---	---	---
Sterling, issued in 1858	144,500	---	---	---
Company's, endorsed by State	203,500	---	---	---
Winchester and Potomac:				
Mortgage	120,000	6	1867	---
York and Cumberland:				
1st Mortgage	398,000	7	---	---

Canadian Railroads.—Progressive Development.

A TABULAR STATEMENT OF THE MILEAGE, THE DATE OF OPENING, ETC.

Compiled chiefly from the Report of the Board of Railway Commissioners of Canada.

Railroads.	Miles in use.	Miles in progress.	Opened for traffic.
Brockville and Ottawa:			
Brockville to Franktown.	37	---	Nov. '58
Franktown to Bouchere.	38	---	Nov. '59
Bouchere to Land Point.	---	34	---
Perth Branch	11	---	Nov. '58
Buffalo and Lake Huron:			
Fort Erie to Paris	82	---	1 Nov. '56
Paris to Stratford	32	---	22 Dec. '56
Stratford to Goderich	45	---	28 Jun. '58
Coburg and Peterboro's	28*	---	May '54
Erie and Ontario	17	---	3 July '54
Galt and Guelph	10	---	27 Sep. '57
Grand Trunk:			
Toronto to Guelph	50	---	July '56
Guelph to Stratford	39	---	17 Nov. '56
Toronto to Oshawa	33	---	Aug. '56
Oshawa to Brockville	175	---	27 Oct. '56
Brockville to Montreal	125	---	19 Nov. '55
Montreal to St. Hyacinth	30	---	Spring '47
St. Hyacinth to Sherbrooke	66	---	Aug. '52
Sherbrooke to Province Line	30	---	27 July '53
Richmond to Quebec	96	---	27 Nov. '54
Chaudiere Junction to St. Thomas	41	---	23 Dec. '55
St. Thomas to Riv. d. Loup	78	---	21 Nov. '59
Stratford to London	31	---	27 Sep. '58
St. Mary's to Sarnia	70	---	21 Nov. '59
V. Bridge to Pt. St. Chas.	6	---	24 Nov. '59
Great Western:			
Susp. Bridge to Hamilton	43	---	10 Nov. '53
Hamilton to London	76	---	21 Dec. '53
London to Windsor	110	---	27 Jan. '54
Komoka to Sarnia	51	---	27 Dec. '58
Galt Branch	12	---	21 Aug. '54
Hamilton to Toronto	38	---	3 Dec. '55
Grenville and Carleton	13	---	Oct. '54
Hamilton and Port Dover	---	---	---
London and Port Stanley	24	---	1 Oct. '56
Montreal and Champlain:			
Montreal to Lachine	8	---	Nov. '47
Caughnawaga to Moosers	32	---	Aug. '52
St. Lambert to St. John's	20	---	Jan. '52
St. John's to Rouse's Pt.	21	---	Aug. '51
Northern:			
Toronto to Brantford	42	---	13 Jun. '53
Brantford to Barrie	21	---	11 Oct. '53
Barrie to Collingwood	32	---	2 Jan. '55
Port Hope and Lindsay:			
Port Hope to Lindsay	43	---	30 Dec. '57
Lindsay to Beaverton	---	33	---
Millbrook to Peterboro	13	---	18 Aug. '58
Prescott and Ottawa	54	---	Dec. '54
Preston and Berlin	11*	---	2 Nov. '57
St. Lawrence and Industrious	12	---	May '50
Stanstead, Sheff. & Ch'by:			
St. John's to W. Farnham	13	---	Fall, '58
W. Farnham to Stukely	32	---	Summ. '59
Stukely to Stanstead	---	37	---
Welland	25	---	Spring, '59
Total	1,922	121	---

* Not in operation or abandoned.

† Gauge 4 feet 8½ inches: all others have a gauge of 5 feet 6 inches.

‡ Are summer roads running in connection with steamboats.

|| Have electric telegraphs of their own for working trains.

§ Can avail themselves of the public telegraphs.

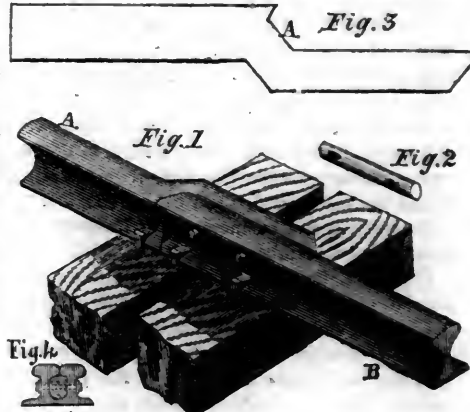
¶ Formerly the La Prairie and St. John's Railroad opened in July, 1836, and the oldest railroad in Canada.

RECAPITULATION.

Years ending 31st Dec.	Miles open.	Yearly increase.
1849	38	---
1850	50	12
1851	71	21
1852	189	118
1853	391	202
1854	731	340
1855	969	238
1856	1,402	433
1857	1,472	70
1858	1,634	232
1859	1,922	288

Avery's Railroad Joint.

Below we give a cut of an improvement patented by GEO. S. AVERY, Esq., Civil Engineer, of Cross River, New York, for a more perfect joint between railway bars. The necessary angle is obtained by inserting the end of the rail, when hot, in a die, or press, which can be done at a very trifling expense. The hollow space where the



rails overlap, is filled by an iron core, or bar, (Fig. 2), which serves as a fish to strengthen the joint. It is claimed, that, by this contrivance, the ends of the rail can be only slightly abraded, and that a firm joint is made. Some bars have already been laid on the Harlem Railroad, with a view of testing the merits of the invention, with, so far, satisfactory results.

Blue Ridge vs. Broad Mountain Railroad.

It appears from the report of the President and Directors of the Blue Ridge Railroad Company, presented at the recent annual meeting of the stockholders, that the "estimated cost of that road in South Carolina and Georgia, which is seventy miles in length, and thirty-five per cent. of the distance to Knoxville, is fifty-eight per cent. of the estimated cost of the whole road." It appears that in the construction of the road in South Carolina and Georgia, about seventy per cent. of the grading is done, four-fifths of the square drains and culverts, three-sevenths of the bridge and arch masonry, and fifty per cent. of the tunnel heading, while forty-five per cent. of the grading of the entire road has been done. This work has been effected at a cost of about two millions and a half, of which the State and city of Charleston contributed each one million of dollars.

At this stage in the construction of the Blue Ridge Road, an opposition is started to it in behalf of the French Broad Road.

Both roads have to cross the Blue Ridge—the French Broad by the Butt Mountain Gap, and the Blue Ridge by the Rabun Gap, which is lower than the Butt Mountain Gap. After the Blue Ridge is surmounted, the French Broad Road will follow the valley of the French Broad River to the foot of the mountains near Paint Rock, and the Blue Ridge will follow the valley of the Tennessee River. The character of the country in

the approach to the mountains, and in the crossing of them, and down the valleys of the two streams, cannot differ much. The terminus of Blue Ridge Road is at Knoxville, and that of the French Broad Road is at Morristown, forty-two miles northeast of Knoxville.

The subscription to the Blue Ridge Railroad is \$3,000,000. The French Broad route has \$500,000 subscribed by individuals and counties in North Carolina.—*Charleston Mercury*.

Journal of Railroad Law.

RIGHT OF CONSIGNEES, WHERE DELIVERY OF GOODS IS UNREASONABLY DELAYED.

The duty of railroad companies, express companies, or of whatever company whose business it is to carry goods for the public, is not merely to transport the goods from the place of their receipt to the place of their delivery, but to see that they arrive at their place of destination in good order and in a reasonable time after receiving them.

The case of *Briggs vs. the New York Central Railroad Company* calls into consideration, the effect which a delay in the delivery of goods, transported by the company as freight, to the consignees, may have upon the legal rights of the parties to the contract. The plaintiffs in this case, were partners in the business of wholesale and retail dealers in garden and field seeds, and their principal place of business was at Rochester. On the 5th of December, 1853, the plaintiffs delivered to the defendants, at their freight warehouse in the city of Rochester, 64 boxes of garden seeds and eight boxes of garden and field seeds, marked "Samuel Phillips, Sacket's Harbor, N. Y." and the defendants delivered to the plaintiffs a receipt for the goods in which the defendants agreed for the consideration paid by the plaintiffs, to forward the same according to their said mark, but not to be responsible after the goods should be delivered to the Rome and Watertown Railroad Company. The goods were then to be forwarded by the latter company. On the day following their delivery to the company, when in their usual course and time, the goods would have arrived at their place of destination, and from that time until the 20th of the same month, Samuel Phillips, who was the agent of the plaintiffs, engaged in the sale and distribution of garden seeds, was at Sacket's Harbor waiting the arrival there of the 72 boxes of seeds, for the purpose of distributing them about the country. The seeds not having arrived on the 15th of December, a second lot of 72 boxes, directed as the first, were sent by the plaintiffs to their agent, who received them the next day, and left Sacket's Harbor with them the same day, one day prior to the arrival there of the first lot. During all the time of his stay at Sacket's Harbor he had with him a span of horses and a wagon belonging to the plaintiffs used in the distribution of seeds, and his wages and board together with the cost of keeping the team and the value of its use amounted in all to five dollars a day.

The first lot of seeds reached Rome in a freight train during the night of the sixth day of December, 1853. The day after their shipment, on their arrival it was raining very hard, and there being another freight train standing on the track between the running train and the freight warehouse, the boxes in question were transferred to such standing train, for the purpose of having them removed in the morning to the freight ware-

house. In the morning their removal was neglected, and they were taken to Albany, from which place they were returned to Rome and arrived there on the 19th of December, 1853, and were on the same day shipped on board the freight train of the Rome and Watertown Railroad, and on the same day they were delivered at the railroad freight house in Sacket's Harbor. The value of the seeds was not less than \$300, and at the time of the trial they were still in the warehouse of the defendants.

On these facts the plaintiffs claimed to recover the value of the goods, the damages which they had sustained by the loss of time, and expenses of Phillips and the team, and interest on the value of the goods during the delay.

The jury found a verdict for the plaintiffs for \$65. Judgment was entered for that sum, with costs; from which both parties appealed.

We give the opinions of two of the justices deciding the case.

JOHNSON, J.—It appears from the case that the goods were delivered by the defendants to the Rome and Watertown Railroad Company on the 19th of December, and this action was commenced on the following day. The rights of the parties must, of course, be determined by the state of things existing at the time the action was commenced. The plaintiffs then had a cause of action, but it was not for a destruction, or a conversion of the goods. It was for negligence in not delivering, in a reasonable time, to the Rome and Watertown Railroad Company. The goods had then been delivered to that company by the defendants; and were on their way to the place of destination. The goods were not lost or destroyed; they were merely delayed, negligently. What then should be the measure of the recovery? Clearly the loss or damage the plaintiffs have sustained, by reason of the delay, and nothing more. This is not the value of the goods. They were still in existence, and were the goods of the plaintiffs. It is not shown that the goods had lost their value, or any value, by reason of the delay in transportation and delivery. The plaintiffs had been put to trouble and expense, in furnishing other similar goods, in order to prosecute their business; and for such trouble and expense as resulted directly and necessarily from the negligence and delay of the defendants in performing their undertaking, they are responsible in damages. Whether that shall be more or less than the value of the goods depends upon the evidence. But the value of the goods is not the measure of the damages, because the plaintiffs, for aught we know, and as we are bound to presume, until the contrary is shown, are still the owners of the goods. If the defendants have refused to deliver the goods since this action was commenced, and then been guilty of a conversion, that is a new and distinct cause of action, and has nothing to do with the measure of damages here.

It seems to be settled law in this State, that a mere delay in delivery, by a carrier, is not a conversion of the property. So that the only claim for damages grows out of the delay.

A new trial should be granted, with costs to abide the event.

E. DARWIN SMITH, J.—I concur in granting a new trial, on the question of damages, on the ground that the defendants had no notice when

they received the goods, that an agent would be in waiting to receive them at Sacket's Harbor; or that there was any special occasion or necessity for their prompt or immediate delivery. If any extra diligence was required or expected of the defendants, in respect to the transmission or delivery of the seeds, they were entitled to notice the special circumstances, before they could be liable for special damages. If the special circumstances had been communicated to, or been known by, the defendants, at the time of the receipt of the goods; then the damages, resulting from a breach of the defendants' contract to deliver within a reasonable time, might very properly be held to have been within the contemplation of the parties when the contract was made.

But I cannot concur in the opinion that the delay in the delivery of these seeds amounted to a conversion of them, or entitled the plaintiffs to recover the value thereof.

The seeds were received on the 5th and arrived at Rome in the night of the 6th of December, and if they had been delivered the next day, December 7th, to the Rome and Watertown Railroad Company, there could be no pretense of negligence in respect to their delivery. They were actually delivered to the Rome and Watertown Railroad Company on the 19th of the same month. This delay of twelve days was negligent, and entitled the plaintiffs to recover all the damages sustained thereby or by reason thereof, which were within the scope of damages naturally or reasonably consequent upon such delay—such as may reasonably be supposed within the contemplation of the parties—such as would ordinarily be incident to, or result from, such neglect in the delivery of the property. But it did not amount to a conversion of the property, and, in my opinion, did not entitle the plaintiffs to recover the value of the goods. Mere delay in the delivery of property, by a carrier, is not a conversion, nor equivalent to a conversion.

The defendants are common carriers, on the line of their road, but no further. When they had delivered these boxes, at Rome, to the Sacket's Harbor and Watertown Railroad Company, their duty as common carriers was fulfilled. Such delivery was, in my opinion, equivalent to a delivery to the plaintiffs, who were bound to receive their property.

The delivery was made at Rome on the 19th of December, and this suit was commenced on the 20th of the same month, and when the property was on the way from Rome to Sacket's Harbor, in the possession of the Rome and Watertown Railroad Company, no right of action, in my opinion, then existed in behalf of the plaintiffs, in respect to such goods, except for the unreasonable and negligent delay of the defendants in their transportation and delivery. The defendants' duty had been fully discharged, except in respect to this simple question of negligence. For that, and that only, could the plaintiffs, at that time, maintain any action. The fact that, at the trial, these goods were in possession of the defendants, I think entirely immaterial. How such a fact came to be inserted in the case I cannot conceive. No such question was presented in the pleadings, or was at issue on the trial, or proper to be presented there, in any way, except to contradict the defendants, evidence in respect to the delivery at

Rome, or to satisfy the jury that the goods had never been sent forward from Rochester. This was not really pretended, and is in conflict with the conceded facts of the case.

Mr. Thomson on the Railroad Routes to the Pacific.

Mr. J. Edgar Thomson, President of the Pennsylvania Railroad, has written a letter to the Southern Pacific Railroad Company, in which he says:

The extension of your line, it seems to me, affords the most practicable, if not the only route over which a railway can be constructed between the Eastern States and California, that will meet all the requirements for a great national highway between the Atlantic and Pacific Oceans, within the territory of the United States. Such a work has become a public necessity, and must be commenced at an early date. The stake involved is too important to sanction its commencement upon any basis that will not secure its uninterrupted progress.

In this connection we copy the following from the Louisville Journal:

There was an enthusiastic and large meeting of stockholders, which, on completing its business, adjourned yesterday, after two days' session. A year ago, when a similar convocation assembled in our city, there was a feeling of gloom and despondency to which the cheering indications of yesterday were a gratifying contrast. The stockholders advanced a loan, and surrendered half their investments, in the last hope to save something from the general wreck, as it appeared; now, when a call was made upon them for funds to comply with the conditions upon which J. Edgar Thomson agrees to accept the Presidency, \$50,000 were subscribed on the spot, and there is not the least doubt, in our opinion, that \$100,000 will be added to that sum by our citizens to-day, and the \$150,000, with the \$100,000 raised in Texas, makes up the quarter million for which Mr. Thomson stipulated. Thus, then, all three of the conditions are fulfilled, the debts of the company are all liquidated; the State of Texas has withdrawn all litigation affecting the preservation of the charter, and \$250,000 have been raised for a commencement of working capital. Mr. Thomson will, therefore, soon assume the position of president of the company, and he will bring to the discharge of his duties great experience in railroad matters, a character for caution of which few capitalists know the full value, and an enthusiastic ambition to carry to completion the greatest railroad enterprise which was ever undertaken. We know from the private correspondence between Mr. Thomson and Dr. Fowlkes that he feels perfectly confident of being able to connect the Atlantic and Pacific Oceans by a railroad communication in ten years, and he will make the attempt to do it in eight. He is sanguine of success. He desired only to keep the company free from debt and litigation, but the cash subscription of \$250,000 was suggested by Dr. Fowlkes and accepted by Mr. Thomson. The sagacity of Dr. F. is strongly exemplified in this.

Western Maryland Railroad.

The annual report of the President and directors of this company, just issued, after noticing the opening of the road to Owing's Mills, says:

Five miles more of the track is now being built, and when completed, which certainly will be accomplished by the middle of next month, the running of the cars will at once be extended to Reisterstown. From this point a large amount of the work is done on the line in the direction of Westminster. Eight miles of which will soon be ready for the track when it will be put down with the least possible delay.

The western division extending from Union-bridge, beyond New Windsor, is in such a state of advancement that the track laying can be commenced as soon as it is reached.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending December 6, 1859.

BONDS.	Per cent.	and int.
Little Miami, 1st Mort.	8s	85
Covington and Lexington, 2d Mortgage	7s	65
Ohio & Miss. R. D., Construction	7s	25
Cinc., Ham. and Dayton, 2d Mortgage	7s	84
Indianap. & Cincinnati, do.	7s	75
STOCKS.		
Cincinnati, Hamilton & Dayton	Ex Div.	62
Columbus and Xenia		82
Indianapolis & Cincinnati		49
Little Miami		84

Railroad Earnings.

The earnings of the Hudson River road for November, were:

November, 1859.	\$157,443 07
November, 1858.	137,094 50

Increase.....\$20,348 59

The following tables give a comparative statement of the earnings in each month during the fiscal year ending Sept., 1858-9.

	1857-8.	1858-9.
October	\$141,627 72	\$140,782 87
November	121,282 44	137,094 50
December	127,079 94	197,980 94
January	176,572 91	192,161 14
February	163,837 27	190,588 94
March	179,423 38	175,773 23
April	112,614 60	121,123 24
May	128,132 27	141,268 92
June	95,219 28	115,444 13
July	114,731 23	125,304 57
August	139,488 64	155,163 78
September	140,871 92	156,972 88

\$1,640,882 60 \$1,849,638 84

Increase this last year.....208,755 74

The net earnings over the cost of operating (including repairs), and the payment of interest on the funded indebtedness, are, it is stated, \$132,000, or about a 3 per cent. dividend on the capital stock.

The annexed table gives the comparative earnings of the Illinois Central Railroad Company for eleven months, 1858 and 1859:

	1858.	1859.	Increase.
January	\$130,030 99	\$132,935 88	\$2,874 89
February	116,470 47	134,311 09	17,840 62
March	163,847 71	154,689 70	*9,158 01
April	179,991 01	163,643 84	*26,347 17
May	161,090 34	144,804 31	*16,286 03
June	154,192 57	149,592 23	*4,600 34
July	154,299 42	139,109 99	*15,189 43
August	202,353 01	181,611 73	*21,341 28
Sept.	218,860 58	246,829 05	27,968 47
October	184,776 09	245,391 67	60,615 48
Novemb'r.	156,037 60	250,742 19	94,704 59

Total...\$1,822,579 79 \$1,933,661 53

Total increase.....\$204,004 05

Total decrease.....92,923 26

Total gain.....\$111,081 79

* Decrease.

The earnings and expenses of the Buffalo and State Line Railroad for October, 1858 and 1859, were as follows:

EARNINGS.		
	1858.	1859.
Passengers	\$46,059 91	\$38,364 54
Freight	40,812 87	39,954 79
Other sources	1,150 00	1,701 00

Total.....\$88,022 78 \$80,020 33

EXPENSES.

	1858.	1859.
Construction	\$1,408 46	\$
Maintaining road	14,207 23	8,387 31
Repairs of machinery	5,172 68	4,124 58
Operating	14,611 83	13,960 72

Total.....\$35,400 20 \$26,422 61

The New York and New Haven receipts for November, 1859, were:

Passengers	\$90,714 61
Freight	15,500 00

Total.....\$106,214 61
Due other roads.....27,027 54

For November, 1858.....\$79,187 07
70,197 94

Increase.....\$8,989 13

The receipts of the Grand Trunk Railway of Canada for the week ending Nov. 26,

were.....\$63,182 70
Week ending Nov. 27, 1858.....47,141 43

Increase.....\$16,041 36

Total traffic from July 1st.....\$1,084,460 19
Same period last year.....962,971 67

Increase.....\$121,488 52

Mileage and receipts of St. Thomas Branch are not included in this return.

The earnings of the Cincinnati, Hamilton and Dayton Railroad for Nov., 1859, were..\$43,677 30
November, 1858.....41,934 72

Decrease in 1859.....\$1,742 67

The earnings of the Galena and Chicago Railroad, for the fourth week of November were:—

1859.....\$24,978
1858.....22,725

Increase.....\$2,253

The earnings of November for two years compare as follows:—

November, 1859.....\$123,293
Do. 1858.....103,813

Increase.....\$19,480

The following is a statement of the earnings of the Buffalo, New York and Erie Railroad (Buffalo to Corning), for the month of November, 1859, compared with the same month of last year:

	1858.	1859.
Passengers	\$11,901 10	\$11,332 58
Freight	39,466 51	40,498 07
Other sources	1,549 52	1,540 17

Total.....\$52,917 13 \$57,370 82

The earnings of the Chicago and Rock Island Railroad in November, 1859, were.....\$99,328
November, 1858.....68,350

Increase.....\$30,978

The earnings of the Michigan Southern Railroad company, in the month of November were:

	1859.	1858.
Passengers	\$65,804 71	\$79,949 30
Freight	109,310 22	70,823 95
Mails	4,435 56	4,485 62
Miscellaneous	4,982 47	14,750 69

Total.....\$184,532 96 \$168,009 56
Increase.....16,523 40

Of the miscellaneous last year, \$10,000 came from the Michigan Central road. The increase in the last week of the month was \$8 61.

The receipts of the Grand Trunk Railway of Canada for the week ending Nov. 19,

were.....\$60,764 84
Week ending Nov. 20, 1858.....50,110 35

Increase.....\$10,654 49

Total traffic from July 1st.....\$1,021,277 40
Same period last year.....915,830 24

Net increase.....\$105,447 16

The earnings of the Little Miami, Columbus and Xenia Railroad in November were:—

1859	\$99,159 19
1858	101,301 97

Decrease

The earnings of the Cleveland and Toledo Railroad for the month of November were:

1859	\$77,020
1858	75,620

Increase

The traffic of the Great Western Railway of Canada for the week ending Nov. 25, 1859, was as follows:

Passengers	\$18,808 67
Freight and live stock	17,523 65
Mails and sundries	1,500 76

Total	\$37,833 08
Corresponding week of last year	37,397 63

Increase

The earnings for November on Michigan Central Railroad were:

1859	\$181,617 17
1858	156,298 00

Increase

The increase in last nine days of the month was \$11,000.

American Railroad Journal.

Saturday, December 10, 1859.

Can Cotton Come North by Railroad?

Experiments upon a pretty extensive scale are being tried the present year to test the practicability of taking cotton from the districts where it is grown to the Eastern States, entirely by rail; or by water up the Mississippi and Ohio, and by rail from various points on the latter. Most of the cotton forwarded in this direction the present year has, we believe, taken the route of the Illinois Central to Chicago, and thence by several routes east; a considerable portion of it going over the Grand Trunk of Canada to Portland, to supply the manufacturing establishments in that vicinity.

The result thus far seems to indicate that a very considerable amount may be brought north by the inland route, both for the manufacturing establishments of our own country, and for shipments abroad. With the cotton pressed, a car can be fully loaded. It can be easily handled. Cars loaded at Cairo can be taken to Detroit, 656 miles, and from Detroit to Portland, 856 miles, without breaking bulk. The most favorable conditions for economical movement exists; and it is claimed by competent parties that at a cent per pound, or at \$20 per ton, cotton can be taken from Cairo to the eastern cities at a profit. If so, a very large diversion may be effected in favor of the inland routes. Cotton can be delivered at Cairo at very nearly the same cost as at other points on the Mississippi. The expenses of transportation and insurance on the river, as well as by the sea-going routes, are saved, and the staple delivered in very much less time, and in much better shape, than by the outside route.

Should the expectations now entertained be realized, a new locomotive traffic is opened to our railroads. The product of cotton in the United States the present year will exceed 1,000,000 tons, worth, on the ground, \$200,000,000. The value of

this staple enables it to bear very high charges, and its carriage is one of the more valuable source of income of Southern roads. It creates a reciprocal trade of equal value; so that the inward bound freight of roads traversing cotton districts, equal in amount the outward bound. A similar result would follow on Northern roads, could they become the avenues for its transportation to market.

So well satisfied is the Illinois Central Railroad Company, of the results so far attained, that they propose to erect presses at Cairo, for the accommodation of the traffic. In their efforts they will be efficiently seconded by all the leading East and West lines.

Southern Pacific Railroad.

This road seems to have more than nine lives. We do not know how many times it has been on and off its legs. It is now, if we may believe reports, getting on them again. How long it will keep on them remains to be seen. Not long, we fancy.

The road has had every variety of misfortune, for the very simple reason that at no time have the means of the Company been adequate to their plans, or their plans at all equal to the vastness of the undertaking. The only element of strength it has had, has been in the name assumed, a "Railroad to the Pacific." Divested of this, the scheme has never had vitality enough to hold it up twenty-four hours. But the idea held forth was a popular one, and the assumption of the ability to accomplish it has given the Company what little means it has had.

Another delusion has been the enormous tracts of land which the road could secure as it progressed. This has been a double delusion. We have no doubt that all the valuable lands on the line of the road, for hundreds of miles, have been taken up by private speculation. But if they could be had as fast as the road progressed, and upon its line, it proves that there are no people upon it to furnish the means to build the road, or to give it business when built. It seems to us that the scheme hangs upon one horn of this dilemma.

As already remarked the only strength the project possesses is in the title given to it. A Railroad to the Pacific is a most desirable acquisition, but it does not follow that such a desire is a good reason for embarking, with a capital provided of only a few hundred thousand dollars, in an enterprise that cannot fail to cost, with interest during its progress, when fully completed, from \$100,000 to \$150,000 per mile, or say \$200,000,000 in the aggregate. A great many things appear to be desirable that are very impracticable with all the means that can be brought to bear on them. It would be very desirable to have a canal across the Isthmus of Darien; the Isthmus of Suez; or the Isthmus of Nicaragua; but it would be height of foolhardiness for a party with 5, or 10, or \$50,000,000 to undertake either of these works. So with a Railroad to the Pacific. When built the General Government will have to take the greater part of the load. It is not yet prepared for such a step, but will be, by and by. In the meantime, for individuals to undertake any work of the kind, irrespective of the local traffic and means of their route, is the very acme of folly. Should the road take a new start, it will find itself, as it has al-

ways done, flat on its back in the course of a few months, for the very simple reason that it is an undertaking, for which the means provided, or that can at present be commanded, are utterly inadequate. Its plans and operations must necessarily be on a scale corresponding to the magnitude of the objects; so that where one dollar is provided, a hundred will be wanted.

In what we have said, we do not by any means wish to discourage the building of any road looking to the Pacific, upon any route. If Northeastern Texas contains a sufficient population to furnish say one-half the means for the construction of a road, and can contribute a sufficient amount of business for its support, when completed, then the conditions of success so far exist. These are the only considerations that should at present exert any influence on parties undertaking it. In the meantime, the great land prize should be entirely ignored. It should never enter in the calculations of means. If the whole amount claimed could be secured, they could not be relied on as furnishing a dollar of ready money. Should it turn out, as is most probable, that these lands are a sort of a *myth*, then their loss will not create embarrassment. But to count upon them for a penny, for immediate means, or for future profit, is to so far proceed upon a hypothesis that cannot fail to end in disappointment and disaster.

Wilmington and Manchester Railroad.

We give this week, in another column, an abstract of the late report of this company, whose road forms the great link between Northern and Southern lines. It is an excellent illustration of the small sum with which railroads can be built, with integrity and economy in their management. Its length is 162 miles. Its total cost the present year, the 6th since its completion, is \$2,507,314, which is equal to only \$15,400 per mile, though it has one very expensive structure on its route—the Great Pedee Bridge. The road is well built and equipped, and appears to be conducted with the same fidelity and ability displayed in its past history.

Its receipts for two or three years were affected by the same causes that diminished those of all other roads. It has also, during the past year, felt the influence of the Virginia and Tennessee lines. The results obtained, consequently, were under conditions as unfavorable as can ever happen while there are sources of business soon to be opened, which must add largely to its traffic. Among these may be named the railroads of Southern Georgia and Florida—particularly those of the latter State. The Florida railroad is on the eve of completion across the neck of the Peninsula, where a new route to the Gulf ports, and to New Orleans, will be formed, in connection with the great coast line of railroad, which must add largely to the business of all its links. The Wilmington and Manchester, from its low cost, feels the effect of only a very slight improvement in its traffic. The road has to earn only \$920 net per mile to pay, annually, 6 per cent. on its entire cost, which is something that cannot be said of a work of similar magnitude in the United States.

In its early history, the road had many struggles, from the fact that the burden of its construction fell almost entirely upon agriculturists of a sparsely inhabited country. It had no large and

wealthy commercial community to fall back upon. Economy was the necessary condition to success. With a plenty of money, its cost very likely would have been doubled, without anything to show more than the company now possess. With the present low cost, and with its prospective increase of business, no road in the country has a better future before it.

Wilmington and Manchester Railroad.

We have the Report of this company for the year ending Sept. 30, which shows the following result:—

Earnings from through passengers...	\$141,053 45
" " local "	75,376 77
" " freight	165,725 19
" " mails, etc.	44,883 14

Total.....\$427,043 55

Current expenses:

Repairs of road	\$87,937 86
" locomotives	19,412 99
" cars	23,573 46
Station expenses	15,862 76
Conducting transportation,	30,253 56
Fuel	11,887 92
Oil, waste, etc.	4,384 16
Loss and damages	4,681 52
Ferry	4,715 69
Salaries, office exp'ses, etc.	14,540 56

217,250 48

Leaving as net earnings....\$209,793 07

Increase of receipts	\$44,851
Decrease of expenses from past year.	5,817

Total net gain.\$50,668

No dividends have yet been paid—the net earnings having been applied in improving the road and in reducing the indebtedness of the company, of which \$62,530 was paid the past year, a sum equal to about six per cent. on the capital stock. To relieve the company of this burden and to enable it to commence the payment of dividends, authority has been sought to issue a *preferred* stock into which it is proposed to convert a portion of its outstanding bonds. The requisite legislation has been obtained in North Carolina, but not in South Carolina, although no opposition is anticipated from that source. Could a portion of the debt be converted into preferred stock, the company would be enabled to commence paying dividends on the whole amount issued.

The net gain on the entire cost of the road has been 8.58 per cent.; upon the capital and outstanding indebtedness, 9.36; upon the capital deducting interest, 8.61. The net earnings have been greater than for any year since the road went into operation, notwithstanding a vigorous competition by sea-going steamers and by inland railroad routes.

The total debt of the company at the close of the year was—

First mortgage bonds	\$596,000
Second do.	200,000
Income do.	174,000
Bonds secured by hypothecation of W. & W. R. R. stock.....	90,000
Bills payable	111,886
Accounts do.	23,323

\$1,198,209

Less available assets

\$1,114,990

The following is a general statement from the company's ledger:—

Construction	\$2,507,314
Interest and exchange	78,924
Wilmington and Weldon R. R. stock ..	201,500
Post office	33,938
Adams & Co.'s Express	17,855
Other items	57,938

\$2,892,969

By capital stock	\$1,127,511
" 1st mortgage bonds	596,000
" 2d "	200,000
" Income "	174,000
" Bonds secured by W. & W. stock	90,000
" Bills payable	111,886
" Profit and loss	357,182
" Net profits past year	209,793
" Sundries	26,323

2,892,969

The officers elect for the current year are as follows:—

President—THOS. D. WALKER.

Treasurer—WM. A. WALKER.

Superintendent—JAMES P. ROBERTSON.

Directors—John Dawson, Henry Nutt, N. N. Nixon, Jno. A. Taylor, Alfred Smith, E. W. Charles, J. Eli Gregg, Geo. J. W. McCall, John B. Moore, M. P. Mayer.

Albany and Susquehanna Railroad.

The following gentlemen have been elected directors of this road: Richard Franchot, Joseph H. Ramsay, Ezra P. Prentice, Charles Courter, Levi Dimmick, Eliakim R. Ford, Edward Tompkins, Robert H. Pruyn, Arnold B. Watson, Lewis Northrup, Jared Goodyear, John Cook, Cornelius Vosburgh.

Alexandria, Loudoun and Hampshire R. R.

The annual meeting of this company was held at the office of the company in Alexandria, on the 15th of November, at which the report of the President, of each division engineer, and of the Treasurer were presented. Upon that portion of the line now under construction, extending from Alexandria to Clarke's Gap, a distance of 41¼ miles, the graduation and masonry was so nearly completed as to offer no material impediment to the steady progress of the track-layers, there remaining only some re-dressing upon the excavations and embankments which were first made. The track-laying had nearly reached Broad Run, 28 miles from Alexandria, and the necessary rails for the completion of the track to the Gap were upon the company's grounds in Alexandria. The bridges east of Broad Run were in place, and the timber for the remaining bridges was on hand. The Broad Run bridge was framed, and only awaited the completion of the track to that stream to be put up. Those over Beaver Dam, Goose Creek, Sycolin and Tuscarora, will be erected as soon as the track is laid to those streams. The board expect soon to have that portion of the road which extends from Alexandria to Broad Run in active use. A few thousand cross-ties only are waiting for the track to Leesburg, which place the board hope to reach by January next. The depot grounds at Alexandria, comprising four acres, have been sufficiently improved to meet the requirements of the road, as far as it is now intended to put it in operation. These improvements comprise a brick engine house, one-fourth of which is completed, with a fuel house and turntable. This is to be added to from time to time

as may be necessary. A brick freight house is nearly finished, and a brick passenger house is now going up. The necessary buildings along the line of the road have also been provided.

The inability of the people to subscribe to the stock of the road by reason of the failure of their crops, has tended greatly to retard its progress. The board do not anticipate much difficulty in getting the usual subscription from the State. The real difficulty is in making up the private subscription, without which that of the State is unavailable. The corporation of Leesburg has recently subscribed \$10,000 to the company's stock, payable when the road reaches that town. The superstructure for the several bridges were framed under the immediate supervision of Mr. R. Randolph, the engineer in charge of the first division of the road. The following in reference to them is from his report to the board:

The bridges on this division are now complete, and have been for some time daily crossed with heavy loads of iron, without showing the slightest indication of insecurity.

The timber and most of the castings for the other bridges are delivered at the depot lot in Alexandria, where they are now being framed; that for Broad Run being ready for erection. These differ from those which are already up in the simplification of the details and other improvements. They act upon the principle to which "Howe's truss" owes its merit, but with a different arrangement and proportion of its parts, which are put in the most economical position, and of dimensions proportioned to the various strains to which they are subject, and connected in the most secure and simplest manner. This being accomplished, it is freed from all claims to patent rights. At no point does the strength depend upon a weld of the iron, for these have been entirely discarded as being too uncertain to be depended upon; but in every case the round fibrous iron is used as it comes from the rolls, with screw threads cut upon the rods, with nuts of such depth as to ensure the same strength at the point where they bear as that given by the net diameter of the rod. The castings are of such a shape as not to be liable to fracture during the lowest temperature, and in such a position that no damage could ensue if possibly that should happen.

Though this is called a wooden bridge, its strength depends upon wrought iron, as is the case with all other wooden bridges now in use; therefore the prejudice which has lately sprung up against iron as a material in bridge building, appears as much here as in the case of those composed entirely of iron. But this is a perfectly groundless objection, and should have been aimed at the defect in the plans and uncertain execution of many of those which have lately failed. When this material is properly secured at the junctions, and of dimensions sufficient for the strains, which can all be reduced to a certainty, it is quite as reliable when employed in one bridge as in another, if maintained in its proper position. Then the principal question becomes one of cost and durability. A bridge made wholly of cast and wrought iron, on the suspension truss plan of Fink or Bollman, most now in use and approved of, having a span sufficient for Goose Creek, would cost \$8,000, which is presumed to be imperishable. The one which will be put there will cost \$4,000, of which \$2,000 is the cost of the timber and workmanship upon it. This, at the end of ten years, will begin to need repairs, which would be in effect the expenditure of \$2,000 every twelve years. The interest on the amount saved in first cost would be \$2,880, which would be more than sufficient to repair it continually.

The fiscal year of the company closed with September. The receipts from all sources during that time were \$926,074 87; and the expenditures, \$925,599 75—leaving a balance of \$475 12.

The receipts and expenditures from commencement of operations to the close of the last fiscal year were as follows:

RECEIPTS.	
From State of Virginia.....	\$841,748 00
" Individuals.....	561,270 18
Bills receivable.....	88,031 37
Loans on State stock.....	36,188 32
Checks outstanding.....	3,246 90
Other items.....	2,709 43

\$1,534,194 20

EXPENDITURES.	
Engineering.....	\$86,787 28
Right of way.....	60,649 70
Graduation.....	490,644 44
Masonry.....	148,763 28
Bridge superstructure.....	26,907 92
Road.....	355,263 03
Buildings.....	17,842 63
Equipment.....	42,000 00
Virginia State stock.....	98,000 00
Loss on State stock.....	45,630 34
Clark County bonds.....	84,000 00
Interest.....	12,506 15
Salaries.....	17,896 39
Depots.....	16,270 98
Incidental expenses.....	14,437 90
Miscellaneous.....	17,119 14
Cash in bank.....	475 12

\$1,534,194 20

The officers of the company are:

LEWIS MCKENZIE, *President.*

REUBEN JOHNSTON, *Treasurer.*

CHAS. P. MANNING, *Consulting Engineer.*

RICHARD RANDOLPH, *First Division Engineer.*

ROBERT T. BOWIE, *Second Division Engineer.*

Delaware, Lackawanna and Western R. R.

The quarterly statement of the Delaware, Lackawanna and Western Railroad Company shows that on the 30th September last

The outstanding funded debt was ..	\$8,070,125 00
Bills payable.....	272,911 33
Accounts payable.....	296,229 04
Total.....	\$6,639,265 37
Assets in cash.....	\$52,960 90
Bills receivable.....	280,443 57
Accounts receivable.....	268,922 86
Coal on hand.....	243,270 51
	845,597 84

Balance of indebtedness.....\$5,793,667 53

In addition to the above assets, the company owns \$72,100 of the bonds, and \$473,500 of the stock of the Warren and Lackawanna and Bloomsburg Railroads, and has \$182,612 59 of material available for operating the road and coal mines. The amount expended for construction and equipment during the nine months ending September 30, was \$118,151 96. The revenue for the nine months ending Sept. 30, 1859, was as follows:

Transportation and sales of coal....	\$3,262,873 44
Expenditures, includ'g coal on hand.....	2,620,263 60
Net earnings nine months.....	\$642,609 84

The Welland Railway.

The Welland Railway, between Port Colborne on Lake Erie, and Port Dalhousie, on Lake Ontario, has at length given signs of being a successful enterprise in spite of its apparent absurdity. Running side by side with the Welland Canal, it appeared improbable that the road could get any business. It has only been in operation a few months, but, according to the *St. Catherine's Journal*, the traffic over it is increasing at a wonderful rate. Friday last, 7 vessels arrived at Port Colborne, loaded with grain to pass over the road, the smallest of which contained 15,000 bushels. Seven more are on their way. The trains are

running night and day, and yet so fast does freight offer, they are scarcely capable of keeping up with the business.

During the month of October it carried from Port Colborne to its terminus on Lake Ontario, 600,000 bushels of grain. Next year the Welland Railroad Company will keep propellers on Lake Ontario to carry the grain to its destination, instead of sail vessels, as at present.—*Cin. Gaz.*, Nov. 19th.

Mississippi Bonds.

The Governor of this State has submitted a message to the Legislature upon the subject of the payment of the Planters' Bank Bonds, which we copy. It seems to us probable that the step now initiated will eventually result in the payment of these bonds.

The importance of the subject induces the publication in full of the message of the Governor of Mississippi, in favor of the resumption of the public faith on \$2,000,000 of the old Bonds of the State. The message appears to have been a special one.

EXECUTIVE OFFICE,
CITY OF JACKSON, NOV. 15, 1859.

To the Members of the House of Representatives: GENTLEMEN: Since the last meeting of the Legislature, I have received several petitions from the subjects of foreign governments, and also from citizens of the United States, respectfully asking the payment of certain Planters' Bank Bonds issued by the State. I herewith transmit those petitions to you, with the recommendation that some satisfactory arrangement should be made in relation to their payment. These bonds were originally for \$2,000,000, and there is now, in addition to the original amount of the bonds, a considerable amount due for interest on the same. Though a portion of this interest has been paid, viz: On the 30th of November, 1858, there was a payment of \$101,500, and on the 5th of July last \$20.

An act of the Legislature was passed in 1848, authorizing the State officers to convey the Internal Improvement lands of the State to the holders of these bonds in payment, at the price of six dollars per acre—and a small portion of them were so conveyed. But since that time the greater portion of these lands have been sold, and the proceeds of the same invested in the different railroads of the State. I would suggest that on the completion of the Gulf and Ship Island Railroad, that the stock then held by the State in said road might be sold and made to contribute largely to the payment of these bonds.

In 1852, by an act of the Legislature, the question was submitted to the people, asking whether or not they were willing to be taxed for the payment of those bonds. The answer was in the negative. I then thought, as I now think, that the bonds ought to be paid, and voted accordingly. If you, the immediate representatives of the people, should not feel authorized, in the face of this vote, to make an arrangement for the payment of these bonds, the question might be raised and submitted to the people, again asking their consent to the imposition of a tax sufficient to pay the interest for the present on the same, and to provide a fund in aid of the funds arising from the sale of Internal Improvement lands sufficient to provide for their payment in twenty or thirty years, which I have no doubt would be satisfactory to the bondholders. Such has been the greatly increased value and amount of taxable property within the State, that I do not believe that any increase of the present rate of taxation would be necessary for the purpose. But, even admitting that it might require an additional tax to meet this obligation, it constitutes no valid objection. The question for your solution is, Are those bonds due and unpaid? If this question should be answered in the affirmative, in my opinion the question of payment is no longer debatable—and proper provision should be made for

their liquidation or adjustment. It is due to ourselves and to the character of the State that all acknowledged obligations should be promptly met. It can never cost an individual or State too much to be just.

WILLIAM MCWILLIE.

The Vicksburg *Whig* remarks as follows on the subsequent proceedings of the Legislature:

On Saturday Mr. Smedes, from the Joint Committee, reported the following resolution, which was passed, viz:

Resolved, That the Auditor of Public Accounts be requested to report to this House, with all convenient dispatch, a full statement of the amount of the bonds of the State issued on behalf of the Planters' Bank now outstanding, the date of their issuance, the period of their maturity, the amount of interest paid and when paid, and the amount of principal and interest of said bonds due up to the present time.

We are not prepared to say that these movements indicate any intention on the part of the Legislature to make immediate provision to pay this long-deferred debt; one admitted on all hands to be justly due, and for the non payment of which not a shadow of just excuse ever has, to our knowledge, or ever can, in our opinion, be given. We sincerely hope, however, that they may prove auspicious of prompt action, and that the present Legislature will repair the wrong which the failure to pay this debt has done and is still doing to the State and to the nation.

In this connection it is but a just tribute to Gov. Brown (now United States Senator) to mention the earnest appeal which he made to the Legislature of the State in his recent speech, delivered by invitation before that body, to pay these bonds. With a manliness characteristic of him, and with an integrity without which he would be unworthy of the high post which he fills, he urged upon the immediate representatives of the people to pay these bonds, as being alike the dictate of an enlightened policy, as well as the simple demand of justice and right.

Pensacola and Georgia Railroad.

The Quincy (Florida) *Republic* says that this road is progressing very rapidly; and the general impression is that it will be completed from Tallahassee to that place in about one year.

Reading Railroad.

The fiscal year of this company closed on the 30th of November. The quantity of coal transported for the year was.....1,633,150.04 tons. Transported in 1858.....1,542,591.13 "

Increase in 1859.....90,558.11 "

Charleston and Savannah Railroad.

We learn that a cargo of iron has been received at Savannah for the western end of this road, and forwarded up the Savannah river to the Eighty-sixth Station on the road, where it will be taken immediately for laying by an active and well organized force of track layers, who will work towards the gang now busy at the Sixtieth Station.

These gangs are able to complete each six miles of track monthly, at least, and as there remains but twenty-six miles to be laid on this side of the Savannah river, there is no reasonable doubt of completion to this point by the 1st February, 1860. On reaching the river, the Charleston and Savannah Railroad Company will be prepared to convey passengers from the crossing to the city of Savannah (16 miles) by steamers, until the thorough completion of the track to Savannah. As a considerable portion of the Georgia work is already under way, this completion will not be delayed long after the river is reached by the cars.

The only part of the line now awaiting completion which can, under any circumstances, involve delay, is the bridge over the Savannah, and for this a cargo of iron cylinders, has been received. This work will be commenced as soon as possible.—*Charleston Courier*.

Internal Improvements in Kentucky.

The following is a statement of the amounts of stock owned by the State in various public works within her territory.

RIVER IMPROVEMENTS.	
Kentucky river navigation.....	\$901,982 70
Green and Barren river navigation.....	859,126 79
Licking river navigation.....	372,520 70
TURNPIKES.	
Maysville, Washington, Paris and Lexington.....	213,200 00
Frankfort to Shelby county.....	20,000 00
Shelby county.....	45,000 00
Muldrough's Hill and bridge.....	55,145 45
Hardinsville to Crab Orchard.....	17,064 00
Anderson county, from Hardinsville to Crab Orchard.....	42,950 00
Mercer county, from Hardinsville to Crab Orchard.....	71,800 00
Lincoln county, from Hardinsville to Crab Orchard.....	51,299 00
Frankfort, Lexington and Versailles.....	78,122 00
Danville, Lancaster and Lexington.....	151,382 00
Frankfort to Georgetown.....	15,400 00
Frankfort to Georgetown, (Scott portion).....	43,325 00
Winchester and Lexington.....	45,100 00
Covington and Georgetown.....	86,952 66
Williamstown and Georgetown.....	83,223 11
Lexington and Georgetown.....	30,270 00
Richmond and Lexington.....	75,385 00
Louisville to mouth of Salt river.....	65,340 99
Mouth of Salt river to Elizabethtown.....	84,580 16
Elizabethtown to Beil's Tavern.....	118,778 24
Beil's Tavern to Bowling Green.....	85,488 70
Bowling Green to Tennessee line.....	87,194 16
Springfield and Bardstown.....	65,190 60
Lexington and Perryville.....	109,646 00
Louisville and Bardstown.....	100,000 00
Bardstown and Glasgow.....	289,825 19
Glasgow to Tennessee line.....	110,385 38
Maysville and Mt. Sterling.....	88,072 59
Anderson county and Versailles.....	20,000 00
Logan, Todd and Christian.....	149,428 91
Maysville and Bracken.....	25,948 00
New Market, Lebanon and Washington.....	2,655 82
Owingsville and Big Sandy road.....	168,783 83
RAILROADS.	
Stock in Frank't & Lexington R. R. Co.....	217,800 00
Bond on Louisville and Frankfort Railroad Company.....	74,519 50
Total.....	\$5,182,794 00

Delaware Breakwater Railroad.

The Engineers of the Junction and Breakwater Railroad are engaged in running a west line from Milford to Georgetown. The contract for grading the road has not yet been given out, and it is thought work will not be commenced before Spring. The first instalment of two dollars per share has been called for and is being promptly paid.

Keokuk and Des Moines Railroad.

The United States District Court for Iowa, (Judge Love,) at its recent session at Dubuque, gave its decision sustaining the claim of the State to about six hundred thousand acres of land, granted by Congress to the State in aid of the Des Moines River Improvement. The question submitted was the extent of the grant, the State claiming and the Secretary of the Interior denying that the grant extending to the sources of the Des Moines river. By an arrangement between the State and the Des Moines River Improvement Company, 550,000 acres of these lands are to be transferred to the Keokuk, Fort Des Moines and Minnesota Railroad Company. This road has been constructed and in operation for two years, from Keokuk to Bentonport, thirty-nine miles, and will be completed before the first of January, 1880; to Kilbourne, ten miles further, mainly on stock subscriptions. If the decision of the District

Court stands, the railroad company will have the lands to aid them in building the road to Fort Des Moines, the capital of the State, which it is their intention to do as expeditiously as possible.

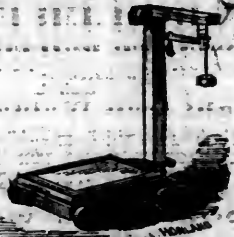
Androsoggin Railroad.

The Directors of this road have given notice of their intention to petition the Legislature for leave to extend their road so as to connect with the Atlantic and St. Lawrence Railroad near the Hotel road; or to connect at Lewiston with the proposed Lewiston and Topsham Railroad. It is about fifteen miles from a point of their road to the Grand Trunk road, and eighteen miles from Leeds Junction to the Lewiston and Topsham road. The Lewiston Falls Journal says this movement receives great encouragement from the manufacturing corporations and merchants of that place, in consequence of the high rates taxed by the A. & K. road between that place and Danville Junction.

Toledo and Western Railroad.

This company hope soon to make arrangements for the payment of the coupons on their first mortgage bonds.

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STANDARD SCALES,

Adapted to every branch of business where a correct and durable Scale is required.
SCALES FOR RAILROADS,
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 All of which are **WARRANTED** in every particular. Call and examine, or send for an illustrated circular.
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To Car Manufacturers.

OFFICE OF DON PEDRO 2d R. R.,
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THIS Road now under construction, is 270 miles in length, with 38 miles open to traffic, stocked with Cars of the English pattern built in London. The directors have determined to order American Cars as an experiment, and with this view desire proposals for two 1st class, two 2d class Passenger Cars (90 seats each) and one Baggage and Post Office Car.
 Drawings and specifications may be seen at the office of LYMAN HOLLINGSWORTH, Esq., No. 5 Water st., Boston, who is fully authorized to contract immediately for the above cars.

ANDREW ELLISON, Jr.,
 Engineer in Chief.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other near sea.
CASWELL & PERKINS,
 Brokers, 69 Wall st.
 New York, July 9, 1859.

RAILROAD IRON.

500 TONS American Rails, Erie pattern, 55 lbs. per yard, for sale at Chicago, also about 250 Tons English Rails same size and weight.
M. K. JESUP & COMPANY,
 New York June, 1859. 44 Exchange Place.

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No. 654 BROADWAY,

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PIGS FEET, PIES, ETC., ETC.

COLD CUTS AT ALL HOURS.

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 Messrs. T. B. CORDINGTON & Co., New York.
 " P. & J. P. HAWES & Co., Boston.
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AND COMMON BARS.

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R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE subscribers. Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

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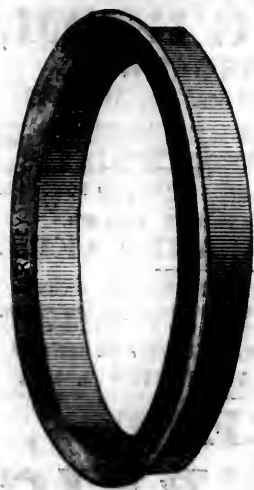
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For sale, at manufacturer's prices, by

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500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

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F. S. PEASE, 61 Main st., BUFFALO.
Reliable orders filled for any part of the United States or Europe.

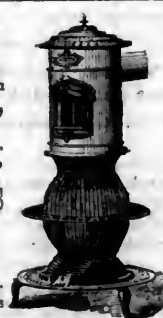
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HOUSE FURNISHING GOODS,
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Extensively used in
Railroad Depots,
WORKSHOPS,
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AND ALL
EXPOSED PLACES
REQUIRING A
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**SANFORD'S
CHALLENGE
HEATERS,**
PORTABLE
AND FOR BRICK
Most powerful
HEATER,
AND
THE GREATEST
FUEL SAVER
KNOWN.
Burning the
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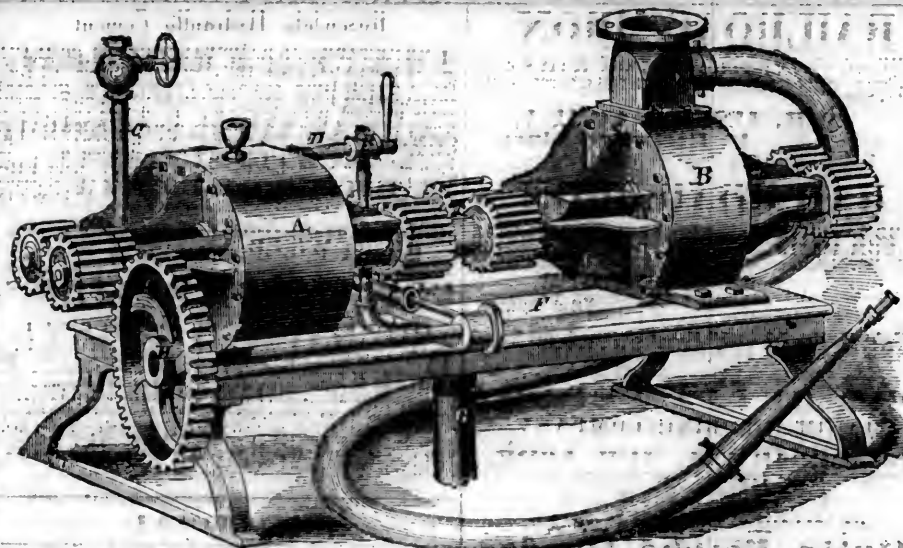
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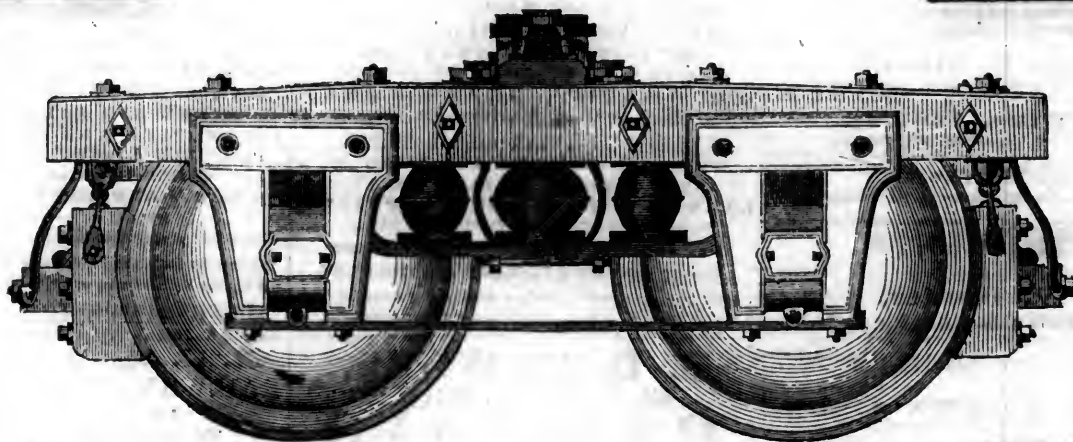


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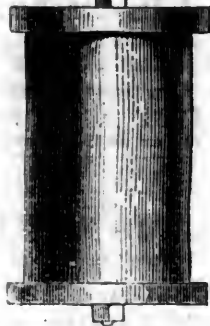
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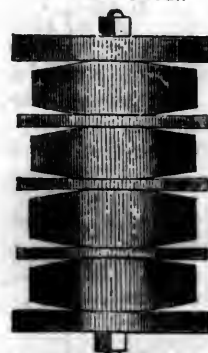


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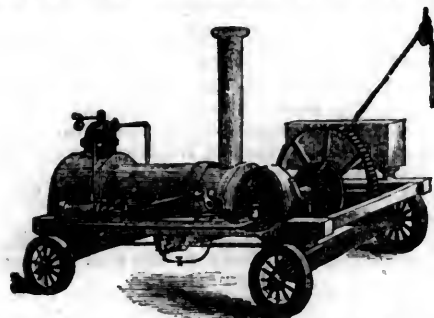
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AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

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MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

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American Railroad Journal.

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New York, Saturday, December 17, 1859.

The Gauge Question.

(Continued from p. 795.)

The number of engines required for the estimated tonnage of the road is, according to Major Brown's report, 250. His method of arriving at this number, is as follows: The Reading Railroad has 72 engines; is 1-5 the length, and has 4-9 the business of the New York and Erie Railroad; therefore $72 \times 5 \times 4-9 = 160$.

The number of engines on the Western Railroad ($\frac{1}{2}$ the length, 1-5 the business of the Erie, and grades of 83 feet,) is 43. The number for the New York and Erie Railroad, would on the same principle, be $43 \times 3 \times 5 = 645$.

Major Brown next compares the whole length and business of the Erie Railroad with that of the Eastern Division. In doing this, he assumes that we had 9 engines last year, and that the whole road will be 9 times larger, with 18 times the business; therefore, $9 \times 9 \times 18 = 1,458$ engines. He then remarks that "on the Eastern Division the grades are high, and a portion of the engines have been employed in completing the road-bed, which accounts for the extraordinary results obtained by using the Erie Railroad data. Now, as the num-

ber of engines required is very important, and as the number estimated in my report, varies so materially from the number estimated by Major Brown, I propose to apply, as I did in the case of freight cars, the data of the Erie Railroad to the determination of this question. Major Brown's calculation applies only to freight transportation. Last year we had only 6 engines to perform all our passenger and freight business and repairs. We began the year with but 5 engines, all told; the new ones altogether performed less than 12 months service. One arrived in April; one in June, and two in September; the last one doing nothing but one day's work in the year. The engines which had formerly performed the passenger service, had become unfit for that duty, or for the freight business. One of them was put to use at the earth work, and the other was laid up after the first two new engines were put in use.

The freight business was done with less than 3 engines; and those of only 16 tons weight. Then by Major Brown's method $3 \times 9 \times 18 = 486$ engines, by the N. Y. & E. R. R. data, will be required, instead of 1,458.

But is it reasonable to suppose that engines will perform no more labor after the completion of the line, than while doing a light way business on 53 miles?

In the first place, they should run twice the distance in a day, which will reduce the number one-half; and next, they should on an average per mile run, haul 3 times the load, which will still further reduce them to one-sixth the number, or 81. Without doubt, 81 broad gauge engines, of 20 to 24 tons, will perform the estimated freight business of the road after its completion. In my report, to which I again refer you, I stated that 66 engines would, on the wide gauge, be sufficient for the estimated tonnage, and that on the narrow gauge 86 engines would be required, on account of the difference in the power of the engines. I estimated the cost of wide gauge engines at \$1,000 each more than narrow gauge engines, which is too much; but I still showed a saving in the first cost, of \$94,000; and this saving I still maintain, will be realized.

The next item charged against the 6 feet gauge by Major Brown, is, the extra cost of machine shops, tools, machinery and depot building, &c.,

which he makes \$18,750. Now as our cars and engines are all shorter in proportion to their capacity and power, it is easily demonstrated that all those items will cost the least on the wide gauge. By having long engines you increase the size of your engines and turn-tables very much. Your car and passenger houses are also required to be as much larger in proportion. The cost of housing the extra number of engines required by the narrow gauge, will alone be more than \$18,000, and the saving of machinery to keep them in repair, will be at least \$3,000 more. Every freight house on the line will be cheaper. But I will make no account of this item, and am willing that it be assumed that your buildings will cost the same, with either gauge.

Instead, therefore, of there being any saving made in the construction account, or cost of the road and machinery, by a change of gauge, there will be a larger loss; thus, the cost of changing the present track, cars and engines, is estimated at.....\$130,000
Saving in the number and cost of freight cars.....100,000
Do. passenger cars.....80,000
Do. engines at one-fourth cost.....94,000

\$406,000
Less the extra cost of grading, superstructure and repairs.....317,485

\$88,515

The next subject mentioned by Major Brown as a leading "characteristic feature of the Erie road, is its curves." He notices "that the grades on the greater portion of the line, by reason of the adoption of the Pennsylvania routes, will be favorable, but that the same policy which has secured this important result, will necessarily, by confining the track closely to the margin of the streams, occasion much curvature. East of Binghamton in particular, curves of from 1,000 to 1,500 feet radius are of frequent occurrence; and straight lines a mile in length, are rarely to be met with. On such a line, all idea of traveling at the rate of 50 miles per hour, must of course be abandoned, no matter what the gauge may be."

Now I should suppose that this consideration would induce Major Brown to favor the adoption of such a gauge as would admit of the greatest speed; for if we must be brought in competition

with roads shorter, and with less curves than ours, then we must make the better speed where our line will permit it to be done with safety. As I understand the Pennsylvania location, the curvature between Binghamton and Deposit is reduced; and on the Delaware, where it is increased, this important advantage in the practical working of the road, is obtained on curves of more than 1,200 or 1,000 feet radius, there being little more difficulty or danger in a speed of 40 or 50 miles per hour than on tangents, except that the engineer cannot usually see far enough ahead, to be able to stop the train in case he should observe anything wrong on the track. In consequence of the side hill location along the Delaware, the longest curves of the inner bends are not obstructed; and on these, as well as on the straight lines, which are, I believe, about two-thirds the distance, a rapid speed can be maintained. This is, perhaps, an advantage of the Delaware line not before observed, but it is nevertheless one of value. The curves on the interior route would often be in deep cuts where rapid speed would be obtained at much greater risk than in the other case.

Major Brown goes on to show that our line has more curvature than the northern line, from the fact that it is much longer, compared with an air-line drawn between the respective terminations of the two routes. We may have more curvature than the northern line, but I do not see that the fact is proven by this kind of argument. Our line might be still longer, compared with the air-line connecting its terminations, and yet have but little curvature, much less than our "rivals." I am of opinion that the N. Y. & E. R. R. is yet the shortest, as compared with the air-line. Suppose a perfectly straight road from New York city, on the east side of the Hudson, to Troy, thence crossing the river by a curve of 180 degrees, and proceeding down the west side, perfectly direct, to Jersey City. Would it follow, (because the road is 300 miles long) to go from New York to Jersey City, one mile apart on an air-line, that there was a great loss of distance in consequence of its numerous curves? Our line is, however, admitted to be very crooked, and the curves are to some extent objectionable. It requires more power to move a load around a curve than upon a straight line of the same length and grade, but it is still true that the effect of curves is not so serious as was formerly supposed. In practice they serve to retard the motion rather than limit the road.

To my report was appended a paper by Mr. Post, wherein he has given calculations of the comparative resistance, on curves of both gauges, and has already shown the error of the eminent engineer, whose statement is referred to by Major Brown, and endorsed by him as a perfectly sound one—to wit: that the resistance occasioned by the slipping of the wheels, owing to the difference of length of rails on curves, increases "as the square of the width of the track." There is doubtless an error made by Mr. Stephenson, when answering questions of the Gauge Commissioners, without sufficient reflection. If making the wheels conical facilitates the dragging motion referred to, as Major Brown says it does, then let the wheels be made cylindrical; but that conical wheels produce a zig-zag motion on a curve, and thus facilitates the dragging motion, is not clearly in accordance with facts.

Major Brown next estimates that the greater weight of cars on the broad gauge will be equal to an extra tonnage on the whole road of 9,000,000 tons, one mile, and which at $\frac{1}{2}$ cent. per ton, per mile, amounts to \$45,000, as the yearly tax. It has been shown that our cars are not heavier, but lighter; and the saving of dead weight on the wide gauge, will be made to enter into the calculations I shall make, of the economy of moving freight on the wide gauge. Major Brown here introduces George Hudson Esq., M. P., as the manager of "more than 1,000 miles of railroad in England," who says, "without any prejudice of either the broad, or the narrow gauge, I am perfectly satisfied that everything is accomplished by the narrow, that is accomplished by the wide, and therefore, as economy on the construction of railways is an important element, the narrow gauge I should say was the better of the two. I think in regard to the weight, we can carry as large a quantity on the narrow gauge by one train, as can be carried by the broad gauge."

I regret the necessity of taking up your time with this testimony, and would not advert to it, if you had read it all; but as it comes to you so well certified as the opinion of a man well qualified to judge, and as such must have great weight, cannot pass by it. Is Mr. Hudson qualified to judge correctly on this matter? He is not a manager in our occupation of the term; but as he says, a director on nearly 1,000 miles of railways, all of the narrow gauge. But Mr. Hudson says also that he "does not know much of engines," and proves this fact by his testimony.

I am only anxious that he should stand before you as he is, eminent for his wealth, and business talent, and largely interested on the narrow gauge lines, but not at all acquainted with the detail of railway management. It may be well then, to ask whether his assertion that "every thing is accomplished by the narrow gauge lines, that is accomplished by the broad gauge," is in accordance with facts; and whether our directors will be satisfied for their line, with the results accomplished by the narrow gauge in England? The average gross loads taken per train, per mile, was as per the returns made to the commissioners as follows:—

London to Birmingham	177 tons including cars.
Grand Junction	154 " " "
Liverpool and Manchester	100 " " "
Great Western (wide g.)	300.5 " " "

These are the results of the actual working of these roads. Now when Mr. Hudson asserted that they accomplished as much on the narrow as on the wide gauge, he had in his mind a money view of the matter,—that is; his roads had made thus far, as good dividends as the broad gauge had done.

Major Brown next discusses the subject of the conformity or non-conformity of the gauge of the Erie Railroad, with that of the other roads with which it will come in contact and competition. "This—he says—I consider, after all, the most important aspect of the question." He refers in the outset, to the controversy which was held in England on this subject, to the creation of a commission to inquire into the importance of uniformity of gauge, and to the result of their investigation. The origin of this commission, the objects had in view by those who called for it, and the manner of prosecuting its inquiries, are all matters of in-

terest to the board, and it would be well if they were in possession of fuller information with regard to these matters, than I shall be justified in placing before them at this time. I will only remark, that in 1845 two systems of railways for connecting the north and south end of England were promoted in Parliament.—The one on the narrow gauge, advanced by the London and Birmingham in connection with the South-Western Company, was to cross the wide gauge, or Great Western main line, and run parallel to the Oxford and Didcot, a branch of the Great Western, (also wide gauge).—The other, on the broad gauge, was to extend the Oxford and Didcot Branch to Rugby for the northern and north-eastern traffic; and to run another line from Oxford westward, with a view ultimately of reaching the west coast of the Island in Wales, and making the most direct route from London to Dublin.

These were great schemes, and on them the *Battle of Gauges*, was fairly commenced. Now it would seem, that (without knowing the result,) if Parliament denied the introduction of broad gauge into the narrow gauge districts as contemplated, to be a great evil, without countervailing advantages, they would certainly reject the broad gauge application and sanction that of the narrow. The bills went before a committee of the House of Commons, which after a patient inquiry into the whole subject, after 29 days, decided in favor of the broad gauge lines. I regret exceedingly that I have not taken measures to procure the report of this committee, as it embraces the results of this long investigation, and is, no doubt, (as the author of the observations on the Gauge Commissioners Report remarks) well deserving the most serious attention of all interested in the question of gauge. But the fact is known to us that the broad gauge lines were reported by the committee, and the London and Birmingham schemes rejected. When the report of this committee came up in the House of Commons, the promoters of the narrow gauge system, having no other means of defeating the bill, which seemed most certain of success, proposed an amendment to the effect that a commission should be appointed to "inquire whether in all future acts for the construction of railways, provisions ought not to be made for securing one uniform gauge?"

Those of the board acquainted with legislative maneuvering, will notice that this was a skillful measure for defeating the bill. This amendment was, however, rejected by a vote of more than two to one, or 247 to 113. It is evident, therefore, that it was not the simple desire to promote inquiry into break of gauge which originated the idea of a commission, but an effort to defeat a bill to construct broad gauge lines, up to, and interlocking, narrow gauge lines. The bills were then sent to the House of Lords, referred to a committee who reported unanimously in favor of them, "after a renewed investigation and protracted opposition, they finally received the royal assent."

A still more important fact, throwing light upon the motives and objects of those who originated the inquiry into the importance of uniformity of gauges, is at hand. While the London and Birmingham and Midland Companies with their allies, more strenuously contending against any extension of the broad gauge lines into the north of England, the London and Birmingham Company

were promoting direct lines "to intercept and cut off the traffic of Manchester, and all places beyond it, from the Grand Junction Line. This induced the latter company, though their road is a narrow gauge, to ally themselves to the Great Western and broad gauge schemes, and thus have a line from Liverpool as well as Manchester, to London, independent of the London and Birmingham Company. The Grand Junction Company, at that time, were in favor of broad gauge lines, or of a connection with them; and it is quite important, as well as interesting to know how they regarded the difficulty of a break of gauge, under such circumstances. On the 11th of June, 1845, or after the report of the committee in the House of Commons in favor of the broad gauge bills, but before these bills had been acted upon, the Directors of the Grand Junction addressed a circular to the proprietors of this road, in which they call their attention to the decision of the committee "after a long investigation, in favor of the lines promoted by the Great Western and for which the Grand Junction had petitioned" in which they say: "The Directors have been informed through the medium of circulars from the London and Birmingham Company, that an active canvass has been commenced for the purpose of setting aside the decision, they consider it their duty, therefore, to urge you to meet this attempt by inducing such members of Parliament as you may know, to attend on the 17th instant, on the bringing up of the report. The question at issue has been represented as one entirely of *broad and narrow gauge*. Upon this point, the Directors may answer that they do not anticipate any inconvenience whatever to arise from the introduction of the broad gauge among the narrow gauge lines, or the mixture of gauges on the same line. On the contrary, looking at Express trains running at high speed, which are being introduced on the leading roads, they deem it probable that many companies possessing trunk lines on the narrow gauge principle may find it their interest to adopt both, the Directors having ascertained the perfect practicability of adding the broad gauge on the Grand Junction at a very reasonable cost."

Such were the views entertained by the Grand Junction Company, at a time, when, from the extreme course of the London and Birmingham Company, they were compelled, in order to save themselves, to count the influence of the broad gauge lines. But the London and Birmingham Company found from the success of the broad gauge interest in obtaining their bills, that it was necessary to add to their own strength, and therefore made such overtures to the Grand Junction, as to induce that company to change their ground; and we find that when the commission on this subject, of uniformity of gauge, calls upon this company, they are in favor of uniformity. What can better illustrate the truth of the assertion, that this question is, after all, in England, one of interest only, and that the origin of this commission is clearly traced to a fear of competition from the broad gauge lines.

After the measure for the appointment of the commission had been defeated, as an amendment to the broad gauge bills, it was brought up in the form of a distinct resolution, in which shape, no one opposed it. The commission thus formed by the narrow gauge interest, entered upon its duties in August, 1845.

The broad gauge interest in England complain, (and with justice,) that the Commissioners allowed a large number of witnesses interested in the behalf of the narrow gauge companies, to testify without the advantage of any cross examination, so essential to the thorough sifting of the evidence itself. A larger portion of the testimony, may therefore be regarded as little else than the special pleadings of the advocates of the narrow gauge, being placed, (by the means we have stated,) in a position to gain great influence to their opinions, with all who do not look closely upon the object of the whole movement.

But to follow on in the path of Major Brown. It is admitted that the Commissioners are men of "high character, science and practical experience," but not that they pursued their investigations impartially. Major Brown states "that the witnesses comprised 44 civil engineers, six carriers, 14 secretaries and managers, four superintendents, five engine builders, two contractors, and four officers of rank in the British army." Of these, he says, 33 are in favor of uniformity and a narrow gauge; six are in favor of an intermediate gauge, and express no opinion as to uniformity; four are opposed to any break of gauge, but express no opinion as to the relative merits of the gauges; and four are in favor of the broad gauge of seven feet, and are connected with the Great Western Company. That 33 out of 49 should be in favor of retaining the gauge in which they were in various ways identified and interested is not surprising; nor does the fact, when you examine the ground upon which they found their opinions, add any force to the arguments which are given in favor of a change of our gauge. These opinions are formed in view of short roads, which branch out from each other, and unite with others at short intervals, and do really present, in a great many instances, serious objections to break of gauge. So far as these lines are concerned, we should not advise a wide gauge for either of the different companies whose roads make up the line from Albany to Buffalo, unless all the others conform to it. Again it is not surprising that 33 men could be found in England who have experience in railroad matters, but who, from the fact that their experience is gained on short roads, operated with very light trains, honestly think that four feet eight a-half inches gives sufficient room for all the power required for their roads, as it undoubtedly does; but the fact that even six out of 49 go so far as to advise a change of gauge, of all the roads in the Kingdom, in order that the roads may be increased in capacity, ought to make an impression; for they so advise on the ground that four feet eight and a-half inches is too narrow for the business that railroads are now called upon to perform; but that seven feet gives greater capacity for business than is required in England; while four think that all the capacity of a seven feet gauge can be advantageously used. Major Brown next says, "of the 14 civil engineers, *one only*, viz: Mr. Brunell (its inventor) was in favor of the broad gauge, and the list embraces at least seven names as eminent as any in the profession in Great Britain. Now if from this language you should be led to infer that all the 14, except Mr. Brunell, are in favor of the narrow gauge, you would be misled. As I may not take the same names as does Major Brown in speaking of civil engineers; and to avoid any mis-

take in this respect, I will state that besides Mr. Brunell, Wm. Cubitt is in favor of a six feet gauge. John Gray, of five and a-half to six. Locke would not think of dropping down to four feet eight and a-half inches, but would stop somewhere between that and seven feet, so that he may be said to favor six feet. C. Vignoles also favors six feet, making four; and if Benjamin Cubitt and Capt. Huish are included, six; while two express no opinion. It is true that those who advocate a wide gauge, as above, are men of experience, but are connected with narrow gauge lines. I think it very remarkable that in *England* with their *short roads* and level grades, so many men should have learned from their experience there, the great importance of a wider gauge. But it is a matter of complaint that the commissioners did not call on all those whose opinions would have been of weight, but in favor of the broad gauge. Especial reference is made to the fact, that they did not call upon Mr. James Walker, an engineer of great eminence, who is now the adviser of Government, and who had no connection with those whose interests were mixed up in the contest.

It is not surprising that the commission, favored as it was, should advise Government to arrest the extension of the wide gauge, and to declare that four feet eight and a half inches should be the gauge to be adopted on all public railways then under construction, and that narrow gauge lines might be authorized across the district occupied by the broad gauge. But even this decision is founded only on the *cost and delays of transshipment*, growing out of different gauges. The greater power of engines on the broad gauge, its capacity for more rapid traveling, and greater loads, and the greater steadiness of cars, are all admitted, while at the same time, that the cost of cars and engines, and their repairs is less, in performing the same amount of work, is abundantly proved.

Major Brown remarks "that it is understood that these recommendations of the commissioners have since been adopted by Parliament," but Parliament refused to adopt them, and, on this fact, we find the strongest proof that the broad gauge is deemed in England the best gauge. Mr. Gooch's letter indicates that there is no reason to apprehend that Parliament will undertake to carry out the advice of the commissioners. The Board can therefore decide with safety, that a break of gauge will not destroy the value of railroads in our country, since it has not had that effect in England; but on the contrary, a difference of gauge there has given additional value to them, by means of the efforts of narrow gauge roads to prove that the narrow gauge is *unnecessary*. But even had it happened that in the judgment of Parliament, the difficulties arising from a break of gauge was sufficient reason for arresting the broad gauge, it would be very easy to show that in our case the same reason does not exist. The Chief Engineer of the Portland and Montreal Railroad mentioned to me, some weeks since, a fact corroborating this view, which was that some of the English stockholders of that road, who appear as strenuous advocates of the narrow gauge in *England*, insist upon the wide gauge upon the Atlantic and St. Lawrence, and five and a-half feet has been adopted, after a full and elaborate discussion, in which the whole merits of the case were submitted.

(To be continued.)

St. Louis, Alton and Chicago Railroad--Its Transfer to Bondholders.

James Robb, of New Orleans, and Charles Congdon, of New York, have been appointed, by Judge Drummond, of the United States District Court at Chicago, Receivers of the above named road, at the suit of the first and second mortgage bondholders. We learn it will immediately pass into their hands, and the continuation of its affairs hereafter be under the direction of Mr. Robb.

This road has been embarrassed with a large floating and funded debt which has so trameled it, that while possessing natural advantages not surpassed by other competing lines, it failed to attain that position which it should have commanded. This decree will relieve it, and we may look for an improvement in its condition and traffic, and a certain renewal of confidence in the public mind in the permanency of its management, and an ability to meet any engagement that may be made in connection with its future operations. We are advised that immediate arrangements will be made to construct an independent track between Alton and East St. Louis, and the whole line of road, rolling stock and machinery, upon which extensive improvements have been made during the past season, will be thoroughly repaired and renewed. Few business men in this country have ever attained a more enviable position than James Robb, of New Orleans.

The results produced by his energy of character, large and comprehensive views, have become a part of the financial and commercial history of the country, and in taking the management of the interests of the St. Louis, Alton and Chicago Railroad, we may confidently expect that he will add new laurels to his already well-earned reputation. —*St. Louis Republican.*

Missouri River Valley Railroad.

Memorial of the Missouri River Valley Railroad Convention, held at Richmond, Mo., November 21, 1859.

To the General Assembly of the State of Missouri:

The undersigned Committee, appointed by the Missouri River Valley Railroad Convention, held in Richmond, on the 21st day of November, A. D. 1859; in discharging the duty enjoined upon us by the convention, take the liberty of presenting some of the most prominent reasons in support of a bill now pending in the House of Representatives, incorporating the Missouri River Valley Railroad Company, and granting State aid to the road, upon the dollar for dollar principle, to the amount of one million five hundred thousand dollars.

1st. This road will pass through the richest agricultural region in the State. Connecting with the North Missouri road in Randolph County, and passing Westward through the counties of Randolph, Charlton, Carroll, Ray, Clay and Platte, and terminating at Weston, the road traverses a country of extraordinary fertility, in a high state of cultivation, by a thrifty, energetic and prosperous population. This is no mere experiment; it is not proposed to build a road through a new and uncultivated country; the success of the scheme does not depend upon prospective developments. The present surplus productions of the country along the line of the road, together with the through trade and travel, would, from the beginning, furnish a remunerative business for the road; and this business would increase from year to year, as more and more land would be brought into cultivation by a constantly increasing population. The assessed value of the taxable property in the counties along the line of this road, for the year 1858, as appears by the Auditor's last report, was as follows, to wit:

Platte	\$6,633,042
Clay	5,403,139
Ray	4,125,409
Carroll	2,881,632
Charlton	3,868,724
Randolph	2,333,604

Total \$25,245,550

The assessment for this year will doubtless show a very considerable increase over last year.

This road, by connecting at Weston, with the road now in process of construction to Atchison, will furnish the most direct communication between Atchison and St. Louis, and a very short branch would connect it with Leavenworth City, and by these means it would command the largest share of the trade of Kansas, and take that trade to our own commercial emporium. A short branch would also connect it with Kansas City. No road in the State would have as large a through business as this.

This road has become a matter of necessity. Unless the people along the line of it, who have hitherto held an advanced position in the race of honorable competition with other portions of the State, are willing to remain stationary, while all others are advancing forward in wealth and power, the road must be built. Without it, we will be compelled to occupy a secondary position, except in the payment of taxes; with it, our progress will be onward and upward; and we will continue to hold the relative position to which the natural advantages of the country entitle us.

Mr. Sickels, the Engineer, who has made a preliminary survey of that part of the road west of Brunswick, has furnished us with the following abstract of distances, showing the advantages of this road, as a direct route to St. Louis and the East:

	Miles.
From St. Joseph to St. Louis, via Hannibal and St. Joseph Railroad	352
via the Missouri Valley Railroad	320
Saving	32
From Atchison to St. Louis, via the Hannibal and St. Joseph Railroad	371
via Missouri Valley Railroad	301
Saving	70
From Weston to St. Louis, via the Hannibal and St. Joseph Railroad	386
via Missouri Valley Railroad	286
Saving	100
From Leavenworth to St. Louis, via the Hannibal and St. Joseph Railroad	394
via Missouri Valley Railroad	288
Saving	106
From Kansas City to St. Louis, via Pacific Railroad	283
via Missouri Valley Railroad	273
Saving	10
From Parkville to St. Louis, via the Hannibal and St. Joseph Railroad	410
via the Missouri Valley Railroad	272
Saving	138

2. This road would so increase the business of the North Missouri road, as to convert it into a paying road, and enable it to pay the interest, and finally the principal, of the State bonds furnished to it, and thus save the people of the State from the burthen of paying by taxation, the State bonds furnished to that road, which will inevitably fall upon them, unless the business of the Missouri River Valley road be turned into that channel. This road will secure to St. Louis as a large stockholder in the North Missouri road, a corresponding benefit, by making that stock as valuable as any railroad stock in the State. And the commercial advantages accruing to St. Louis from the construction of our road, will be incalculable. Our people desire to be accessible, at all seasons of the year, to the great commercial emporium of the State. But if we should fail to build this road, a large share of the business of this portion of the State will be drawn into other channels; so that this road will promote alike the interests of the people along the line of it, and of St. Louis.

3. We expect the means to build the Missouri River Valley road, will be obtained, by stock to

be taken principally by the counties through which it will run, and State aid upon the dollar for dollar principle. The willingness of the people of the counties along the line of this road, to furnish half the amount necessary to build it, ought to be a sufficient assurance to the General Assembly, that the State bonds asked for in the bill would be paid by the company, and not, as in several cases that have already occurred, be thrown upon the State for redemption. We propose to carry out the true railroad policy of the State, which contemplates furnishing State aid, only where there is a reasonable probability, that the railroad companies themselves will pay off the bonds. It is a gross perversion of this policy, to give State aid to chimerical experiments however plausible; and it is equally a departure from true policy, to refuse State aid, to real projects, demanded by the necessities of trade and business, such as the Missouri Valley road.

4. We insist upon the State aid asked for in the bill, in behalf of our road, upon the plainest principles of justice. The counties along the line of this road stand high in the list of counties, in the payment of taxes. The revenue paid by them into the State Treasury for the year 1858, according to the Auditor's last report, was as follows:

Platte	\$15,918 65
Clay	13,018 40
Ray	10,233 91
Carroll	6,976 23
Charlton	3,863 08
Randolph	5,916 47

Total \$60,926 69

The total amount of revenue paid into the State Treasury in that year being the sum of \$741,115 61, it will be seen by calculation that these six counties paid into the State Treasury nearly one-twelfth part of the revenue of the State, and that, leaving out St. Louis, they paid more than one-tenth part of the revenue of the balance of the State.

The people of these six counties will be compelled to pay their relative proportion of whatever part of the thirty millions of dollars (which has been, and will be, furnished to the different railroads of the State) that will ultimately fall upon the State. Shall the people of these counties be forced to bear one-twelfth part of this burthen without any direct benefit from any road whatever? Before the era of railroads in Missouri the country along the line of the Missouri Valley Railroad was as attractive as any portion of the State, and if these counties are to be left without railroad facilities, they will become tributary to others that have enjoyed the bounty of the State. Nothing could be more palpably unjust than this; but when this is brought about by the action of our State government, under which all have equal rights, the injustice of it becomes glaring. While we, will cheerfully bear our portion of the burthens of whatever may be done to promote the prosperity of the people of the State, we claim as a matter of justice, that we may be permitted to enjoy an equitable share of the benefits conferred by the Legislature.

5. All the arguments used in favor of the completion of the Pacific Railroad, to the western border of the State, apply with equal force in favor of the construction of the Missouri River Valley Railroad, which is in fact but an extension of the North Missouri road to the rich counties of Upper Missouri.

6. The people along the line of this road, have, by their voluntary contributions, caused a preliminary survey of that part of the road west of Brunswick to be made by a competent engineer, and we call the attention of the members of the General Assembly to the able and satisfactory report of Mr. Sickels, the engineer. That part of the road between the North Missouri road and Brunswick has been surveyed, and is under the control of a company, with a large amount of stock subscribed, and we leave to that company the task of presenting to the General Assembly, the facts in regard to that part of the road. Mr. Sickels, the engineer, has furnished us the following abstract

from his report, showing the cost and characteristics of that part of the road between Brunswick and Weston.

Graduation	\$409,000
Masonry	100,000
Bridging	45,700
Grubbing and clearing	30,000
Superstructure, includ'g ties, rails, spikes, &c.	900,950

\$1,484,650

Allowing 10 per cent. for right of way, expenses of management, engineering 148,565

\$1,634,215

Depots and rolling stock 360,000

—or \$15,417 per mile \$1,994,215

Length of route	106 miles.
Air line between same points	96 "
Length of straight line	90 "
Minimum radius of curve	1,910 feet.

Grades on four-fifths of the route, not exceeding ten feet per mile.

Excavations are mostly easily to be made. Rock encountered only at three or four points on the route. Grand and Platte rivers, the only important streams crossed—one will require four spans of bridging, and the other two spans. The line lies centrally through the counties of Carroll, Ray and Platte—through Clay, centrally, considered with reference to the mass of the population.

It is apparent from this abstract, as well as from the leading features of the country itself, that this road can be constructed at a less cost per mile than any road that has been built in the State. And no road in the State can command a larger business or pay better dividends to the stockholders.

The bill now pending in the House of Representatives, contemplates the construction of the entire road, from the North Missouri road to Weston; but unless it can be made entirely satisfactory to the company having in charge that part of the road east of Brunswick, the bill will be so amended as to make our road begin at Brunswick. The bill asks for State aid, to the amount of one million and a half for the whole line of the road; but if it should be amended so as to make our road begin at Brunswick, then we ask that the million and a half be apportioned between the two companies, according to the length of their respective lines of the road. We have deemed it altogether superfluous to add anything for the purpose of demonstrating the great utility of railroads in developing the resources of a country, promoting the prosperity of the people, and building up the great marts of commerce. Enough has been said and written of late upon this branch of the subject, to remove the doubts of the most skeptical.

Relying upon the justice of our cause, and the ability of our Senators and Representatives to defend it from all assaults, we leave it in the hands of the General Assembly, knowing that you will do what, in your judgment, will promote, in the highest degree, the prosperity of the people of the State.

A. W. DONIPHAN,
A. A. KINO,
WM. R. SAMUEL,
JOHN DONIPHAN,
Geo. W. DUNN,
Committee.

—St. Louis Republican, Dec. 6.

Extension of the Central Railroad to Jersey City.

We understand that arrangements have been effected between the Central and New Jersey Railroad Companies, whereby the trains of the former will run over the latter road to Jersey City on the 19th inst. The first trip will be made on Saturday, the 17th, as a sort of trial trip, and the regular trains will commence running on the following Monday. The gauge of the Central track is about three inches wider than the New Jersey, but that matter has been obviated in some manner, so that there will be no danger in making the connection.

The full particulars of the arrangements have not yet transpired. For the present the steamboats will continue running between Elizabethport and New York to convey commuters to and fro.

Pittsburg, Fort Wayne and Chicago R. R.

A receiver has been appointed for this road on behalf of the 1st mortgage bondholders, for the purpose of securing the proper application of the net receipts of the road to the payment of interest on their bonds, and other creditors, according to priority, instead of being applied to other purposes. In regard to this matter, *The Pittsburg Post* of the 9th says:

On Tuesday of this week, Messrs. Moran and Von Hoffman of New York, representing certain persons holding bonds issued by the Ohio and Pennsylvania Railroad Company, made application to the United States District Court for the Northern District of Ohio for an injunction and receiver for the Pittsburg, Fort Wayne and Chicago Railroad.

On this *ex parte* application, the Court, on Wednesday, granted the injunction, and named J. K. Edgerton, Esq., of Fort Wayne, Ind., and the Vice President of the Company, Receiver.

As these proceedings were without notice to the Company, and of course no counsel being present to represent them, the Court made a preliminary decree, with leave upon the part of the Company to move for the vacation of the present Receiver, and the modification of the whole decree, the whole proceeding being without prejudice to the rights of the Company.

Domestic creditors here having judgments against the company, hearing of the above proceedings, and being apprehensive that their rights might be sacrificed, yesterday applied to the District Court for a Sequestrator. The application was made by Messrs. Park, McCurdy & Co. and others, and granted by the Court, appointing T. Haskins Du Puy, Esq., Sequestrator.

The prompt movement on the part of Park, McCurdy & Co., and others, will prevent the bondholders seizing upon the road, to their prejudice, and to the prejudice of the city.

If the Receiver appointed by the United States District Court in Ohio, should undertake to obtain possession of the road in this State, we presume our State Courts would resist to the last extent of their authority.

We understand that the officers of the company here, not being advised of the disposition of the earnings of the road by the decree of the Ohio Court, did not feel warranted in opposing the domestic creditors, as they might thereby do great injustice.

Railroads in Missouri.

The Pacific Railroad Company have determined to pay the interest on the bonds issued to the Southwest Branch of that road. The interest thus due is \$70,000. This being deducted it will leave the State to provide for about \$445,000 of interest due in January next. In taking this course, the road was governed by a desire to avoid any difficulty in regard to the Southwest Branch. One provision of law now in force is, that if the company shall at any time make default in the payment of interest on the bonds issued for the Southwest Branch, then, and without any other proceeding, the lands given to that road revert to the State. Looking to the best interests of the road, it was deemed advisable to avoid any such result, and provision has been made for the interest. The two roads—the Kansas, and the Southwest Branch of the Pacific, therefore remain intact, and cannot be divided. The great difficulty which the roads have had to encounter consists in the fact that a large portion of the aid granted to them at each session has been absorbed in the payment of interest. Bonds have necessarily to be sold for this purpose. And to this extent the means of the road have been diverted from the work of construction.

Only four millions of dollars in bonds can be ap-

propriated in aid of the roads, but if this sum should be given to them, a large amount will still be required to pay interest, and the roads will not be completed. If, however, they can be relieved from the payment of the interest next year, they will not only be able to complete the roads, provided a judicious distribution of the remaining bonds is made, but they will be ready to meet the interest due after January, 1861. We learn from a semi-official source that there will be paid into the treasury from the revenue of 1859 the mill tax, and the amount receivable from the United States, the sum of \$1,580,000. Out of this sum the regular appropriation for the Common School Fund is \$200,000, and the estimate for the ordinary expenses of government, \$300,000, leaving a balance in the treasury for the wants of 1860 of \$1,080,000.

This sum will meet all the interest which may be called for in July, of next year, and in January, 1861; and if the money should thus be appropriated, no doubt can exist of the ability of the companies to complete their roads with the bonds yet subject to appropriation by the Legislature. This being the case, the representatives of the people of Missouri ought not to hesitate about relieving the several companies from the payment of interest for the next year, leaving to them all power to make use of the aid given to them to complete their several roads.—*St. Louis Republican*.

Illinois Southern Railroad.

The Mount Carmel (Wabash County) Register has the following intelligence concerning this road, which is projected from Vincennes, Ind., to Mound City, Ill., a few miles above Cairo:

We are happy to be able to state, on good authority, that a contract for the construction of the whole line of the Illinois Southern Railroad has been entered into between Judge Wilkinson, the new President, and the Messrs. Stanton, subject to the approval of the Directors, of which there is no doubt. From the known ability and energy of the contractors, the public will now feel an increased confidence in the speedy completion of the road. The terms of this important contract have not been made public, but from the tact and ability of both parties, the public have the fullest guarantee of its accomplishing the great end in view.

Cairo and Fulton Railroad.

The following message from the Governor of Missouri was read in the House on the 3d inst.:

Gentlemen of the House of Representatives:

I return to you a bill entitled an act to suspend the further issue of bonds of the State to the Cairo and Fulton Railroad Company. My first objection to this bill is that, without any forfeiture or fault on the part of the company, it is a disregard of obligations the State had entered into with the company, under which said company had made arrangements for prosecuting the work of construction, and entered into contracts with third parties under the law authorizing the loan of bonds to the company. Vested rights had accrued which could only be annulled by a forfeiture on the part of the company.

The bill, it will be remembered, was passed before the adjournment in March last. In conformity with my duty, upon the presentation of the proper evidence, I have caused to be issued all the bonds due that company under the law. The bill if approved would consequently be a nullity, and I, therefore, return it without my signature.

Very Respectfully,

R. M. STEWART.

Lehigh Valley Railroad.

For the official year ending November 30, this road increased its coal traffic 106,622 tons over the previous year. The coal tonnage of this road, for the year just closed, was 577,651½ tons, which, considering that it was only the fourth year of the road's coal traffic, is certainly a testimony of its capacity to carry, and its power to command coal tonnage, sent down from the Lehigh mining region to the general market.

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (.....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.			
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.	Road in progress or projected.	Cars.				Property and Assets.			Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Gross.	Net.	Dividends.	Price of shares.
					Engines.	Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.								
M.	M.	M.	M.	No.	No.	No.										M.	M.			p. c.	p. c.	
ALABAMA.																						
30 Jun. '59	43.3				72.3	3	2	19	Alabama and Florida	1,086,278				539,396	473,500	101,205	1,127,174	27.3		59,430	22,350	
28 Feb. '59	30.3				58.1	2	2	19	Alabama and Mississippi	461,506	30,991			335,010	109,500	21,682	518,965	30.3		55,791	31,852	
31 May '59	99.2				68.4	7	7	84	Ala. and Tennessee Rivers	2,101,007	144,549			1,064,915	713,226	212,496	2,264,468	99.2		155,628	78,907	
30 Jun. '59	57.0				171.3				Mobile and Girard	1,500,000								57.0		76,773	21,000	
1 Jan. '59	319.2	14.7			213.0	25	18	361	Mobile and Ohio	7,252,801	681,859	114,894	3,441,859	4,051,547	728,546	8,300,702	202.0		769,787	420,000		
28 Feb. '59	88.5	28.4			205.3	20	14	272	Montgomery and West Point	1,819,403	279,435	100,000	1,419,672	922,621	18,956	2,462,492	116.9		446,153	211,880		
16 Dec. '59					26.1				North East and South West	728,000			105,760									
TENNESSEE AND ALA. CENTRAL																						
CAIRO AND FULTON																						
30 Nov. '58	38.5				301.4				Cairo and Fulton	553,877				351,524	446,000	10,725	511,949					
30 Sep. '58	22.5				107.5				Memphis and Little Rock	1,547,100				791,100	756,000		1,547,100	22.5		185,108	102,726	
SACRAMENTO VALLEY																						
CONNECTICUT.																						
31 Jan. '59	23.9				41.8	3	6	30	Danbury and Norwalk	333,237	49,773			279,050	85,000	3,502	404,622	23.9		56,044	20,618	
30 Sep. '59	122.4				75.1	16	20	250	Hartford, Provid. and Fishkill	3,903,455	302,511			1,806,740	1,810,560	319,443	4,323,922	122.4		333,500	152,777	
31 Aug. '59	61.4	10.6							Hartford and New Haven	3,108,018	254,000	102,889		2,550,000	964,000	16,463	3,932,432	72.0		723,400	204,134	
31 Dec. '58	74.0				11	19	212		Housatonic	2,438,847		8,559		2,000,000	278,500	76,675	2,555,837	159.0		271,272	66,330	
31 Dec. '58	57.0				7	15	178		Naugatuck	1,578,301				1,031,800	437,550	30,713	1,706,902	57.0		199,536	514,068	
30 Nov. '58	62.3								N. Haven, N. London and Ston.	1,470,661		11,050		738,533	750,000		1,488,533	50.1		76,758	8,946	
31 Dec. '58	48.4	8.8							New Haven and Northampton	1,400,000				922,500	600,000		1,481,723	55.2		172,369	70,487	
30 Nov. '58	66.0				5	5	167		N. Lond., Willimant. & Palmer	1,561,241		5,453		510,900	1,058,600	272	1,575,147	66.0		104,404	30,512	
31 Mar. '58	62.2				29	72	368		New York and New Haven	4,593,696	661,547		3,000,000	2,219,002	79,722	5,682,071	74.0		432,024	932,550		
31 Mar. '58	59.0	7.0							Norwich and Worcester	2,245,406	176,792		2,522,300	324,130	50,614	2,596,072	60.0		252,417	44,587		
DELAWARE.																						
31 Dec. '58	71.0				19.4				Delaware	1,146,311				252,561	735,000	123,750	1,146,311	71.0		66,628		
30 Nov. '58	14.3								Newcastle and Frenchtown	690,514		25,000		762,320			767,278	14.3		19,995		
FLORIDA.																						
30 Apr. '59	154.2				45.1				Florida	292,291				317,847	154,000	70,620	543,287					
30 Jun. '59	31.3				2.0	2	1	24	Florida and Alabama	396,310	28,008			206,781	204,000	164,670	594,836	19.3		10,255	1,504	
30 Sep. '59	26.5	8.9			227.0				Fla., Atlantic and Gulf Central									29.4				
PENSAOLA AND GEORGIA.																						
GEORGIA.																						
31 July '58	36.7				15	11	106		Atlanta and La Grange	1,179,381				1,000,000	187,500	23,384	1,459,075	36.7		362,061	197,357	
30 Sep. '58	30.0				133.5				Atlantic and Gulf—M. Trunk									30.0				
31 Dec. '57	53.0								Angusta and Savannah	1,082,200				298,500			1,032,200	53.0		125,427	69,679	
30 Apr. '59	43.5				23.7				Brunswick and Florida	755,000				151,887				31.0				
30 Nov. '58	191.0				52	28	633		Central of Georgia	3,750,000		550,152	3,750,000	199,851			5,645,001	239.0		774,787	1,353,722	
31 Mar. '59	171.0	61.0							Georgia (and Bank)	4,174,492		829,550	4,150,000	373,000			7,368,666	232.0		1,154,621	544,363	
31 July '59	102.5				18	16	171		Macon and Western	1,500,000		6,073	1,438,800	52,500			1,651,721	102.5		325,192	163,124	
31 July '59	60.0				7	2	107		Muscogee	774,244	162,534		699,950	249,000			1,028,668	50.0		202,714	110,516	
1 May '59	68.1				3	4	133		Savannah, Albany and Gulf	1,386,634	52,373		1,275,901	10,200	180,621	1,478,140	71.6					
31 July '59	106.1	56.5	14.8	44.3	15	18	166		South Western	3,165,000			2,254,000	631,000				147.2		171,758	547,876	
30 Sep. '58	138.0				52	24	706		Western and Atlantic	5,901,497								138.0		852,139	457,916	
ILLINOIS.																						
30 Apr. '59	138.0				62	31	990		Chicago, Alton and St. Louis	10,000,000			3,500,000	4,500,000			10,000,000	220.0				
31 Dec. '58	45.0				6	14	101		Chic., Burlington and Quincy	6,068,054	1,400,872	680,158	4,626,340	2,990,000			8,149,064	210.0		1,044,573	171,516	
30 Jun. '58	138.0				75.0				Chicago and Milwaukee	1,799,394	67,869	120,000	988,000	762,865	188,085	2,050,065	45.0		14 mo.	243,282	135,284	
30 Jun. '58	181.8				58	57	900		Chicago and Northwestern	6,776,119		175,165	5,605,000	1,397,000			6,651,745	128.4		1,407,846	629,029	
10 Nov. '58	33.2								Fox River Valley	580,000				590,000				84.0				
31 Dec. '58	121.0	138.5	73.6		60	63	1,369		Galena and Chicago Union	8,027,473	1,311,917	211,003	6,026,400	3,783,015	292,466	10,300,517	326.5		806,281	1,547,561		
31 Dec. '58	175.0				113	98	2,305		Great Western	6,022,926			1,000,000	3,088,426	334,500	6,022,926	175.0					
31 Dec. '58	454.8	252.5			81.5				Illinois Central	19,674,214	3,347,799		10,249,210	20,000,000	1,297,277	31,996,487	708.3			1,976,578	556,624	
31 Dec. '58	148.0								Illinois River													
31 Dec. '58	46.6								Ohio and Mississippi	4,870,586				1,780,295	3,292,403			148.0				
31 Dec. '58	184.0				129.0				Peoria and Bureau Valley						600,000			oper by Chic.				
31 Dec. '58	100.0								Peoria and Hannibal									oper by Chic.				
31 Dec. '58	1.0								Peoria and Oquawka	5,400,000			1,569,889	2,200,000				184.0				
31 Dec. '58	168.5	39.8	12.2		31	30	424		Quincy and Chicago	1,978,555			800,000	1,200,000		2,000,000	100.0		oper by Chic.			
31 Dec. '58	108.0								Rock Island Bridge									oper by Chic.				
31 Dec. '58	29.0								Terre Haute, Alton & St. Louis	7,008,968	628,487		3,026,903	5,035,615	741,040	8,865,252	206.3			823,767		
INDIANA.																						
31 Aug. '57	109.0				73.0				Cincinnati and Chicago	2,080,433				1,196,679	1,006,125			108.0				
1 Jan. '58	72.4								Cincinnati, Peru and Chicago									29.0				
31 Dec. '58	89.8	20.2			19	21	278		Evansville and Crawfordsville	2,233,413		2,750	966,061	1,219,100	51,772	3,283,748	109.0		249,867	119,432		
31 Dec. '58	84.0				23	19	313		Indiana Central	1,666,280	244,081	25,641	611,050	1,166,000	47,856	2,111,095	109.0		368,189	132,004		
31 Aug. '57	78.0								Indianapolis and Cincinnati	2,497,952	640,043	25,689	1,689,900	1,362,284	140,689	3,458,108	110.0		448,853	230,534		
31 Aug. '57	64.0								Ind., Pittsburg and Cleveland	1,904,956		10,000	835,971	1,025,200	19,719	2,109,836	84.0		232,905	92,850		
31 Aug. '57	86.0								Jeffersonville	1,839,576			1,014,252	681,000	99,400		108.0		222,737	74,328		
31 Aug. '57	86.0	49.0							Lafayette and Indianapolis	1,850,000			1,000,000	600,000		2,000,000	64.0					
31 Aug. '57	288.0								Madison and Indianapolis	2,984,516			1,647,700	1,336,816				135.0		206,114	82,632	
30 Nov. '58	74.0								Louisv., N. Albany & Chicago	6,000,000			3,000,000	2,000,000		6,000,000	238.0		645,827	871,402		
30 Nov. '58	73.0				18	25	298		Peru and Indianapolis	2,000,000			1,100,000	820,000	80,000	2,000,000	74.0					
30 Nov. '58	73.0								Terre Haute and Richmond	1,611,450		26,555	1,376,450	235,000		1,646,900	73.0		254,742	380,274		
IOWA.																						
1 Jan. '58	75.5				201.5				Burlington and Missouri	1,514,257				752,733	665,000	92,663	1,542,788	50.0				
31 May '58	50.1				260.0	8	8	86	Chicago, Iowa and Nebraska	1,350,000												

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

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Years ending.	Railroad.			Road in progress or projected.	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Price of shares.	
	Main Line.	Lateral and Branch Lines.	2nd Track and Siding.		Engines.	Cars.			Property and Assets.			Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Gross.		Dividends.			
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.					
M.	M.	M.	M.	No.	No.	No.															P. c.	P. c.		
MAINE.																								
31 Dec. '58	32.0			6.0	4	10	25	Androscooggin	645,271			145,787	511,500		32.0	22,001	30,957	17,263						
31 May, '59	55.0				9	10	122	Androscooggin and Kennebec	2,210,947		27,925	457,900	1,748,457	101,209	2,307,566	137.0	73,186	281,929	89,766					
30 Jun. '59	149.0		25.0		41	17	349	Atlantic and St. Lawrence	6,066,376	857,568		2,494,900	3,472,000	9,572	6,976,472	149.0	429,791	645,741	180,226					
31 Dec. '58	12.5				4	2	45	Bangor, Oldtown and Milford	175,232			135,000			175,516	12.5	25,437	33,059	16,530			6		
31 Dec. '58	63.0	9.0			12	11	109	Kennebec and Portland	2,871,264			1,107,526	1,763,738			72.5	169,240	145,074	70,746					
31 Dec. '58				23.0				Penobscot	308,413			180,000	143,678											
31 May, '59	54.7				4	10	93	Penobscot and Kennebec	1,611,413	104,019	78,014	555,228	1,206,800	128,576	1,990,604	54.7	oper. by	An. & K.	67,324					
31 May, '59	51.3				11	13	118	Portland, Saco and Portsmouth	1,494,792		6,208	1,500,000			1,500,000	61.3	141,664	208,299	104,029			6		
31 May, '59	37.0							Somerset and Kennebec	783,763			169,200	556,600			37.0		55,403	25,404					
31 May, '59	18.6			33.5				York and Cumberland	1,090,000			370,000	450,000	270,000	1,090,000	18.5								
MARYLAND.																								
30 Sep. '58	279.6	7.2			228	87	4,459	Baltimore and Ohio	20,019,286	3,538,360	2,981,982	13,111,500	10,668,645	412,483	29,400,161	286.8	3,626,805	3,856,485	1,325,280			6		
30 Sep. '58	30.0				7	33	167	Washington Branch	1,650,000			1,650,000			1,650,000	39.0	187,427	489,423	266,969			6		
31 Dec. '58	138.0	4.0			42	38	1,455	Northern Central	6,843,457	733,934	220,965	2,260,000	5,393,800	655,507	8,681,567	154.5	606,482	810,604	364,649			6		
MASSACHUSETTS.																								
30 Nov. '58	21.2				6	4	80	Berkshire	600,000			600,000			600,000	ope	rat. by	Housat.	42,000			7		
30 Nov. '58	28.8	1.8	43.6		20	26	544	Boston and Lowell	2,239,253	183,345		1,830,700	440,000	21,965	2,619,210	28.6	274,655	407,399	166,109			6		
31 May, '59	74.3	7.4	50.8		30	39	540	Boston and Maine	3,847,004	308,357	105,937	4,076,570			4,076,570	81.7		818,681	399,657			7 1/2		
31 Dec. '57	74.5		2.1					Boston and New York Central	3,622,203	69,941		2,241,000	374,550	1,299,039	3,923,519	74.5		88,483	7,052					
30 Nov. '58	43.5	12.0	23.8		22	27	200	Boston and Providence	3,333,907	191,175		3,160,000	193,220		3,353,220	55.5	292,649	527,764	259,176			6		
30 Nov. '58	44.7	24.0	59.2		31	64	697	Boston and Worcester	4,281,682	437,416	100,000	4,500,000	600,000	60,774	5,578,180	68.7	498,325	923,223	332,270			6		
30 Nov. '58	46.1	1.1	2.7		7	10	100	Cape Cod Branch	907,761	123,864		681,689	144,600	114,417	47.2	78,282	106,846	49,483						
30 Nov. '58	50.0	2.4	8.9		12	13	330	Connecticut River	1,614,364	187,568	20,000	1,691,100	223,000	28,000	75.4	168,815	238,390	90,877			2			
31 May, '59	44.2	36.4	19.4		28	46	820	Eastern	4,134,475	456,523	262,102	2,658,400	2,105,500	172,218	5,123,719	100.5	373,641	663,135	319,526			6		
30 Nov. '58	19.9	1.3	2.8		3	3	63	Essex	742,592	4,416		299,107	277,961	197,423	774,492	ope	rat. by	Eastern	12,296					
30 Nov. '58	50.9	16.8	70.1		29	28	643	Fitchburg	3,189,851	350,149		3,540,000			3,540,000	67.7	303,392	672,967	278,585			6		
30 Nov. '58	14.0		2.4		3	3	63	Fitchburg and Worcester	293,658	40,226		210,000	64,200		210,000	26.0	85,557	55,476	12,849					
30 Nov. '58	9.0		9.0					Grand Junction (Boston)								9.0								
30 Nov. '58	24.9		2.0		2	8	28	Hampshire and Hampden	568,299			292,651	200,000	106,649	ope	r. by N.	H. & N'h	23,294						
30 Nov. '58	12.4		2.3					Lowell and Lawrence	332,833	30,275		200,000	100,000		200,000	12.4	22,455	42,784	18,540			3		
30 Nov. '58	14.6		17.1		12	11	301	Nashua and Lowell	568,919	95,684		600,000			600,000	14.6	123,395	180,085	71,505			8		
30 Nov. '58	20.1	1.4	1.1		7	18	144	New Bedford and Taunton	493,059	61,908		600,000			600,000	21.6	62,220	137,914	28,968			8		
30 Nov. '58	26.9		2.4		5	9	43	Newburyport	570,086	59,096		220,240	198,520	12,600	36.0	70,236	44,974	9,257						
30 Nov. '58			23.4					N. York and Boston Air Line	116,133			223,176	673,210	4,443	8.6	18,093	16,606	1,647						
30 Nov. '58	78.5		25.1		25	46	359	Old Colony and Fall River	3,028,445	334,503		3,015,100	101,500	30,985	3,748,970	87.3	365,197	651,399	257,000			6		
30 Nov. '58	18.0		0.8		1	2	1	Pittsfield and North Adams	432,430	11,247		450,000			450,000	ope	r. by We	tern	27,000			10 1/2		
30 Nov. '58	43.4		14.9		12	18	374	Providence and Worcester	1,534,911	264,563		1,550,000	300,000	46,500	1,897,509	43.4	169,865	270,402	110,344			6		
30 Nov. '58	16.9		1.7		3	3	198	Salem and Lowell	366,987	82,543		245,205	226,000		245,205	16.9	26,822	60,556				97		
30 Nov. '58	21.9							Stockbridge and Pittsfield	444,000	4,100		448,700			448,700	ope	r. by Ho	uston	31,409			7		
30 Nov. '58	7.1		35.5					Troy and Greenfield	529,741			268,428	169,000	9,854										
30 Nov. '58	69.0	8.0	5.5		12	8	194	Vermont and Massachusetts	3,309,237	207,343		2,214,225	1,093,675	6,500	77.0	99,256	225,079	103,037				11		
30 Nov. '58	173.4		94.3		12	47	1,149	Western (incl. Alb. & W.S. etc.)	9,785,566	1,096,713	15,120	5,150,000	6,032,520	243,800	13,528,766	210.6	944,951	1,700,238	809,368			8		
30 Nov. '58	45.7		8.8		10	8	145	Worcester and Nashua	1,779,936	140,961		1,141,000	200,000		1,141,000	45.7	162,903	185,127	83,549			5 1/2		
MICHIGAN.																								
1 Jun. '59	17.3				2	2	1	100	Bay de Noquet and Marquette															
30 Sep. '59	57.0							Chla. Detroit & Can. G.T. Junc.	built and	equip	ed by G.	Tr. & R.	R. Co. of	Canada										
1 Jan. '59	188.0							Detroit and Milwaukee	8,270,623	647,596		2,339,155	4,707,500		9,008,366	188.0		365,038	144,270					
MINNESOTA.																								
31 May, '59	284.0			183.0	98	123	1,528	Grand Rapids and Indiana	12,941,238		1,149,069	6,057,840	8,284,063	119,069	14,545,411	226.0		2,417,916	896,697			40		
1 Mar. '59	246.0	293.0			91	135	976	Michigan Central	14,517,892	1,807,906	1,312,534	8,975,400	9,343,000	816,460	19,595,407	339.0		2,019,425	777,273			6 1/2		
MISSISSIPPI.																								
1 May, '59	146.5				41.7	11	6	155	Mississippi Central	3,395,965		1,641,947	1,246,363	383,129	3,717,469	146.5		239,585	117,371					
1 Oct. '59	71.4				27.8	7	4	11	Mississippi and Tennessee	1,254,934	159,018	798,285	456,948	275,000	1,974,444	69.7		176,462	116,433					
31 Dec. '58	83.2				60.4				Southern Mississippi	2,750,000		1,000,000	1,400,000			83.2		250,047	121,659					
MISSOURI.																								
30 Nov. '58	12.0				65.8	1			Calumet and Fulton	281,645	9,200	50,493	327,000	50,592	128,356	12.0								
1 July '58	171.0				36.0				Camden and St. Joseph	8,164,559	330,422	1,664,773	6,830,500	37,500	8,633,228	171.0								
31 Oct. '58	168.8				68.0				North Missouri	8,396,527	235,994	2,620,080	3,320,000	48,006	6,018,106	168.0								
NEBRASKA.																								
28 Feb. '59	163.0	19.0			119.0	26	26	412	Platte County	8,621,559	614,782	3,380,657	8,206,000	764,837	12,288,494	182.0		676,310	301,503					
31 Oct. '58	19.0				264.0				Southern Nebraska	1,236,010		66,974	1,400,000											
31 Oct. '58	86.6								St. Louis and Iron Mountain	4,916,189	283,869	1,999,300	3,276,000	171,103	6,446,403	86.5		152,371						
NEW HAMPSHIRE.																								
31 Mar. '59	23.1		3.2						Ashuelot	506,000		246,018	150,000	109,982	506,000	ope	r. by Con	n River	30,000					
31 Mar. '59	93.6		5.6		14	10	232	Boston, Concord and Montreal	2,690,134	283,450	8,219	1,800,000	1,050,000	165,883	3,051,889	93.6		353,890	227,720			8		
30 Nov. '58	53.6		8.2		18	11	289	Cheshire	2,758,565	32222														

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						Passenger.	Freight, etc.		Railroad and appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.			
	M.	M.	M.	M.	No.	No.	No.															
NEW YORK.																						
30 Sep. '58				140.0				Albany and Susquehanna	227,356			275,783		8,097								
30 Sep. '58	32.9		3.3		5	12	53	Albany, Vermont and Canada	1,557,502	136,088		439,005	1,575,099	50,000		32.9	93,894	84,110	11,215			
30 Sep. '58	39.3		54.0					Albany and West Stockbridge	2,289,934			1,000,000	1,289,934			37.6	34,424	60,524	32,413			
30 Sep. '58	34.9	2.6		73.6	4	6	39	Black River and Utica	1,153,069	81,405		804,648	602,500	52,570		37.6	16,636	22,554	6,204			
30 Sep. '58	14.8		1.6					Blossburg and Corning	496,661			250,000	220,000			29.0	355,480	420,754	128,122			
30 Sep. '58	142.0		78.0		26	32	353	Buffalo, New York and Erie	2,975,325			690,000	2,490,593	164,938		87.8	366,145	814,116	369,609			
30 Sep. '58	68.3		18.0		28	34	312	Buffalo and State Line	2,400,251	312,736		1,913,000	1,049,000	172,378		34.0	59,639	59,421	5,092			
30 Sep. '58	24.6		38.1					Cayuga and Susquehanna	1,016,058	79,542		687,000	426,000	7,042		ope r. by N. Y. & E. receivers.			24,000			
30 Sep. '58	17.4		2.1					Chemung	400,000			380,000	70,000			ope r. by N. Y. & E. receivers.						
30 Sep. '58	46.8		2.9		10	8	83	Elmira, Canandaigua & N. Falls				352,742	14,000	28,710	396,416	ope r. by B. N. Y. & E.			10,840			
30 Sep. '58				63.2				Erie and New York City	237,708			59,374	38,500	23,404		17.2	49,610	58,207				
30 Sep. '58			0.5		6	3	50	Genesee Valley	91,889			175,000				130.0	700,223	1,626,412	594,639			
30 Sep. '58	17.3		106.5		57	107	537	Hudson and Boston (West'n)	148,000	27,000												
30 Sep. '58	144.0							Hudson River	10,146,617	1,182,372		3,738,466	8,842,000	455,003								
30 Sep. '58				73.8				L. Ontario, Auburn & N. York	74,203			75,717										
30 Sep. '58				182.0				L. Ontario and Hudson River	3,497,538	178,320		2,715,186	870,000	115,886		101.5	213,414	324,028	111,531			
31 Mar. '59	84.0	2.5		8.5	19	34	185	Long Island	2,211,659	354,611	1,000	1,852,715	659,497	144,506		55.9	3,663,194	6,528,412	3,041,120			
30 Sep. '58	297.8	258.1	313.8		218	258	2,860	New York Central	25,475,490	3,257,077	8,193,000	24,182,400	14,402,635	43,079	40,633,635	355.9	3,000,560	5,161,616	1,080,575			
30 Sep. '58	44.6	19.0	382.5		210	183	2,684	New York and Erie	29,909,749	1,448,885	978,053	11,000,000	26,371,611	1,707,575	39,079,086	152.9	621,747	975,883	358,792			
30 Sep. '58	130.8	2.1	30.9		33	89	430	New York and Harlem	7,903,339	634,777		5,717,100	5,151,287	147,640		121.8	311,040	418,006	127,013			
30 Sep. '58	55.9		2.2		26	8	417	Northern (Ogdensburg)	4,086,712	702,079			1,494,000			35.9	68,845	115,990	61,347			
30 Sep. '58	75.4		2.0		7	6	44	Oswego and Syracuse	600,919	100,462		396,240	197,000	16,415		75.4	98,636	94,386	44,715			
30 Sep. '58	25.2		2.1		5	13	70	Potomac and Watertown	1,625,646	63,582		603,077	618,500	180,138		46.2	89,380	208,225	55,946			
30 Sep. '58	18.4		1.3	32.6				Rensselaer and Saratoga	743,977	180,573		610,000	140,000			18.4	92,980	37,280	18,590			
30 Sep. '58	21.0		1.6		2	1	32	Rochester and Genesee Valley	653,530			655,450	150,000	30,417		18.0	17,620	32,925				
30 Sep. '58	40.9	6.6	3.9		9	12	84	Sackett Harbor and Ellensburg	171,556	17,714		107,455	278,400	56,810		ope r. by Ken & Sar.			30,150			
30 Sep. '58				13.2				Saratoga and Schenectady	480,684			300,000	80,500			54.5	107,800	139,888	32,196			
30 Sep. '58								Saratoga and Whitehall	820,518	74,904		600,000	395,000	5,456								
30 Sep. '58								Staton Island	40,000			40,000										
30 Jun. '59	11.0							Brooklyn and Jamaica	369,850			284,850	85,000			ope r. by Long Isl.			37,560			
30 Sep. '58	81.3		7.1		13	12	117	Syracuse, Binghampt. & N. Y.	2,887,997			1,200,130	1,500,000	59,415		51.3	143,240	177,627	74,359			
30 Sep. '58	27.2		3.2	7.7	7	4	65	Troy and Boston	1,296,302	125,887		668,297	707,500	231,083		27.2	61,614	125,042	53,289			
30 Sep. '58	6.0		0.1					Troy and Greenbush	258,558	30,073		275,000				ope r. by Hud. & River.						
30 Sep. '58	2.1		0.1					Troy Union	732,114			30,000	650,000			ope r. by Hud. & River.						
31 Dec. '58	96.8		11.0		7	11	298	Watertown and Rome	2,159,293		28,000	1,498,500	690,000	85,071	2,278,611	96.8	216,606	397,712	187,000			
NORTH CAROLINA.																						
.. .. '58	95.2		2.0					Atlantic and North Carolina	1,850,000			1,800,000	400,000			95.2						
.. .. '58	223.0							North Carolina	4,235,000			4,000,000				223.0						
.. .. '58	97.0							Raleigh and Gaston	1,240,341			973,300	126,200			97.0						
30 Sep. '59	161.0		17.1		22	20	144	Wilmington and Manchester	2,586,238		201,500	1,127,511	1,060,000	111,886	2,869,225	171.0						
30 Sep. '59	161.9				24	32	144	Wilmington and Weldon	2,889,223		107,000	1,340,213	791,055	102,891	3,114,954	171.0						
15 Mar. '59				43.0				Western North Carolina	190,783		4,700	290,212	70,860		304,072							
OHIO.																						
.. .. '58								Atlantic and Great Western	613,231			866,939		77,294		37.8						
31 Dec. '58	118.2				17	12	208	Bellefontaine and Indiana	3,908,919		11,000	1,879,370	1,274,828	39,028		118.2						
1 Aug. '58	137.0				41	39	508	Central Ohio	5,578,518	800,633	106,133	1,627,996	3,869,300	1,252,440	6,894,557	60.0						
31 Mar. '59	60.3				22	28	432	Cine., Hamilton and Dayton	2,648,266	504,592	26,500	2,155,800	1,411,000	32,618	3,650,710	30.3						
.. .. '59	37.0				62.1			Cine. and Indianapolis Junct.	8,250,841			2,441,176	3,082,000	228,978		37.0						
31 May. '59	131.8				16	10	332	Cine., Wilmington and Zanes	2,500,411			1,730,000	38,000	6,242	5,643,276	141.2						
31 Dec. '58	136.4	5.8			42	31	429	Cleveland, Columbus and Cine.	4,087,571	694,955	67,422	4,746,100	1,202,300	1,945,500	67.0							
31 Dec. '58	67.0				18.0			Cleveland and Mahoning	1,920,958			1,590,000	1,202,300	1,945,500	67.0							
31 Dec. '58	95.4	1.2	37.9		31	39	453	Clev., Painesville & Ashtabula	3,338,114	620,532	523,000	3,000,000	1,367,000	119,812	4,855,932	96.5						
30 Nov. '58	101.0	102.5			42			Cleveland and Pittsburgh	9,320,385			2,942,368	4,918,325	630,821	9,001,102	303.6						
30 Apr. '59	109.2	79.4			32	62	430	Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720	358,605	7,858,195	181.6						
31 Dec. '58	61.4				53.0	5	99	Clev., Zanesville and Cinein.	1,574,693			369,673	575,250	68,248		61.5						
31 Dec. '58	72.0				31.0	6	103	Columbus and Indianapolis	2,555,000			750,000	1,600,000	205,000		72.0						
30 Nov. '58	54.5		10.4					Columbus and Xenia	1,370,250	392,900	112,734	1,490,000	290,700	50,500		ope r. w. L. Miam.						
31 Dec. '58	72.0				72.0			Dayton and Michigan	3,740,000			1,620,000	2,120,000		1,965,839	72.0						
31 Aug. '58	36.6				6	3	87	Dayton and Western	930,262	104,012		289,692	700,000	90,482		36.6						
31 Aug. '58	16.0				47.0	3	2	Dayton, Xenia and Belpre	860,496			437,838	422,658		1,080,174	16.0						
31 Dec. '58	46.0				6	5</																

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Dividends.	Price of shares.
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected.	Engines.	Cars.			Property and Assets.			Liabilities.				Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.					
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.					
31 Dec. '58	28.0							PENNSYLVANIA, (Continued.)	1,000,000			1,000,000			1,000,000	28.0	oper. by	Cam. &	Amboy	7				
30 Nov. '58	98.0	6.0			31	60	487	Phila. Wilmington and Balt.	7,255,522	762,225	76,081	5,000,000	2,647,379	198,961	8,782,996	194.0		1,096,847	344,152	5				
31 Oct. '57	48.0							Pittsburg and Connellsville	2,285,606	*		1,031,173	1,100,000	513,403	2,044,756	48.0		45,586	4,318					
30 Sep. '57	10.3				127.5			Pittsburg and Erie	1,947,462	*		1,221,277			250,000	10.3								
31 Dec. '58	467.0				94	96	1,130	Pittsburg, Ft. Wayne & Chicago	14,631,110	*	91,100	6,260,555	9,029,765	1,057,594	17,046,232	467.0	1,394,029	1,567,232	601,658					
30 Sep. '57	31.0				11.0			Pittsburg and Steubenville																
1 Jan. '59	25.0				230.9			Schenck Valley	5,517,841	87,933		3,903,843	527,600	309,591	6,876,132	25.0								
1 Jan. '59	40.2							Sanbury and Erie	1,093,203															
31 Mar. '59	78.0							Tioga	3,650,682	380,847		1,500,000	2,261,973	101,272	4,148,920			191,970	96,308					
								Williamsport and Elmira																
31 Aug. '58	50.0		2.0		9	13	84	RHODE ISLAND.	2,158,000	*		1,508,000	306,500		2,158,000	50.0	147,231	208,439	96,571	5				
30 Nov. '58	13.6		0.5		3		5	N. Y., Providence and Boston	454,998	1,588		287,917	109,937	36,159		13.6	23,514	23,006	1,278					
								Providence, Warren & Bristol																
31 Dec. '58	13.2	1.5			182.4	2	26	SOUTH CAROLINA.	2,126,599			1,916,515	217,577		2,134,092	13.2								
31 Dec. '58	54.9				47.4	4	3	Blue Ridge	801,615	34,372	250,000	706,265	195,266	197,905	1,099,536	54.9								
31 Dec. '58	109.6				13	9	176	21 Charleston and Savannah	1,719,045	*		1,201,000	354,000		1,555,000	109.6		283,263	151,536	6				
1 Jan. '59	40.3							Charlotte and South Carolina	600,000			400,000	200,000		600,000									
1 Jan. '59	143.2	21.3						Cheraw and Darlington	2,439,769	324,161		1,429,000	1,145,000	345,546	2,919,554	143.2		341,190	126,571					
31 Aug. '58	22.5							Greenville and Columbia	196,230	*		200,000			200,000	22.5								
31 July '58	32.0							Kings Mountain	543,403	*		400,000	106,218		575,729	32.0		27,568	8,527					
28 Feb. '59	102.0							Laurens	2,011,652	*		985,743	900,410	108,172	2,067,325	102.0		220,014	96,145					
31 Dec. '58	136.0	100.0			62	59	790	North-Eastern	5,517,384	1,103,130	374,000	4,179,475	2,770,463	193,086	7,701,557	136.0		1,501,008	820,511	7				
31 July '58	25.1				41.9			South Carolina																
								Spartanburg and Union																
								TENNESSEE.																
30 Jun. '58	30.6							Cleveland and Chattanooga	867,210															
30 Jun. '58	46.7							Edgefield and Kentucky																
30 Jun. '58	110.8							East Tennessee and Georgia	3,376,943	*		1,289,155	1,910,688	278,319	3,561,197	110.8		264,959	156,195					
30 Jun. '58	130.3							East Tennessee and Virginia	2,529,418	117,512		629,800	1,968,950	406,659	3,041,940	130.3		191,198	95,231					
30 Jun. '58	271.0	28.0			48.3		96	Memphis and Charleston	5,276,573	699,776	109,000	2,258,113	2,594,000	837,992	6,354,752	271.0		1,330,812	778,036					
30 Jun. '58	82.0				73.0			Memphis and Ohio	3,200,000	*						82.0								
30 Jun. '58	48.1				24.8	4	48	Memphis, Clarksv. & Louisv.	195,394	*		309,562	624,500	118,658	1,032,721	48.1			43,436					
30 Apr. '59	34.2				35.2	3	21	Mississippi Central and Tenn.	1,023,470	*		140,097	406,000		565,459	34.2	run by	Nash. &	Chatta.	3				
30 Nov. '58	151.0	8.0			35.2	20	322	Memphis and Manchester	555,459	*	160,000	2,262,406	1,674,000	85,944	4,121,557	151.0		641,552	279,267					
30 Jun. '58	43.6				172.8			Nashville and Chattanooga	3,733,472	*														
30 Jun. '58	15.0				65.3			Nashville and Northwestern	1,000,000	*														
					9.5			Tennessee and Alabama	985,697	*		309,754	626,889	83,037				55,776	29,405					
								Winchester and Alabama																
								TEXAS, (all aided by State.)																
30 Jun. '58	32.0				158.0			Buffalo Bayou, Braz. & Col'do																
30 Jun. '58	56.0				184.0			Galveston, Houston & Henderson																
30 Jun. '58	43.0				31.0			Houston and Brazoria																
1 May '59	50.0				306.0	2	67	Houston and Texas Central	1,182,747	*		1,270,123	335,000	128,205	1,601,443	50.0		76,936						
30 Sep. '58	25.0				110.0			San Antonio & Mexican Gulf																
30 Sep. '58	28.0				756.0			Southern Pacific																
31 Aug. '58	90.7				19.6	7	7	VERMONT.	2,345,724	185,421		1,300,000	800,000			90.7	95,256	171,625	67,853					
31 Aug. '58	119.9				20	18	503	Rutland and Burlington	3,989,708	556,275	92,559	2,233,376	3,145,001	1,013,764	6,392,141	119.9		395,762	354,288					
31 Aug. '58	62.0				8.4	10	601	Rutland and Washington	1,771,683	*		950,000			1,780,683	62.0		154,997	174,429					
31 Aug. '58	122.0				42	28	885	Vermont Central	8,402,035	*		5,000,000	3,863,000	1,423,299	10,276,299	122.0		569,323	995,697					
31 Aug. '58	47.0							Vermont and Canada	1,380,695	*		1,350,000			1,380,695	47.0								
31 Aug. '58	23.7				4	4	52	Vermont Valley	1,212,274	89,612		515,664	763,200		1,208,864	23.7		47,324	43,998					
31 Aug. '58	50.5							Western Vermont	1,083,500	*		332,000	700,000		1,083,500	50.5								
31 Aug. '59	41.3				122.1			VIRGINIA.																
30 Sep. '58	73.8				63.5	9	8	Alex., Loudoun & Hampshire	3,492,194	42,000		1,403,018	30,188	88,131	1,534,194	73.8								
31 Mar. '59	79.2							Manassas Gap	2,292,990	209,901		3,093,500	418,000	292,956	3,809,729	79.2		125,599	65,554					
30 Sep. '58	103.5							Norfolk and Petersburg	1,696,907	64,027	10,500	1,346,576	456,893		1,803,769	103.5		345,427	248,004					
30 Sep. '58	112.5	9.1	4.5		36.0	12	101	Northwestern Virginia	5,322,150	*		468,605	5,719,229		5,719,229	112.5								
30 Sep. '58	123.3	20.1			19	13	279	Orange and Alexandria	4,330,375	*		1,899,329	1,480,500	371,590	5,134,475	97.6		150,538	258,875					
31 Dec. '58	59.2	21.2			14	17	131	Petersburg and Lynchburg	9,040,636	374,996		1,365,200	1,851,500	292,842	4,745,256	133.4		410,166	201,344					
30 Sep. '58	140.5	1.8			23	18	370	Petersburg and Roanoke	3,988,791	192,640		883,200	127,427	34,344	4,131,657	80.5		310,988	186,085					
31 Mar. '59	75.1							Richmond and Danville	3,588,653	*		1,981,017	1,126,407	25,133	4,424,671	142.3		263,893	491,674					
30 Apr. '59	22.2	2.7			10	16	192	Richm., Frederick & Potomac	1,985,579	*	52,800	1,063,600	680,116		2,183,232	75.1		290,126	145,656					
30 Sep. '58	38.3				14.3	2	13	Richmond and Petersburg	1,087,949	*		836,100	201,408	34,681	1,250,186	24.9		79,921</						

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F.," Sinking Fund. "var.," that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
Alabama and Florida :					Chicago and Milwaukee :					Eaton and Hamilton :				
Mortgage	\$300,000	7	1867		1st Mortgage (convertible)	\$512,000				1st Mortgage	\$757,734	†	var.	
Convert. (guar. by Dir.)	150,000	7	1863		Income	62,000				Erie and North-East :				
Land Mortgage	23,500	7	1869		Real Estate 2d Mortgage	188,864		1868		Exchanged for Buff and St. L.	149,000			
Alabama and Miss. Rivers :					Chicago and Rock Island :					Evansville and Crawfordsville :				
State (Ala.) Loan	123,171				1st Mortgage	1,397,000	7	1870						
Mortgage	109,500				Chic. St. Paul and Fond du Lac :					Florida :—				
Alabama and Tenn. Rivers :					1st Mortgage (on 1st Division)	3,000,000	7			Internal Improvement (State)	1,655,000	7	1891	
1st Mortgage convertible	528,000	7	1872		2d Mortgage (1st Land Grant)	3,000,000	7			Free Land, 2d Mortgage	1,500,000	8	1891	
2d Mortgage	225,705	8	1864		Real Estate	350,000	7			Florida and Alabama :				
Albany, Vt. and Canada :					Cincinnati, Hamilton and Dayton :					Internal Improvement (State)		7	1791	
1st Mortgage	500,000	7	1867		2d Mortgage	461,000		1867	92	Free Land, 2d Mortgage		8	1791	
Albany and West Stockbridge :					*Cincinnati, Wilm. and Zanesville :					Florida, Atlantic and Gulf Centr.				
Albany City (S. F.)	1,000,000	6	66-76		1st Mortgage	950,000		1880	84	Internal Improvement (State)	300,000	7	1791	
Androscoogin and Kennebec :					2d Mortgage	1,300,000				Free Land, 2d Mortgage	200,000	8	1791	
1st Mortgage (Coupon) '60-'64	1,000,000	6	'62-'64		Income	574,000				Fox River Valley :				
Stock, convert. (Coupon)	710,000	6	'63-'66		3d Mortgage	158,000				1st Mortgage	400,000	†		
Atlantic and St. Lawrence :					Income	250,500				2d Mortgage	180,000			
Dollar Bonds (Coupon)	988,000	6	1866		Tunnel Right	1,000,000				Galena and Chicago Union :				
Sterling Bonds (Coupon)	454,000	6	1878		Cleveland and Mahoning :					Litchfield	52,015	7	1859	
City of Portland Loan (Coups.)	1,500,000	6	'68-'70		1st Mortgage	694,500				1st Mortgage (S. F.)	1,963,000	7	'62-'63	924
Baltimore and Ohio :					2d Mortgage	469,000				2d Mortgage (S. F.)	1,738,000	7	1875	86
Maryland Sterling	3,000,000	5			3d Mortgage	25,800				Galveston, Houston and Henderson :				
Mortgage Coupons	2,500,000	6	1885		Clev., Painesville and Ashtabula :									
"	700,000	6	1880		1st Mortgage	564,000	7	1861	99					
"	1,125,500	6	1875	834	2d Mortgage	303,000	7	1861						
"	1,000,000	6	1868		Special (Sunbury and Erie)	500,000								
Balt. City Loan	4,886,511	6			Cleveland and Pittsburg :									
Bellefontaine and Indiana :					1st Mortgage (Main Line)	800,000	7	1860	87	*Great Western, Ill. :				
1st Mortgage convertible	791,000	7	1866		2d Mort. (M. L.) or 1st Extension	1,188,000	7	1873	58	1st Mortgage (W. Div. 100 m.)	1,000,000	10		
2d Mortgage	140,000	7	1870		3d Mort. (M. L.) or 2d Extension	1,165,000	7	1875		1st M. (E.D. 84 m.), 2d M. (W.D.)	1,350,000	7		
Real Estate (1861, '63, '68)	129,000	7	var.		4th Mort. (M. L.) or 3d Extension	1,154,000				Old Sang. and Morg. Railroad	41,000			
Income (S. F.)	199,500	7	1859		Income	118,000				2d Mortgage	323,000			
Belvidere Delaware :					Dividend Bonds and Scrip.	491,825				Chattel (Equipment) Mortgage	374,426			
1st Mort. (guar. C. and A.)	1,000,000	6	1877		Cleveland and Toledo :					Greenville and Columbia :				
2d Mortgage	445,500	6			Junction 1st Mortgage 1st Div.	377,000	7	1867		1st Mortgage, Coupon	1,145,000			
Camd. and Amb. R. R. Co.	244,000	6			Junction 1st Mortgage 2d Div.	305,000	7	1872		Hannibal and St. Joseph :				
Black River and Utica :					Junction 2d Mortgage	324,000	7	1862		Missouri State Loan	3,000,000	6		
1st Mortgage	370,000	7	1869		Tol., Nor. and Clev. 1st Mort.	822,000	7	1863	70	Land	8,509,500	7		
Boston, Concord and Montreal :					Tol., Nor. and Clev. 2d Mort.	299,600	7	1863		Income (convertible)	310,000	7		
1st Mortgage	200,000	6	1870		Junction Income	61,500	7	1862		Plain	11,000	7		
2d Mortgage	300,000	7	1870		C. and T. Income	192,950	7	1863		Harrisburg and Lancaster :				
3d Mortgage Coupons	150,000	6			C. and T. Income (convertible)	409,900	7	1864		New Dollar Bonds	459,872	6	1883	984
4th Mortgage Coupons	200,000	7			C. and T. Income (convertible)	373,000	7	1864		Hartford and New Haven :				
Sinking Fund	200,000	6			C. and T. Dividend (convert.)	199,735	7	1865		1st Mortgage	1,000,000	6	1873	98
Boston and Lowell :					C. and T. Income (convertible)	129,000	7	1870		Hartf'd, Providence and Fishkill :				
Mortgage	440,000	6	1873		C. and T. (S. F.) Mortgage	640,000	7	1885						
Boston and Worcester :					Junction (Lloyd's)	5,000	7	1862						
Mortgage (plain)	100,000	6	1860		*Cleveland, Zanesville and Cin. :									
Mortgage (convertible)	500,000	6	1860											
Buffalo and State Line :					*Columbus, Piqua and Indiana :									
1st Mortgage	500,000	7	1866	90						Houston and Texas Central :				
Income (1/2 in '59, 1/2 in '62)	200,000	7	var.		Columbus and Xenia :					State (1st Lien) Loan	210,000			
Unsecured	200,000	7	1864		1st Mortgage	18,000		1859		Mortgage	125,000	7	1866	
Erie and North-East	149,000	7			Dividend (due 1860, '61, '62, '63)	272,700		var.		Hudson River :				
Burlington and Missouri :					Connecticut River :					1st Mortgage	4,000,000	7	1869	104
1st Mort. on 1st Division	800,000				Mortgage (due 1859, 60, '62, '63)	210,000	6	var.		2d Mortgage	2,000,000	7	1860	99
Burlington Loan	75,000				Connecticut and Passump. Rivers :					3d Mortgage	3,000,000	7	1867	
Calro and Fulton (Mo.) :					1st Mortgage	800,000				Illinois Central :				
State (Mo.) Loan	650,000	6	'78-'79		Cumberland Valley :					Optional Right Scrip.	65,000	7	1868	
Camden and Amboy :					1st Mortgage	116,500				Construction	12,885,000	7	1875	844
Mortgage	367,000	6	1864		2d Mortgage	97,000				Construction	4,115,000	6	1875	844
Mort. (chgd from Sterl'g)	888,000	5	1864		Dauphin and Susquehanna :					Free Land	3,000,000	7	1860	
Mortgage	800,000	6	1849							Indiana Central :				
Mortgage	1,700,000	6	1875		Dayton and Michigan :					1st Mortgage (convertible)	600,000	7	1866	
Sterling (\$210,000)	1,008,000	5	1864		1st Mortgage					2d Mortgage	284,500	10		
Sterling (\$225,000)	1,080,000	6	1864		2d Mortgage					Income	281,500	10		
New Loan (iss'd \$337,000)	2,500,000	6	1887		Dayton and Western :					Indianapolis and Cincinnati :				
Unsecured	800,000	6	1863		1st Mortgage	300,000				1st Mortgage	500,000	7	1866	
*Catawissa, Williamsap. and Erie :					2d Mortgage					2d Mortgage	400,000	7		
1st Mortgage	1,500,000	7	1865	32	Delaware :					Real Estate Mortgage	200,000	7	1858	
2d Mortgage	390,036	7	1886		Guaranteed	65,000				Dividend	86,294	7		
Chattel Mortgage	380,000	10	1871		State Loan	170,000				Income and Domestic	176,000		var.	
Cayuga and Susquehanna :					Delaware, Lackawanna and W'n :					Indianap., Pittsb. and Cleveland :				
1st Mortgage	300,000	7	1865		1st Mortgage	900,000		1871		1st Mortgage	650,000			
Unsecured	89,000	7	1862		1st Mortgage (E. Extension)	1,500,000		1875	88	2d Mortgage	167,000			
Central of Georgia :					2d Mortgage	2,000,000		1881		Income	166,000			
Mort. (due 1859 to 1863)	158,767	7	var.		Income (due 1862, '65 and '67)	1,263,170		var.		Domestic	34,200			
Central of New Jersey :					Detroit and Milwaukee :					Jeffersonville :				
1st Mortgage	1,500,000	7	var.		1st Mortgage (convertible)	2,500,000	7	1875		1st Mortgage	289,000			
2d Mortgage	1,500,000	7	1875		2d Mortgage	2,000,000	8	1866		2d Mortgage	392,000			
Income	375,000	7	var.		3d Mortgage (convertible)	750,000	10	1863		*Kennebec and Portland :				
*Central Ohio :					4th Mortgage (G. W. R. R.)	500,000	8			1st Mortgage (City and Town)	800,000	6	1870	
1st Mortgage	450,000	7	1861		Dubuque and Pacific :					2d Mortgage	220,000	6	1861	
1st Mortgage	800,000	7	1864		New Construction	800,000	†			3d Mortgage	250,000	6	1862	
2d Mortgage	800,000	7	1865		Dubuque Western :					*Kentucky Centr. (Cov. and Lex.) :				
3d Mortgage (S. F.)	950,000		1855		1st Mortgage	344,000	†			1st Mortgage	160,000	6		
4th Mortgage (S. F.)	1,339,250		1876		Eastern (Mass.) :					2d Mortgage	260,000	7		
Income (1858, '59 and '60)	1,238,200		var.		Income (due \$75,000 annually)	525,000	6	var.		2d Mortgage (convertible)	1,000,000	7		
Income (due to Muskingum Co.)	100,000		1862		2d Mortgage (convertible)	710,000	5	1862		3d Mortgage	600,000	7		
Charleston and Savannah :					3d Mortgage (convertible)	445,000	6	1874		Guaranteed by Covington	200,000	6		
1st Mortgage (endorsed)	510,000	6			1st M. (State) \$75,000 a y'r after '65	500,000	5	var.		Guaranteed by Cincinnati	100,000	6		
2d Mortgage	1,000,000	7			East Tennessee and Georgia :					Income	400,000	10		
Cheshire :					State, 1st Mortgage	970,000				Income	210,000	6		
Mort. (1860, '63, '75 and '77)	786,400	7	var.		Endorsed by State of Tennessee	150,000				Kent'ky Centr. (Lex. and Danv.) :				
Chicago, Burlington & Quincy :					Mortgage (ordinary)	790,688								
Consolidated 1st Mort.	1,600,000	8	1883		East Tennessee and Virginia :					Keokuk, Ft. D. Moines and Minn. :				
Chic. and Aur. 1st Mort.	405,000	7	1867		State, 1st Lien	1,602,000				City of Keokuk, 20 years	400,000	8		
Ch. and Aur. 2d M. (S. F.)	303,000	7	1869		Endorsed by State of Tenness.	300,000				City of Keokuk, (special tax)	150,000	10		
Cent. Mil. Tr. 1st Mort.	400,000	7	1864		1st Mortgage (after State)	100,000				Lee County, 20 years	150,000	8		
Cent. M. T. 2d M. (Conv.)	281,000	8	1868		Redeemable in Stock	66,360				Keokuk, Mt. Pleasant and Muscat.				
Chicago, Alton and St. Louis :										Lee County	150,000	8		
1st Mortgage										City of Keokuk	200,000	8		
2d Mortgage										Henry and Louisa Company's	50,000	8		
3d Mortgage										Leligh Valley :				
										1st Mortgage	1,400,000	6		

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F.," Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
La Crosse and Milwaukee:					Montgomery and West Point:					Orange and Alexandria:				
1st Mortgage (Eastern Div.)	\$903,000	7			Alabama State Loan	\$122,622				State Loan	\$400,000			
2d Mortgage (Eastern Div.)	1,000,000	7			Mortgage (due 1860, '63 and '65)	350,000	6	var.		1st Mortgage	612,500			
1st Land Grant (Western Div.)	4,000,000	7			Mortgage	450,000	8	1866		2d Mortgage	1,587,500	6		
2d Land Grant (Western Div.)	353,000	7			Muscooge:					Pacific (Mo.)				
3d Mortgage (whole road)	1,700,000	7			1st Mortgage	249,000	7			State (Mo.) Loan	7,000,000	6		
Farm Mortgage	1,087,700	7			Nashville and Chattanooga:					State Loan (S. W. Branch)	2,800,000	6		
Unsecured Bonds	1,785,000	1			Mortgage (State endorsed)	1,500,000				Construction	4,500,000	6		
Lexington and Frankfort:					Chat. and Clev. Subsc. (endora.)	150,000				Panama:				
Mortgage, due 1864, '69 and '74	130,000	6			Not endorsed	24,000				1st Mortgage Sterling	1750,000		1859	
Little Miami:					New Albany and Salem:					1st Mortgage Sterling	1,250,000		1865	100
Cincinnati Loan	100,000	6			Crawfordsville	175,000	7			2d Mortgage Sterling	1,000,000		1872	
1st Mortgage	138,000	6			1st Mortgage	500,000	10			Pennsylvania:				
2d Mortgage	7,000	6			1st Mortgage	2,235,000	8			1st Mortgage (convertible)	4,905,000	6	1888	
3d Mortgage	961,000	6			New Haven and Hartford:					2d Mortgage	1,928,000	6	1875	
Long Island:					New Haven and Hartford:					2d Mortgage Sterling	1,539,840	6	1876	
State Loan (S. F.)	100,000	5	1876							For Canals, etc.	7,400,000	6		
Louisville and Frankfort:					*N. Hav., N. Lond. and Stonington:					Pennsylvania Coal Company:				
Louisville Loan	174,000				Mortgage	450,000	7			1st Mortgage	600,000	7		
1st Mortgage	248,000				Extension	200,000	6			Penobscot and Kennebec:				
Louisville and Nashville:					New Haven and Northampton:					Bangor City 1st Mort. (Coupon)	800,000	6	1874	
State (Tenn.), 1st Lien	300,000	6			1st Mortgage	500,000		1869		2d Mortgage (Coupon)	250,200	6	1876	
1st Mortgage	2,000,000				New Jersey:					3d Mortgage (Coupon)	156,600	6	1871	
McMinnville and Manchester:					Company's (various)	711,000		var.		Pensacola and Georgia:				
State (Tenn.)	372,000	6			New London, William and Palmer:					State Internal Improvement		7	35 y's	
Mortgage	24,000	7			2d Mortgage	500,000	71			Free Land				
Mortgage	10,000	6			Income (convertible)	300,000	61			Peoria and Oquawka:				
Madison and Indianapolis:					New London City	152,000	61			Peru and Indianapolis:				
State (Ind.) Loan	3,087,000				N. Orleans, Jackson and Gt. North:	100,000	61							
Mortgage					State (Miss.) Loan	155,000				Petersburg:				
*Marietta and Cincinnati:					1st Mortgage	3,000,000	6	1866		Mortgage (due 1863 to 1872)	100,000	7	var.	
1st Mortgage (convertible)	2,496,000	7	1868		N. Orleans, Opelousa, and Gt. West:					Petersburg and Lynchburg (S. Side):				
2d Mortgage	2,000,000				Louisiana State Loan	621,000				State (Va.) Loan (S. F.)	800,000	7		
3d Mortgage	1,500,000				New Orleans City Loan	1,500,000				1st Mortgage (1859-'70-'75)	365,000	6	var.	
Sterling Income	333,000	4			1st Mortgage (S. F. and Land)	2,000,000	7			3d Mortgage (1862-'70-'72)	378,000	6	var.	
Domestic	928,617		59-'62		New York Central:					Special Mortgage (1865-'68)	175,000	6	var.	
Memphis and Charleston:					Albany Loan—Alb. and Sch'dy.	127,000	6	1864	102	Last Mortgage (1861 to 1869)	133,500	8	var.	
State (Tenn.) Loan	1,100,000	6			State Loan—Sch'dy and Troy	100,000	6	1867		Phila. German'n and Norrist'n:				
1st Mortgage	1,600,000	7	1890		State Loan—Rochester and Syr.	77,382	64	1861		Consolidated Loan	274,800			
Memphis, Clarkesv. and Louisv.:					State Loan—Buffalo and Roch.	55,300	64	1865		Loan of 1842	100,000			
State (Tenn.) Loan	910,000	6			State Loan—Roch., L. and N. F.	298,000	7	1861		Philadelphia and Reading:				
Memphis and Ohio:					Stock Subscription	785,000	6	1883		Mortgage	705,000	5	1860	91
State (Tenn.) Loan	1,340,000	6			Premium Consolidated Stock	8,000,000	6	1883		Mortgage	1,572,800	6	1860	91
Michigan Central:					Real Estate	221,000	6	1883		Mortgage (convertible)	886,000	6	1860	91
1st Mortgage Sterling	467,489	6			New Convertible	3,000,000	7	1864		Mortgage (convertible)	134,000	6	1860	
1st Mortgage (convertible)	500,000	8			*New York and Erie:					Mortgage	3,209,600	6	1870	75
Unconvertible	258,000	8			1st Mortgage	2,000,000	7	1867	91	Mortgage (convertible)	3,584,500	6	1886	
1st Mortgage (convert.) Dollar	3,531,000	8			2d Mortgage	3,000,000	7	1859	88	Lebanon Valley R. R. (convert.)	1,500,000	7	1886	
1st Mortgage (S. F.), convertible	3,087,000	8			3d Mortgage (convertible)	6,000,000	7	1871		Real Estate Mortgage	516,460		var.	
Mich. Southern and N'n Indiana:					4th Mortgage (convertible)	3,715,000	7	1880	48	Phila. Wilmington and Baltimore:				
Michigan Southern	993,000	77	1857		5th Mortgage	1,253,500	7	1883	70	Mortgage Loan	688,929	6	1860	
Northern Indiana	965,000	77	1861		Unsecured (convertible)	3,423,000	7	1871	26	Mortgage Loan	1,696,500	6	1864	
Erie and Kalamazoo	300,000	7	1862		Unsecured (convertible)	3,001,000	7	1862	26	Improvement	119,000	6	1863	
Michigan Southern	256,000	7	1863		Sinking Fund	3,925,500	7	1875		Pittsburg and Connellsville:				
Northern Indiana	296,000	7	1863		New York and Harlem:					Pittsburg Loan	500,000			
Jackson Branch	203,000	7	1865		1st Mortgage	3,000,000	7	1873	92	Alleghany Co. Loan	750,000			
Goshen Air Line	1,535,000	7	1868		2d Mortgage	1,600,000	7	1864	91	Connellsville Loan	100,000			
Detroit and Toledo	336,000	7	1876		3d Mortgage	1,000,000	7	1867		McKeesport Loan	100,000			
General Mortgage (S. F.)	2,458,000	7	1885		New York and New Haven:					Baltimore Loan	1,000,000			
2d Mortgage	2,175,000	7	1877		1st Mortgage	311,000	7	1860	914	Cumberland Loan	200,000			
*Milwaukee and Beloit:					1st Mortgage	965,000	6	1866		*Pittsburg, Ft. Wayne and Chicago:				
1st Mortgage	630,000	6			1st Mortgage	929,000	6	1875		1st Mortgage (O. and P.)	1,000,000		1865	
Milwaukee and Chicago:					N. York, Providence and Boston:					2d Mortgage (O. and P.)	750,000		1866	
1st Mortgage	400,000	8			1st Mortgage	331,000	6			Income (O. and P.)	1,991,300		1873	
2d Mortgage	200,000	7			North Carolina:					Bridge (O. and P.)	1,000,000		1872	
*Milwaukee and Horicon:					State Loan	2,000,000	6			1st Mortgage (O. and L.)	380,000		1873	
1st Mortgage	420,000	8			State Loan	1,000,000	6			2d Mortgage (O. and L.)	1,250,000		1873	
2d Mortgage	600,000	8			North-Eastern (S. C.):					Real Estate (F. W. and Chic.)	498,000		1874	
Farm Mortgage	150,000	10			1st Mortgage	700,000				Mortgage, Consolidated Comp'y	1,229,000		1887	
Milwaukee and Mississippi:					2d Mortgage	224,500				Pittsburg and Stenbenville:				
1st Mortgage (convertible)	74,000	101	1861		Real Estate	35,910				Mortgage	800,000	7	1865	
1st Mortgage (convertible)	626,000	81	1862		Northern Central					Platte County				
1st Mortgage (convertible)	650,800	81	1863		Balt. and Susq. R. R. (Coupons)	150,000	6	1866		State (Mo.) Loan	300,000	6	1879	
1st Mortgage (convertible)	1,250,000	81	1877		Md. State Loan (B. and Susq.)	150,000	6			Potomac and Watertown:				
South-West Branch	350,000	81	1866		York and Cumberland 1st Mort.	175,000	6	1870		1st Mortgage	800,000	71	64-'74	
2d Mortgage	600,000	101	1862		York and Cumberland 2d Mort.	25,000	6	1871		Quincy and Chicago:				
Construction	500,000	71	1859		York and C. guar. by Baltimore	600,000	6	1877		1st Mortgage	1,200,000		1873	
3d Mortgage	500,000	81	1862		N. C. Contract	292,300	6	1875		Racine and Mississipp:				
Mississippi Central:					Construction	1,903,500	6	1885		1st Mortgage (Eastern Division)	680,000	7		
1st Mortgage	1,007,263	7			Northern (Ogdensburg):					1st Mortgage (Western Division)	757,000	7		
Income	91,200	10			1st Mortgage	1,500,000	71	1859		Raleigh and Gaston:				
Tennessee State	45,000	6			2d Mortgage	3,077,000	71	1861		Company	100,000		1862	
Mississippi Central and Tenn.:					North Missouri:					Rensselaer and Saratoga:				
State (Tenn.) Loan	529,000	6			State Loan	2,000,000	6			1st Mortgage		7	1863	
Income	96,500				State Loan	2,000,000	6			Richmond and Danville:				
Mississippi and Missouri:					State Loan	350,000	6			State (Va.) Loan	600,000			
1st Mortgage (convertible)	1,000,000	7			North Pennsylvania:					Guaranteed by State	200,000		1875	
2d Mortgage (S. F.)	400,000	8			Mortgage	2,500,000				Mortgage (Coupon)	250,000		1869	
Oskaloosa Division	1,425,000	7			Chatel Mortgage	214,500	10		87	Registered	150,000		1860	
Land Grant	7,000,000	7			Northern (N. H.):					Richmond, Fred. and Potomac:				
Mississippi and Tennessee:					Mortgage (due 1860, '64 and '74)	219,500		var.		Sterling (£67,000)	324,006		1860	
Tennessee State Loan	98,000	6	1885		Norwich and Worcester:					Convertible	54,500		1875	
Mississippi State Loan	202,799	6			Mass. State Loan	400,000	6	1877		Dividend Certificates	35,800		1857	
1st Mortgage	171,000	7	1876		Mortgage	205,800	6	1860		Dividend Certificates	265,809		1869	
Mobile and Ohio:					Mortgage	16,000	7	1860		Richmond and Petersburg:				
City (Mobile) Tax Loan	400,000	6			Dividend Scrip and Bonds	102,330	6	var.		Coupon	159,000		1875	
Tennessee State Loan	674,380	6			Ohio and Mississippi (O. and Ind.):					*Rutland and Burlington:				
Alabama State Loan	389,410	6			1st Mortgage	2,193,500	7	1858		1st Mortgage	1,800,000			
Income	759,415	8	1861		2d Mortgage	316,995	7			2d Mortgage	913,500			
Income	354,723	8	1862		Construction	4,637,920	7	1858		3d Mortgage	426,400			
Income	375,132	8	1865		Income	3,591,185	7	1858		Sacramento Valley:				
Income	18,700	8	1867		Ohio and Mississippi (Ill.):					1st Mortgage	400,000			
Sterling	875,085	6	1883							2d Mortgage	345,000			
Mississippi State Loan	200,970	6												

AMERICAN RAILROAD BOND LIST.

For explanations see preceding pages.

Description.	Amount.	Interest.	Due.	Price.
Sandusky, Dayton and Cincinnati:				
Mortgage	182,000	10	1856	---
Mortgage	997,000	7	1866	---
Mortgage	1,000,000	7	1875	---
Dividend	224,000	6	1900-02	---
Sandusky, Mansfield and Newark:				
1st Mortgage	1,200,000	1	---	---
Saratoga and Whitehall:				
1st Mortgage	250,000	7	1858	---
1st Mortgage (R. and W. Br.)	100,000	7	1856	---
Unsecured	45,000	7	1858	---
Seaboard and Roanoke:				
1st Mortgage	300,000	---	1860	---
3d Mortgage	75,000	---	1870	---
4th Mortgage	60,000	---	1850	---
South Carolina:				
State Loan	200,000	5	1868	---
Sterling	183,333	6	1863	---
Sterling	2,000,000	5	1860	---
Auditor's	240,500	7	---	---
Southern Mississippi:				
1st Mortgage	500,000	---	---	---
South-Western (Ga.):				
1st Mortgage	631,000	---	1875	---
*Springfield, Mt. Vern. and Pittsb.:				
1st Mortgage	500,000	---	---	---
2d Mortgage	450,000	---	---	---
*Steuers. and Ind. (P. C. and C.):				
1st Mortgage	1,500,000	---	---	---
2d Mortgage	900,000	---	---	---
*St. Louis, Alton and Chicago:				
1st Mortgage	2,000,000	7	---	---
2d Mortgage	1,555,000	7	---	---
3d Mortgage (Income)	1,000,000	10	---	---
St. Louis and Iron Mountain:				
State (Mo.) Aid	2,501,000	---	---	---
St. Louis City Subscription	500,000	---	---	---
St. Louis County Subscription	1,000,000	---	---	---
Carondelet Subscription	50,000	---	---	---
Sunbury and Erie:				
Mortgage	1,000,000	7	---	---
Mortgage	7,000,000	5	---	---
Syracuse, Binghamton and N. Y.:				
Terre Haute, Alton and St. Louis:				
1st Mortgage (convertible)	1,000,000	7	1862-72	55
2d Mortgage (convertible)	2,000,000	7	1868-70	---
1st Mortgage (Bel. and Ill.)	617,000	7	1873	---
2d Mortgage (Bel. and Ill.)	494,000	7	1869	---
3d Mortgage (Bel. and Ill.)	503,000	10	1874	---
Tennessee and Alabama:				
State (Tenn.) Loan	814,000	---	---	---
Mortgage	40,000	---	---	---
Terre Haute and Richmond:				
1st Mortgage (convertible)	235,000	7	---	---
Toledo, Wabash and Western:				
1st M. (L. Er., Wab. and St. Louis)	2,500,000	7	1865	---
2d M. (L. Er., Wab. and St. Louis)	1,200,000	7	1869	---
3d M. (L. Er., Wab. and St. Louis)	1,200,000	7	1861	---
Real Estate (L. Er., W. and St. L.)	300,000	7	1861	---
1st Mortgage (Toledo and Ill.)	900,000	7	1865	---
2d Mortgage (Toledo and Ill.)	800,000	7	1865	---
3d Mortgage (Toledo and Ill.)	600,000	7	1865	---
*Vermont Central:				
1st Mortgage	---	---	---	17
2d Mortgage	---	---	---	---
Virginia Central:				
State (Va.) Subscription	1,809,505	---	---	---
Mort., guaranteed by State of Va.	100,000	---	1880	---
Mortgage	200,000	---	1872	---
Mortgage (coupons)	941,000	---	1884	---
Dividend, due 1865, '66 and '75.	238,346	---	var.	---
Income (1859 to 1863)	161,355	---	var.	---
Virginia and Tennessee:				
State (Va.) Loan	1,000,000	6	1887	---
1st Mortgage	500,000	4	1872	---
Fractional Mortgage	23,500	6	1868	---
2d or Enlarged	1,000,000	6	1884	---
Salt Works Br. Mort. due '53-'61	203,000	6	var.	---
3d Mortgage (Income)	431,000	6	1865	---
Warren (N. J.):				
1st Mortgage	568,500	---	1875	---
Watertown and Rome:				
Mortgage (due by instalments)	688,500	7	var.	---
Western (Mass.):				
Sterling (2500,000)	4,319,520	5	1868-71	---
Albany City (Alb. and W. S.)	1,000,000	6	1860-70	---
*Western Vermont:				
1st Mortgage	700,000	---	1861	---
Williamsport and Elmira:				
1st Mortgage	1,000,000	1	---	---
2d Mortgage	700,000	1	---	---
Chattel Mortgage	495,000	1	---	---
Wilmington and Manchester:				
1st Mortgage	500,000	---	---	---
2d Mortgage	1,000,000	---	---	---
Income	177,000	---	---	---
Wilmington and Weldon:				
Mortgage, payable in England	443,555	---	---	---
Sterling, issued in 1853	144,500	---	---	---
Company's, endorsed by State	203,500	---	---	---
Winchester and Potomac:				
Mortgage	130,000	6	1867	---
York and Cumberland:				
1st Mortgage	398,000	1	---	---

Railroad Reports.

RAILROAD COMPANIES will oblige us by sending us copies of their Reports as soon as they are published.

American Railroad Journal.

Saturday, December 17, 1859.

New York and Erie Railroad.

The adjustment of the floating debt of this company, whereby the payment of interest has been resumed on the first mortgage bonds, has been effected, we are assured, on terms not unfavorable to the company.

The proposition for the adjustment of the second mortgage, by offering a bonus of fourth mortgage bonds, is, thus far, only mooted; but it is not improbable, we are informed, that it may not be made, though the terms are not yet agreed upon.

The road is doing well, the earnings for November being \$536,608, against \$446,101 for 1858; an increase of \$90,507. The earnings for December, so far, are considerable better than for the same time in 1858. The road has been taxed fully up to its capacity. The facilities that Long Dock would give would add largely to the earnings of the road.

We annex the third monthly report of the Receiver of the road:

NATHANIEL MARSH, RECEIVER, IN ACCOUNT WITH THE NEW YORK AND ERIE RAILROAD COMPANY.

1859.	Receipts.	Dr.
Oct. 31.	To balance per last report	\$50,926
Nov. 30.	To rents collected	\$4,962
	To dam'd. &c., goods sold	925
	To old railroad iron sold	15,614
	To dis. and currency bo't.	45
	To North'n R. R. on acct.	831
	To Pittsburg, Ft. Wayne and Chicago R. R. Co.	208
	To Williamsport and Elmira R. R. Co.	312
	To La Crosse and Milwaukee R. R. Co.	682
	To Phila., and Reading R. R. Co.	691
	To old scrap iron sold	1,279
	To hire of cars	16
	To car keys loaned conductors	20
	To freight and passenger receipts	623,773-648,364
Total		\$699,291

Balance on hand Nov. 30, 1859.. \$476,736

1859. Disbursements.

Nov. 30.	By	Dr.
	By sund. accounts for supplies, &c.	12,431
	By interest on accept's.	108
	By charges on freight..	93,979
	By railroad iron bought	30,296
	By paymasters for exp.	256,459
	By tolls, N. I. R. R.	2,973
	By rents paid	1,187
	By Long Dock Co. for interest	9,939
	By taxes paid	15,277
	By sundry ticket bal.	6,792
	By Winslow, Bush & Strong acct. judgment	15,000
	By telegraph right to use, &c.	306
	By coal bought	459
	By sundry bills for supplies and expenses	78,253
		\$522,554
	By balance on hand	176,736
Total		\$699,291

The item \$256,459 is in part to pay wages in arrears, but they are now all paid up.

Sacramento Valley Railroad.

The following is a statement of the earnings of the Sacramento Valley Railroad during the last three years:

	1857.	1858.	1859.
Gross rec'pts.	\$177,842.11	\$185,108.20	\$211,420.55
Oper'g exp's.	91,044.56	82,840.46	96,343.83

Total .. \$86,797.55 \$102,267.74 \$115,076.73

From this are to be deducted payments for the ground, for depot, new track along the levee at Sacramento, and for material on hand and on shipboard not used. 23,175 17

Net proceeds over and above expenses. \$92,901 55

New York Central Railroad.

We give below the material portion of the late report of the New York Central Railroad, which is just received. It falls very far short of what a report from this company should be; but as another, made by a committee of stockholders, may make up for the deficiency of that of the Directors, we defer comment till the second one comes to hand.

The Directors chosen at the meeting of the stockholders, are: Erastus Corning, Albany; Dean Richmond, Buffalo; John H. Chedell, Auburn; Horace White, Syracuse; Alonzo C. Paige, Schenectady; Nathaniel Thayer, Boston; John V. L. Pruyn, J. L. Schoolcraft, Albany; Isaac Townsend, N. Y.; Livingston Spraker, Pal. Bridge; Jacob Gould, Rochester; Cornelius L. Tracy, Troy; Charles H. Russell, N. Y.

Income Account for the year ending Sept. 30, 1859.

Expenses of maintaining and operating road	\$3,349,429 11
Coupons and interest	970,059 62
Dividend No. 11, Feb., 1859, 4 per cent.	\$959,782 00
Dividend No. 12, Aug., 1859, 3 per cent.	720,000 00
	1,679,782 00

Contribution to Sinking Fund:—

Debt certificates	\$114,102 77
Bonds to Buffalo and Niagara Falls R. R. Co.	2,651 00
	116,753 77

Rent of the Niagara Bridge and Canandaigua Railroad	60,000 00
Balance, Sept. 30, 1859	1,619,150 55

\$7,795,175 05

Balance, Sept. 30, 1859..... \$1,594,326 23

Passenger receipts	\$2,566,369 71
Freight	3,337,148 36
Mail	95,765 60
Miscellaneous	201,565 75
	6,200,848 82

\$7,795,175 04

General Balance Sheet, Ledger Sept. 30, 1859.

Railroad and equipment	\$30,840,713 71
Cash in banks, and cash balances	490,163 07
Buffalo and State Line Railroad	557,800 00
Troy Union Railroad	21,100 00
Hudson River Bridge	10,080 00
Debt certificates, etc., chargeable to Income	8,015,000 00
Fuel and supplies; surplus beyond \$1,000,000	286,706 70
Bills receivable	42,758 64
General Post Office Department	27,675 45
Real estate (Buffalo and Niagara Falls R. R. Co.)	32,500 00
Do. (Oliver Lee & Co.'s Bank)	31,828 63
Trustees Syracuse & Utica R.R. Co.	6,680 91
	\$40,866,005 11

Capital stock	\$21,000,000 00
DEBT:—	
Albany and Schenectady R. R. Co.	126,000 00
Schenectady and Troy R. R. Co.	100,000 00
Rochester and Syracuse R. R. Co.	65,669 34
Buffalo and Rochester R. R. Co.	51,067 91
Roch., Lock. & Niag. Falls R. R. Co.	295,000 00
Buffalo and Niagara Falls R. R. Co.	45,000 00
Debt certificates	7,925,000 00
Bonds for convertible loan	3,000,000 00
Do. Railroad stocks	770,000 00
Do. Real estate	195,000 00
Do. Funding Debts of old companies	1,225,000 00
Bonds to Buff. & Niag. F. R. R. Co.	90,000 00
Bond to Telegraph Co.	10,000 00
Bonds, convertible, due 1876.	182,000 00
Bonds and mortgages	254,033 96
Unclaimed dividends	5,888 94
Expenses of operating the road; paid in October	67,555 03
Coupons and interest; accrued to September 30	339,639 38
Income account; balance September 30, 1859	1,619,150 55
	\$40,366,005 11

STATEMENT OF OPERATING EXPENSES FOR 1858-9.

<i>Cost of Maintaining Roadway and Real Estate.</i>	
Repairs of road-bed and railway, excepting cost of iron	\$640,639 03
Cost of iron (including the cost of chairs and spikes) used in repairs ..	172,321 66
Repairs of buildings	116,362 45
Repairs of fences and gates	14,142 29
Taxes on real estate	153,772 17
Repairs of Mohawk turnpike	2,195 52
Total	\$1,099,433 13
<i>Cost of Repairs of Machinery.</i>	
Repairs of engines and tenders	\$226,132 45
Do. passenger and bagg. cars	112,249 89
Do. freight cars	150,888 58
Do. tools and machinery in shops	18,525 45
Incidental expenses, including oil, fuel, clerks, watchmen, etc., about shops	25,563 63
Total	\$533,360 00

<i>Cost of Operating the Road.</i>	
Office expenses, stationery, etc.	\$21,761 26
Agents and clerks	228,979 15
Labor, loading and unloading freight ..	162,451 49
Porters, watchmen and switch tenders ..	174,739 28
Wood and water station attendance	41,087 12
Conductors, baggagemen & brakemen ..	129,975 06
Enginemen and firemen	171,890 83
Fuel, cost and labor of preparing for use	495,379 50
Oil and waste	65,892 02
Loss and damage of goods and baggage ..	20,865 97
Damages for injuries of persons	43,345 12
Damages to property, including damages by fire and cattle killed on road ..	11,096 75
General superintendence	54,817 31
Contingencies	94,355 02
Total	\$1,716,635 98

SUMMARY.	
Maintain'g roadway and real estate ..	\$1,099,433 13
Repairs of machinery	533,360 00
Operating the road	1,716,635 98
Total	\$3,349,429 11

Nashville and Northwestern Railroad.

The Nashville Gazette of the 6th instant, has the following:

A locomotive and six construction cars were yesterday shipped from this point to Hickman, Ky., to be placed on the Nashville and Northwestern Railroad. The road for thirty miles from Hickman is now ready for the iron, which we learn will put be down immediately.

We learn that THATCHER PERKINS, Esq., formerly Superintendent of the Central Ohio Railroad, but more recently of Alexandria, Va., has been appointed Master Machinist of the Baltimore and Ohio Railroad. Mr. Perkins was at the head of the Alexandria Locomotive Works, and is favorably known to engineers as the inventor of ten-wheeled engines. Mr. P. is a man of practical as well as scientific attainments, and we doubt not will give general satisfaction in the new position in which he has been placed.

We refer our readers to the advertisement of the NEW YORK RAILROAD CHAIR WORKS. Mr. BRESE was the senior member of the firm of Breese, Kneeland & Co., Locomotive Builders, and Mr. DOBBS has been engaged in this business for years—having conducted it for the late owners, Messrs. J. B. Green & Co.

Connecticut and Passumpsic Rivers R. R.

The earnings of this road for the fiscal year ending May 31, 1859, were:

From Passengers	\$70,744 25
" Freight and express	112,304 42
" Mails, rents, etc.	9,073 84
	\$192,122 51

And the expenses were:

Maintenance of road	\$20,591 88
Do. equipment	35,287 11
Fuel, oil and waste	15,350 18
Conducting transportation	23,497 76
Loss and damage	2,955 33
Miscellaneous expenses	12,439 49
	110,121 75

Net earnings	\$82,000 76
Earnings in 1858	\$171,625 62
Expenses "	102,153 24
	69,472 38

Increase in 1859

The tonnage for the year ending May 31, 1859, was:

Downward to Boston, Concord and Montreal, and Northern Roads	28,981,763 lbs.
Upward from do.	13,843,215 "
To and from Vermont Central road	15,442,999 "
Lumber down Connecticut river	4,787,620 ft.

The number of passengers carried during the year ending May 31, 1859, was:

Local, up and down	33,725
To and from Northern Railroad	11,587
To and from Vermont Central Road	9,584
To and from Boston, Concord and Montreal Road	2,084
To and from White Mountains Road	731
	57,711

The amount of wood on hand May 31, 1859, was 6,506 cords.

The furniture of the road and property, consists of 7 first class engines, 158 merchandise cars, 8 first class passenger, 5 eight-wheel baggage cars, 20 gravel cars, 19 hand cars, 5 snow ploughs, 23 depot buildings, 7 houses used as tenements, 9 buildings, used as tenements, 9 buildings, including engine houses, machine shops, car houses, etc.

During the year the company have re-built and re-painted a large number of cars; laid down 1,413 rails, 10 tons of chairs, and 5,000 new sleepers—making good the lumber of cars with which the year was commenced, adding to them 12 new ones; and putting both cars and road in as good repair as they have been at any time since reaching St. Johnsbury.

The interest on the bonds has been promptly

paid semi-annually; and \$16,000 annually paid to the Trustees towards the sinking fund for their ultimate redemption.

Williamsport and Elmira Railroad.

A meeting of the holders of the second mortgage bonds of this company was held in Philadelphia on the 8th inst. The substance of the arrangement entered into is the reduction of the debt and capital of the company from about four millions of dollars to two millions of dollars.—That is, the first mortgage of \$1,000,000 is extended to 1890.—The second mortgage of \$700,000 is exchanged for \$250,000 of preferred 7 per cent. stock. The confidential debt, amounting to \$150,000, is also exchanged for preferred stock, and occupies precisely the same footing as the preferred shares issued to the holders of the second mortgage. The common stock is reduced to \$500,000, including unsecured debt, and coupons due on first mortgage—making in all two millions of dollars on a road seventy-eight miles long, less than \$27,000 per mile. The following are the precise terms of the proposed arrangement:

To the present bondholders of \$1,000,000 of present 1st mortgage bonds—the new issue of bonds due 1890	\$1,000,000
To the holders of \$700,000 2d mortgage bonds of preferred stock	\$350,000
To holders of confidential debt of same	150,000
	500,000

To the holders of unsecured debt of common stock	\$100,000
To holders of coupons due on 1st mortgage of same	100,000
To holders of present common stock of same	300,000
	\$500,000

To clear the company from all embarrassments under its new organization, a sale by order of court will be made. Satisfactory arrangements have already been effected in regard to the chattels with the committee representing the chattel bonds. After the reading of the report, the following resolution was adopted:

Resolved, That the report of the committee be accepted, and that the plan adopted by them and the committee of the first mortgage bondholders for the reconstruction of the company be and is hereby approved.

From New York to New Orleans.

The following tables, says the Savannah Republican, were compiled by a gentleman who has given the subject considerable thought, to show which would be the best and shortest route from New York to New Orleans, and the time is estimated as it will be consumed, when the projected railroads are completed:

FIRST ROUTE.		Hours.
Charleston to Fernandina by sea		16
Fernandina to Cedar Keys, by railroad		8
Cedar Keys to New Orleans, by sea		48
		72

SECOND ROUTE.		
Charleston to Savannah, by railroad		4
Savannah to St. Marks, by railroad		12
St. Marks to New Orleans, by steamer		36
		52

THIRD ROUTE.		
Charleston to Savannah, by railroad		4
Savannah to Tallahassee, by railroad		10
Tallahassee to White Bluff, by railroad		2
White Bluff to New Orleans, by sea		24
		40

Journal of Railroad Law.

EXPRESS COMPANIES. THEIR LIABILITIES AS COMMON CARRIERS.

Now that express companies have become so numerous in the United States, and their business has become so important a branch of industry, the various legal questions arising in respect to the duties and liabilities of such companies have acquired a good deal of importance. The case of *Sherman vs. Wells*, lately decided in this State is of interest in this connection. It involves the question whether express companies are held to the strict common law liability of common carriers, so that they are liable for any loss of goods entrusted to them, except such losses as arise from inevitable accident or the act of a public enemy, or whether less stringent rules shall govern their accountability. The action was brought for the purpose of charging the defendant as a common carrier for the value of certain bonds of the State of Michigan, entrusted to him at Buffalo, for transmission to the plaintiff at Detroit and which he failed to deliver. The defendant put in an answer denying that he was a common carrier, or liable as such, and alleging that he was the president of the American Express Company, an association transacting a general express agency, for hire, but not doing business as common carriers.

The cause was referred to a referee, who made his report by which he found the following facts:

First. The defendant was president of a company generally called the American Express Company, whose principal office was at Buffalo; there being also branch offices in most of the cities west of Buffalo. The firm name of the company was Livingston, Fargo & Co.

Second. This Express Company received at its office in Buffalo, packages consisting of coin, bullion, bank notes, commercial paper, and such other articles as parties thought fit to entrust to the care of such company, and for its services the company charged and received a price per package proportionate to the intrinsic value of such package in part, and regulated also in part by its size and weight. On the 19th of August, 1852, the Patchin Bank delivered to the Express Company a package containing six several bonds issued by the State of Michigan in all conditioned to pay \$4,600. The bonds were enclosed in an envelope and in delivering the bonds, and in taking the receipt therefore the Bank acted as agent for the plaintiff. The receipt was as follows:

Buffalo, August 19, 1852.

Received of the Patchin Bank of Buffalo, the following package in good order, directed to J. C. W. Seymour, Esq., Cash., etc. Detroit, Mich.
Amount, \$4,600.

L. F. & Co.,
per Stanley.

Third. The regular business of the express company before and at the time of the reception of such package, and which it held itself out to the world to perform in respect of all packages delivered to it, was as follows, viz: Upon the reception of such packages by the express company, they were taken in charge by such company at its office; they were then transported in vehicles owned by said company and in charge of its servants, to the railroad depot at Buffalo, or to one of the steamboats leaving the port of Buffalo, when they were put on board either of a baggage car upon such railroad, or on board of such steamboat.

If placed upon the railroad car, they were placed in a baggage car devoted to the transportation of packages in charge of such express company. In all cases, whether such packages went forward by railroad or steamboat transportation, an agent of the express company was sent forward with them having such packages under his special charge and supervision. The freight upon such packages, and all charges thereon, were in all cases paid by such express company, the owner of such packages paying no further or other charges than such as the express company charged or received at the time of the receipt of such packages. Upon the arrival of such packages at any terminus of a route, whether by railroad or steamboat, such packages, if they were to go still further forward, were taken by the agents and servants of such express company in vehicles owned by it and under charge of its servants, and transported to the next point of railroad or steamboat departure, as the case might be, and then again taken forward by such new route in the same manner and under charge of agents of such express company as above set forth; and this mode of transportation in all respects was continued until the said packages reached the city or town of their destination, when they were taken in vehicles of the said express company, and delivered by servants of such company to the parties to whom they were consigned or directed. Such regular course of business was well understood by the public and by the Patchin Bank at the time of the delivery of the package of bonds above described. The said express company had no interest in any of the lines of public conveyance by which said packages were carried, or in the moneys received by the persons or corporations owning such lines of public conveyance.

Fourth. The said package of bonds so delivered to the express company as aforesaid, on the 19th of August, 1852, was put in charge of a servant of the company, and on the same day was taken in a wagon belonging to the said company, to the steamboat Atlantic, then lying at Buffalo, and which was then engaged in running from Buffalo to Detroit. It was placed in a carpet bag with a quantity of gold and other valuable papers and packages, in like manner delivered to such company for transportation, and upon its arrival at the steamboat, was taken to a state room on board of such boat, hired by the servant of the company having such package in charge, and in such state room was placed an iron safe belonging to the said express company, in which such package was locked up by such servant, and the key thereof kept by himself.

The said steamboat left Buffalo on the evening of the same day for Detroit. The boat was commodious, staunch, safe and seaworthy; such servant slept in the above-named state room, and while he was so sleeping, and at about 2 o'clock, A. M., of the 20th of August, 1852, a propeller navigating Lake Erie came in collision with the Atlantic, striking her near her bows, and making a breach in her side, through which the water rushed rapidly, and the boat commenced sinking at her bows. A large number of passengers were on board, about 300 of whom were drowned in consequence of the collision and sinking of the steamer. The boat filled rapidly and went down, bow first, at an angle of about 80 degrees, until the bows touched the bottom, leaving a part of the stern of the boat out

of water, from which the remainder of the passengers were taken off by a vessel which came to the assistance of the sinking steamer. It was about two hours after the collision when the last of the passengers left alive were taken off; but the fact that the steamer was sinking and must go down was apparent within a very few minutes after the collision took place. It was probably physically possible for the servant of the express company to have taken the carpet bag in his hand and carried it on board of the assisting vessel, but none other than a man of most extraordinary and unusual coolness and self-possession in the presence of such a casualty, would have undertaken it, and to have attempted to do so would have been attended at the time with additional peril to the life of the messenger, by reason of its tending to encumber him, and by reason of the confusion which prevailed among the passengers. The iron safe containing the bonds in question went down with the steamer, and said bonds were in the safe when it went down. The express company had no interest in the steamer Atlantic, or in her profits, and was in no way interested in the business which she was then engaged in. The servant of the said company, in charge of the bonds, was saved by the vessel which came to the assistance of the sinking steamer.

Fifth. Said bonds were at the time of their loss worth the amount of principal and interest then due upon them. They all bore date, April 8th, 1850. After their loss, the plaintiff and defendant both joined in attempts to induce the State of Michigan to pay such bonds as lost bonds, which said State refused to do; and having advertised for said bonds to be presented at the proper office for payment, said State stopped the interest upon them, from and after the 30th day of January, 1853.

Sixth. The said express company had not either conditionally or otherwise promised the plaintiff to pay him the amount of said bonds.

Seventh. The whole amount of principal was due upon said bonds at the time of their loss in the Atlantic, with interest thereon, at the rate of 6 per cent., from the 8th day of April, 1850, and no part of that sum had since been paid.

Upon these facts, the referee determined as matter of law, as follows, viz:

First. That the American Express Company received such bonds as common carriers, to be carried by such company from the city of Buffalo to the city of Detroit, and there delivered to Mr. Seymour, at his place of business.

Second. That the said company did not by special contract or otherwise limit or restrict its liability as such common carriers. That the plaintiff upon the foregoing facts was entitled to judgment against the defendant for the sum of \$6,634 46, being the amount of principal and interest due upon the bonds. For which sum, with costs, judgment was entered, and the defendant appealed.

The opinion of the Supreme Court, upon the appeal, delivered by Judge Davies, is as follows:

The facts are succinctly and correctly stated in the referee's report, and the only question presented is, are the defendants liable for the loss of the bonds entrusted to them? That the defendants are common carriers, cannot, we think, be doubted. It was settled that they were, in the case of *Russell vs. Livingston*, in this court. The

judgment in that case was reversed in the Court of Appeals, but on an entirely different point. The defendants being, therefore, common carriers, and there being no special contract, the parties are to be supposed to have acted with a full knowledge of their legal rights and liabilities, and must be held to the stringent rule of law which makes a carrier an insurer against all except the act of God and the public enemy.

When goods are entrusted to a carrier, and not delivered according to contract, the value of the goods, with interest thereon from the day when they should have been delivered, is the measure of damages. We think the proof fully authorized the referee to find that the bonds were of their par value, and that no injustice has been done the defendant in this respect.

The judgment appealed from will, therefore, be affirmed, with costs.

Railroad Earnings.

The Illinois Central Railroad Company's statement for November is as follows:

Land Department.

Acres sold since Jan'y
1, 1859.....26,191.65 for \$385,966 38
Acres sold prev'y 1,229,835.33 " 15,637,148 95

Total.....1,256,026.98 for 16,023,115 33
Construction Bonds canceled in Nov.,
1859.....\$37,000 00
Free Land Bonds canceled in Nov.,
1859.....5,000 00
Total Bonds canceled up to October
31, 1859.....1,410,000 00

Total Bonds canceled up to Nov. 30.....\$1,452,117 11
Cash receipts in Nov., 1859.....\$54,642 24
Do. since Jan'y 1, 1859.....529,219 58
Total cash and bonds received to
Nov. 30, 1859.....\$3,246,117 11

Traffic Department.

Total receipts in November, 1859.....\$250,742 19
Do. do. 1858.....156,037 60

Increase.....\$94,704 59
Receipts from Jan. 1, to Nov. 30 1859.....\$1,933,661 58
Corresponding period of 1858.....1,822,579 79

Increase.....\$111,081 79
In November the earnings of the Toledo and Western (Wabash Valley) Road were:

Passengers.....\$13,527 85
Freight.....60,027 66
Miscellaneous.....8,316 66

Total.....\$81,872 17
November, 1859.....63,527 00

Increase.....\$18,355 17

The earnings of the Milwaukee and Mississippi Railroad Company for the month of November were:—

1859.....\$85,835
1858.....63,350

Increase.....\$22,485

The November earnings of the Macon and Western Railroad were.....\$37,111 26
November, 1858.....33,863 85

Increase.....\$3,247 41

The earnings of the Erie Railroad for the month of November, 1859, were.....\$536,608 66
Earnings of November, 1858.....446,101 52

Increase.....\$90,508 54
The Inc. in the first 12 days of Dec. is. 61,000 00

The earnings of the Chicago, Burlington and Quincy Railroad for November were as follows:

Freight.....\$93,111 51
Passengers.....26,160 16
Mails and miscellaneous.....1,462 33

Total.....\$120,734 00
Operating expenses, estimated.....50,000 00

Net earnings.....\$70,734 00
Gross earnings per mile.....754 58

	Chicago & Burlington.	Galesburg & Quincy.
210 miles.	100 miles.	
Freight.....\$103,472 66	\$18,920 34	
Passengers.....30,776 66	10,616 60	
Mails and miscellaneous 1,821 58	856 48	

Total.....\$136,070 90 \$30,393 42
Total earnings, 310 miles.....\$166,464 32
Total earnings for November, 1858... 130,955 39

Increase in November, 1859...\$35,508 93
Gross earnings per mile.....536 98

The net receipts of the Harlem Company for the month of November are as followed:

1859.....\$85,784 80
1858.....83,221 46

Increase.....\$2,563 34
The receipts of the Grand Trunk Railway of Canada for the week ending Dec. 5, were from:

Passengers.....\$20,178 60
Freight.....38,241 78
Mails and sundries.....2,349 46

Total.....\$60,764 84
Corresponding week of last year.....50,110 35

Increase.....\$10,654 49

We invite attention to the advertisement of Messrs. ANDREWS & Co. in another column. These gentlemen are proprietors of the "Broadway Coffee Room," located at No. 654 Broadway, between Bleeker and Bond Streets, and immediately adjoining the Assembly Rooms. The advantage of this location consists in its close proximity to a place of great resort; the frequenters of which doubtless fully appreciate and improve the opportunity thus afforded them to partake of the choice dishes and luscious beverages dispensed with no unsparing hand, and at a price so reasonable, that none are ever disposed to murmur. Those in quest of such an establishment, cannot better themselves at any place kept for similar purposes on Broadway or elsewhere. This, however, is an uptown establishment, and is too far removed to answer the purpose of a lunch house, at noon, for those doing business below the Park. To such we would recommend a visit to the "Great Republic," No. 77 Nassau Street, kept by CHARLES W. NASH, Esq. This is a very desirable place for that purpose. Order, neatness and cleanliness are very agreeable accompaniments to a well filled dish of palatable food. Cheapness is also, in many cases, an object; and time, which is money, valuable. An attentive, polite and obliging waiter is almost as necessary as the food itself. All these things are taken into consideration at NASH'S—thus making it one of the most popular places in that vicinity.

Louisville and Nashville Railroad.

The Louisville and Nashville Railroad has now been in operation the first month throughout its length. We understand that the gross earnings have been over \$65,000, of which \$30,000 came from passengers and \$35,000 from freight.

Michigan Southern Railroad.

It is expected that this company will resume payment in January or February upon their mortgage bonds.

Cincinnati Stock Sales.

By KIRK & CHEEVER.

For the week ending December 13, 1859.

BONDS.	Per cent.
Little Miami, 1st Mort.	6s.....85 and int.
Covington and Lexington, 2d Mortgage	7s.....65
Ohio & Miss., R. D., Construction	7s.....25 set.
Cinc., Ham. and Dayton, 2d Mortgage	7s.....84½
Indianap. & Cincinnati, do. do.	7s.....78

STOCKS.

Cincinnati, Hamilton & Dayton	Ex Div. 62½
Columbus and Xenia	.....80
Indianapolis & Cincinnati	.....49
Little Miami	.....73

J. B. PARSONS.

J. H. DODGE.

PARSONS & DOBBS,
RAILWAY COMMISSION MERCHANTS,
AND NEGOTIATORS OF SECURITIES,
3 NASSAU ST., (opposite the Custom House),
NEW YORK.

WE ARE PREPARED TO FURNISH, ON THE SHORTEST NOTICE,
ALL ARTICLES REQUIRED IN THE
Construction, Equipment & Operating of Railways
AGENTS FOR THE
JERSEY CITY LOCOMOTIVE WORKS.

To Car Manufacturers.

OFFICE OF DON PEDRO 2d R. R.,
Rio de Janeiro, Sept., 1859.

THIS Road now under construction, is 270 miles in length, with 33 miles open to traffic, stocked with Cars of the English pattern built in London. The directors have determined to order American Cars as an experiment, and with this view desire proposals for two 1st class, two 2d class Passenger Cars (60 seats each) and one Baggage and Post Office Car.

Drawings and specifications may be seen at the office of LYMAN HOLLINGSWORTH, Esq., No. 6 Water st., Boston, who is fully authorized to contract immediately for the above cars.

ANDREW ELLISON, Jr.,
Engineer in Chief.

31.49

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
CASWELL & PERKINS,
Brokers, 69 Wall st.

New York, July 9, 1859.

OIL! OIL!
PEASE'S
IMPROVED ENGINE and SIGNAL OIL,

FOR
RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF
MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than Sperm Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating. For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.
Reliable orders filled for any part of the United States or Europe.

RAILROAD IRON
AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Downais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G.I. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

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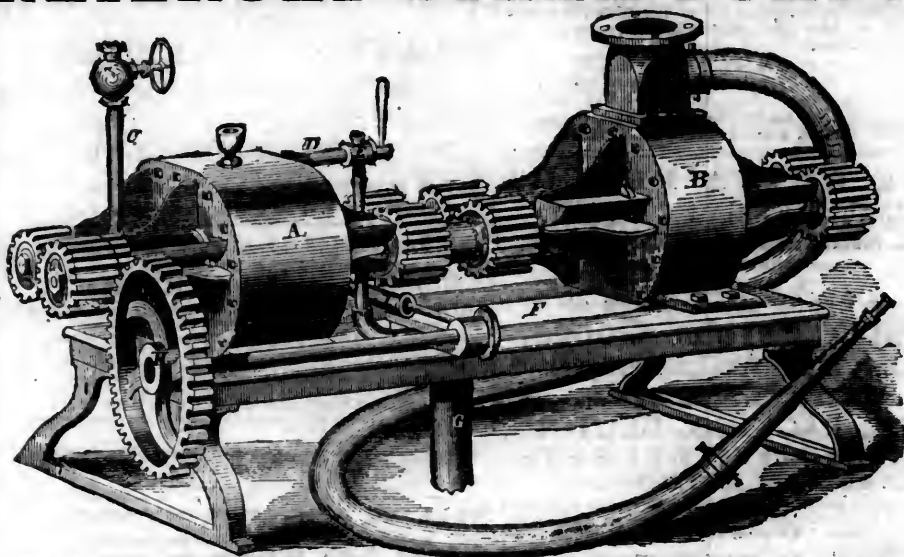
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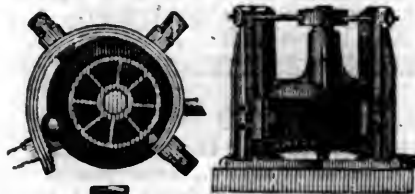
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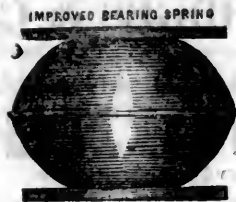
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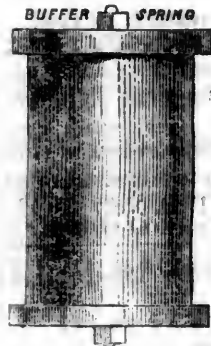
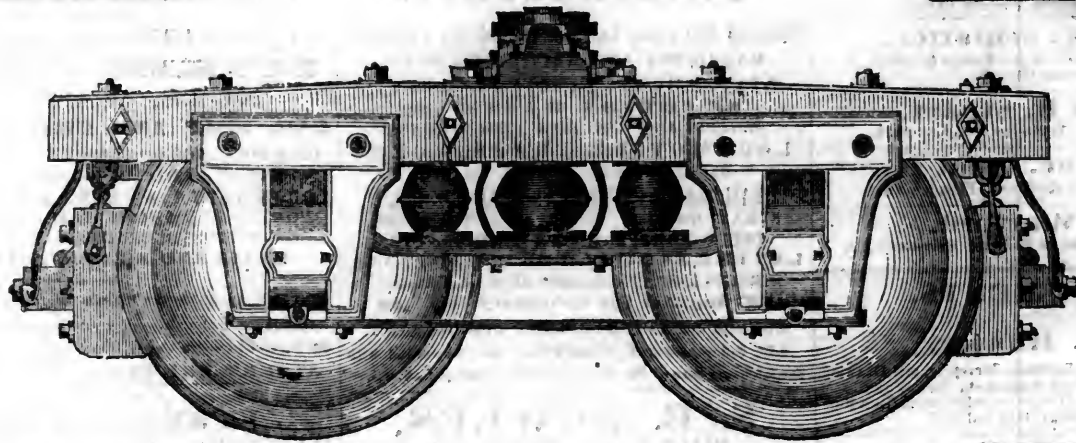
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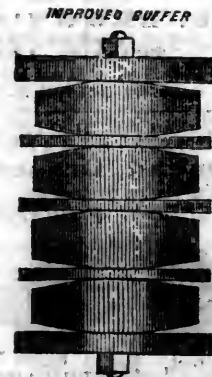
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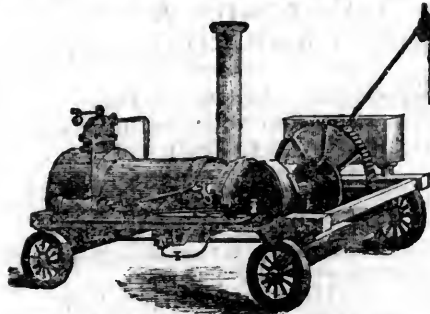
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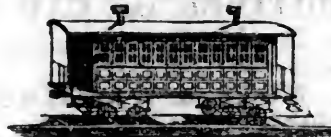


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STEAM NAVIGATION, COMMERCE, FINANCE,
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HENRY V. POOR, *Editor.*

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SATURDAY, DECEMBER 24, 1859.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. NO. 9 SPRUCE ST.

New York, Saturday, December 24, 1859.

The Gauge Question.

(Continued from p. 819.)

I cannot agree with Major Brown's next statement, which is—"That the extension of our six feet gauge involves the introduction of the evils of a break of gauge, on a scale more extensive than ever contemplated by the Great Western Railroad Company." Now, of course, the Great Western Company never contemplated any evils in persisting in the extension of their gauge; and it is shown that none exist, except such as are fully compensated for by their better road. But, I suppose, Major Brown means to say, that the evils of a break of gauge are increased by the number of them; or of contact with lines of a different width; and he goes on to enumerate how many are likely to occur in our case. Here I must beg leave (in answering Major Brown's arguments against the six feet gauge, on the ground of the "break of gauges" which will result,) to follow a different order from that which he has selected; yet I do not propose to introduce any facts or arguments, except in answer to such of his as seem to require it.

Major Brown seems to occupy this ground, that a break of gauge is objectionable, because it

causes an extra expense in transshipment, and a loss of time; and he estimates the expense at 15 cents per ton, and the time lost, at three hours per train, at least. The cost of transshipment instead of being 15 cents per ton, will not, I am satisfied, exceed six cents.

The cost at our stations of taking freight from wagons, and placing it in our cars, including, frequently, storing it for a time, is only about seven cents per ton; but there is too little of this work to do to reduce its cost to the minimum. Our men are obliged to labor diligently for a few hours per day, while freight is coming in; afterward, they are occupied in attendance upon customers, loading and unloading their freight, so that, in fact, seven cents the ton covers two handlings for a large share of the freight both ways. There is transshipment from the Erie Canal boats to barges, and the reverse, of about a million tons per year. This is a more expensive operation than taking freight from one car to another; and I find that it costs but two four-tenths cents per ton, and that five men will transfer 50 tons in three hours. The Western road transships all its freight from cars and canal boats; but for the better operation they use steam power. The freight is raised some 20 feet. I have witnessed the operation on several occasions, and believe the cost to be less than four cents per ton. A manager of a narrow gauge road in England, where a very large amount of transshipment is done, says the cost is about one penny per ton. I have made careful estimates, and am prepared to say, that I have no doubt three cents will cover the cost of transfer from one car to another, averaging the cost of all kinds of articles. When you come to coal, the cost per ton will be little or nothing. This is proven by the Delaware and Hudson Company's operations, who transfer from one car to another, and from cars to boats. They again tranship from boats to barges, and from barges to docks and ships. I do not know the cost of all these transfers; but we all know that the company get their coal to market very cheap, and are in all respects most prosperous, though they have what is fully equal to three breaks of gauges, as far as breaks affect cost, or produce delays.

If five men will unload 50 tons in three hours from canal boats to barges, they will do the same from cars to cars. Only five men can work at one

boat, while five can work at one car. Therefore, if you work 20 men, a train of 100 tons can be unloaded in one and a half hours. By increasing the force still more, it can be done in one hour. This, however, will be unnecessary. The trains of a line running to your's, would be so arranged as to be in at least two hours before your's would leave. This is the practice with freight trains on branch roads here and in England; and the reason is, they *must* be in time, or wait for the next departure. And therefore they *have* to wait the time, unless delayed by accident, whether you tranship or not.

That transshipment will not depend upon, or be increased, by a break of gauge on our line, is, I think, abundantly proven by the experience of other lines. Our line is 450 miles long, and we anticipate few or no branches which will be less than 200 miles long, including the main line to the intersection. After the most careful investigation of this subject, I find that experience has determined that, as between transshipment and an exchange of cars, on a line of even much less magnitude than our's, transshipment is the method. For instance, the Western Company refuse to allow their cars to go west of Troy, though urged to do so by the companies west; they have found it cheaper for them to transship—that by transshipment, fewer cars will do the same work, and that when their cars go upon foreign lines, they are not taken proper care of, or returned as they should be.

The Superintendent of the Western road informed me, that as a matter of economy, they would transship at all the intersections, rather than exchange cars; but that in the case of many of the branches, they were constrained to exchange for other reasons than economy; for many of the branches had not cars enough. Other reasons of a local character existed. Mr. Parker, of the Boston and Worcester road, informed me that their exchange of cars with the Western Company cost them an extra sum of at least \$5,000 per year. The Boston and Worcester, and the Western together, form one continuous line from Boston to Albany of only 200 miles in length, and are therefore most favorably located with regard to each other, to render an exchange of cars economical; and yet \$5,000 a year would be saved by an amalgamation of these lines. I obtained similar facts, a few

days since, at Utica, from an agent of the Utica and Schenectady Company. This agent said that their company could save money by keeping all their cars on their line, and transshipping at Utica, and his reasons were the same.

Now it is evident that if the line from Albany to Buffalo were under one management, there would be no difficulty, but great economy in sending cars through. The conclusion to be drawn from such facts, is that economy requires, that in case of roads doing a large business, they should not exchange cars with foreign lines, but confine the movement of their cars to their own. Other considerations may hereafter arise which will induce the Western Corporation to send their cars west of Troy; but economy will not be one. If they do it at all, it will be, that in order to compete with other interests, they are forced to submit to extra expense. The system of exchanging cars, instead of transshipment on lines of any magnitude, is more expensive than resort to transshipment, and causes more delay, as a general rule. This doctrine is opposed by Major Brown by only one argument: that it is the *habit* in England and America to exchange cars—now I submit whether *habit* or *custom* proves the *economy* of a measure of this kind; for railroad corporations are often constrained to adopt plans not the cheapest or best. But Major Brown asserts "that cars are exchanged on the English roads to an enormous extent, without the least practical inconvenience." Now all the "practical inconvenience" here meant is removed by like gauges, I suppose. But this does not, by any means, prove that additional expense is not incurred; and if so, then this "practical inconvenience" is an injury. In my report of March, I quoted the testimony of Edward Buny, to show that on the London and Birmingham road, where their regular trains were not half full, they were compelled to have an extra daily train for the purpose of returning cars of other roads, and their own, to their proper places; and that it all arose from this plan of exchanging cars; and this for passenger business only. This is a most remarkable statement, and I cannot think the habit will be continued. Mr. Gooch states, in the letter read here, that the practice has been very much reduced for branch lines since that time. But Major Brown says that "this system is increasing as the railway system is developed; that it is the true plan, and is perfectly applicable to this country, where, indeed, it is already begun between Buffalo and Albany, and between Albany and Boston. I have shown that on these roads it is done as a matter of necessity, not choice; and that so far as cost is concerned, the union of gauge is the means of additional cost to the companies, and thus far, a real damage. This is in fact the language of the managers of the Western road. But the plan of exchanging cars leads to another and greater evil. It opens the door to the admission of common carriers on the line. It did this in England; and the London and Birmingham and other companies have had no greater difficulty than this to contend with. As applied to this country, the evil is more serious than it can be there, on account of the influence this class of men have over the people and the Legislature. I cannot go into this feature at any length. The Pennsylvania system, as it may be called, allows any parties to place cars on your roads, and you

take them at a fixed price. Where one is allowed to do this, there is no way of preventing as many as may please to avail themselves of the same privilege. The result will be as it has been, and is, on all roads having common carriers; viz: there will be more cars on the line than the business requires. The private cars will be in bad order, and therefore you will be obliged to move them over your roads at rates of toll which will greatly reduce your profits, and at the same time keep as many of your own cars, as if there were no others on the line, or give all the business up to carriers. I therefore maintain that it will be advisable on the score of economy, as well as prudence, for you to confine the movement on your roads to your own cars, and not allow these to leave your road, except upon those stocked and managed by yourselves. Thus the question of transshipment may be considered in your case as independent of that gauge.

Your business will be derived from two sources: 1st. The country West of your termination; and 2d, the district along your main line and its branches.

The effect of the broad gauge in enabling you to command the trade from both these sources, as compared with the narrow, will now be considered.

First as to the through trade: Major Brown reasons on this subject as though our freight was to come to us by railroads only, while I think that a very large portion at least will be received from steam and sail vessels. The great chain of lakes as they are aptly named, will continue to collect at their harbors from the railroads and canals leading to them, the rapidly increasing products of a vast and fertile region. It has been ascertained that more than 400,000 tons arrived at Buffalo from the lakes last year, and that probably more than 100,000 tons were shipped westward from that port; so that the business of the lakes, aside from that which goes through the Welland Canal exceeds the whole estimated tonnage of our road. The completion of the Illinois Canal and the Central Railroad, together with the rapid increase of the products of the West, warrant the belief that by 1850 this tonnage will be doubled.

Our ability to command this trade is materially increased by the broad gauge, because it gives greater power to engines, and greater capacity to the cars, thus rendering it at least 30 per cent. more economical than the narrow. If this tonnage takes the railroad at Buffalo, Dunkirk, or further West, it must be transhipped; for I think it must be evident to every one, that it would be cheaper for our company to transship, than to send our cars on board of vessels, even if taken without charge to Western ports.

But it will cost more to tranship from vessels than from cars; therefore it will be better to receive freight from other roads at our termination, by transshipment, than to send our cars West on these roads.

Major Brown contends at length that we shall be in danger of losing the Western trade, unless we agree to gauge with the roads coming from that country, and intersecting at our termination. But he makes no mention of our connection with the lakes as likely to afford any business. It used to be thought a great point, and I think it will yet prove an important one; but I would suggest, that if our cars go West at all, they should go as far as

roads can be found to admit them; to Cincinnati, St. Louis, or even to New Orleans and Oregon; at any rate it should be Major Brown's duty to fix the point at which they should stop, and transshipment be made.

But does not the testimony and example of other roads, as I have shown, fully prove that your interests will require transshipment on all freight going West from our road, whether by railroad or vessels? If this is so, a break of gauge would only seem to render impossible, that which the interests of the company require to be avoided; and the time will soon arrive when the managers of our roads will join with our Eastern neighbors, in wishing that gauges should differ in certain quarters; but it is no ways certain that a break of gauge will occur in the extension of a road west of Dunkirk; the chances are decidedly in favor of a continuance of a six feet gauge. The Ohio line was commenced in 1837 on a seven feet gauge. But let us admit, for the sake of meeting Major Brown on his own ground, that a break will occur at Dunkirk if the six feet gauge is retained. Then, as he says, we must transship; but to show that we shall then lose the Western trade, Major Brown assumes three evident errors to be facts.

1st, that a road 40 or 50 miles long can take freight at a cost of $\frac{3}{4}$ of a cent per mile, or 27 cents per ton.

2d, that including the delay of transshipments, the route via Buffalo and Albany, would take freight to New York in less time than our road.

3d, that two transshipments are to be charged against our line at 15 cents a ton each, or 30 cents a ton.

In answer, I would remark, that no road to my knowledge, doing an ordinary freight business, (particularly a short one), has as yet been operated for less than $1\frac{1}{2}$ cents per mile per ton. It is very unreasonable to suppose that they can make the best time, when, as Major Brown estimates, it will take 5 hours to transship. But as it is evident it will not take an hour, we have 40 or 50 miles in our favor, and this train must, on the northern line, pass over the roads of nine corporations, changing engines at least seven times, while upon our route, there will be but three changes. The cost of transshipment will be but six cents instead of 15 per ton each time, and only one transshipment is involved in the supposition.

But to adopt Major Brown's argument, or rather to admit his statements, how slender your means for controlling the western trade!; for, as he shows that 27 cents a ton, or in fact 12 cents, is your only advantage over the Dunkirk, Buffalo and Albany route, after securing to our line all the advantages of his narrow gauge, it will hardly pay you to take the trouble to change. But retain your wide gauge, deduct six cents for expense of transshipment, from its saving in motive power, and you have a large balance over the other lines in economy, enough to secure to you the western trade, so far as the cost of movement on any line affects this question of obtaining trade. I wish, however, to call especial attention to the impropriety of his increasing the cost of transshipment at Piermont, where it operates as an argument, though only to the amount of 15 cents a ton, against our wide gauge. Wide, or narrow, this would be the same, so long as you terminate at Piermont. In another place he speaks of this

feature on our road, as a serious drawback to its prosperity. Much can be said about this matter, but this is not the time or occasion. It has nothing to do with gauges. But I may state that so far as our rivals, as Major Brown (no doubt justly,) terms them, are concerned, it would not be difficult to prove, that we can deliver freight at any dock or pier in the city of New York or adjacent, cheaper than the Hudson River road can from a point opposite Piermont, to any point near the center of business in New York; and that the extra cartage from that point would cost more than our entire ferry expenses, transshipment included.

It does appear to me evident that our ability to command the tonnage trade of the West, whether coming to our termination, by vessels or cars, will depend entirely upon our rates of charges, time of transit and regularity. Our ability to compete with our rivals in all these respects will be increased as the difference in width of gauge. I do not mean, of course, to say that our company have no arrangements to make on the Lake, to secure connections with our roads, or that they need take no interest in the extension of roads west of us. These matters must claim attention at any rate; but even here you will find an advantage on your wide gauge, merely from the fact that wide gauges are popular; the whole West are expecting great advantages from connection with your road, when finished to the Lake; and it attracts more attention, and will command alliances more readily, because it will have unusual capacity and accommodations.

The next important consideration is, how will our wide gauge affect our ability to control the trade of our own district, or the country along our main line, and its branches, without reference to the trade and travel of the West.—The country embraced in what is termed our own district, without any branches, will afford sufficient business to render the Erie road, one of the best investments in the country, if not *the* best. The report of Directors elected October 5th, 1843, of which Horatio Allen was President, conclusively shows that the net revenues from the business district will exceed \$1,300,000, or 18 per cent. on the estimated cost of the road.—That the basis upon which this estimate was made, is largely within the truth, as intimated by the board, subsequent results of the road abundantly prove. Your wide gauge will be no impediment to the control, or economical transportation of this large business, but on the contrary, will increase the trade and reduce the expense. The results thus far on your road are altogether unprecedented. It is safe to say that no railroad located in a purely agricultural district, passing through no large towns, surrounded by competing avenues, has ever commanded anything like the amount of business ours has done. It has accomplished this, for the most part, under unusual disadvantages. The road has been until lately in bad order; its excavations and embankments but partly finished; its outfit of engines and cars inadequate. Yet without means or credit, it has accomplished more than the most sanguine anticipated, and more than other roads have been able to do. Why has this happened? Has our wide gauge had nothing to do with it? The same number of cars have accomplished more here than elsewhere. Our

average loads have, for instance, been more, by 40 per cent. per ton, per mile, than on the Baltimore and Ohio; a longer road, having larger business, but otherwise very similar in character. I do attribute our success to our wide gauge. It has attracted business, and then enabled us to do it cheaper than we could have done it on a narrow gauge. The effect our wide gauge will have, in controlling the trade of branch lines, is still important, for these branch lines can add largely to the business of our main line not only, but if located and properly extended, will draw trade to New York, which otherwise would go to Boston. The effect of the wide gauge is thus described in the report under review. "Suppose an important branch to the Erie Railroad, the Attica and Hornellsville, for instance, has been built on the wide gauge, and that it has been successful, and that it has directed to the Erie Railroad an important amount of business from its own region and from districts beyond; and suppose that afterward another principal branch should be talked of, such as the Canandaigua and Corning Railroad for instance, is it to be presumed that parties interested in the great rival lines to the Erie Railroad, will look on, and permit the control of this branch to fall into the hands of persons disposed to build it on the broad gauge? Will it not soon be discovered, that if the gauge is broad, the trade will almost of necessity go to the Erie Railroad, and that on the contrary, if it is narrow, it will go in an opposite direction? Will it not be found out, that if the narrow track roads can be built, there will be a good chance of competing with the Erie road for the trade of what is called our own district?"

The reliable fact here stated by Major Brown is, that if the gauge of the Erie Railroad is broad, and the branches are made to conform, the trade will almost of necessity "go to the Erie Railroad." What, then, are the chances that these branches will conform to our broad gauge? It cannot be considered a matter of chance, but of certainty, for as these branches bring in, in either case, the contested district, or the district along, and even north of, these lines, nearer or as near to New York by our road as by the rival lines, the greatest object in their construction, will be to connect with our road. Take the most important branch from Rochester to Lake Ontario. The saving in the distance by the way of the Erie Railroad, will no doubt be more than 50 miles. A point then 10 miles south of Rochester, will be 70 miles, and a point 25 miles south will be 100 miles nearer New York by way of our road. Will parties invest capital in lines to compete with us, when the distances are so greatly in our favor? Not at all. But the lines north of us are rival lines. Who then promotes the branches in question? Do the stockholders of these lines? Not at all. *It is the people along the line.*

Where is the wealth of Rochester, Buffalo, Canandaigua or Syracuse? In the interests of these rival lines? Not at all; a few, only a very few, are stockholders in these lines. The wealth and influence of these districts, and the people, desire a line to our road in order that there may be competition. It is this they are looking for, and they will fall in with that plan which will make it the most effectual, looking at the same time for a fair investment. If then they see that, by conforming to our wide gauge, their branch

takes the trade, "almost of necessity," (as Major Brown has it,) they will conform. How then, (it is interesting to inquire,) stands the broad gauge in public estimation? Abundant indications have shown, that that portion of the public interested in the branch lines in question, look at the broad gauge as one great inducement for investment in them.

At a public meeting held the past spring, by the advocates of the Rochester branch, this feature was distinctly acknowledged as one of the advantages of the plan in view. In all directions we discover like sentiments, and it is perfectly evident that the public are decidedly in favor of wide gauges. In England this is as true as in the United States; if not, why, with all the power and influence of the narrow gauge lines, backed by the commissioners so often spoken of, have not the wide gauge lines been arrested? They are still progressing under all the disadvantages arising from the limited space afforded in England for a separate system of road from that which so generally prevails, and in spite of the united influence of all interested in narrow gauge lines. The answer is, they have the confidence of the public, because they are better, safer and more economical.

Now this being so, it will require no particular effort on the part of our stockholders and managers to secure a conformity of gauge to the present one, and then, as Major Brown says, "the trade will almost of necessity go to the Erie Railroad."

But I cannot admit the contrary view of the case as stated by Major Brown, to wit: That if the gauges of these branch roads are narrow, the trade will go in an opposite direction; and yet if this is at all probable, the inducements to retain our wide gauge are increased, so far as it is an object to make sure to our own line, the trade in question; for if these branch lines, built on a narrow gauge, can take the trade of our district at all, they can, without regard to the gauge of our line. Making our line narrow, will take away none of their ability to compete with us. The branch roads can take freight from Corning, via Rochester to New York as cheap, if our road is narrow as they can if it is wide. The only change in favor of our route is the cost of transshipment; or say six cents per ton. The deduction then is obvious. If we retain our wide gauge, the branches will be wide, and the trade is ours "of necessity." But if we reduce our gauge, then the branches will conform to the rival lines, as well as ours, and may be made to take trade from us. In this view of the question, how important to our stockholders not only, but to the city of New York is our wide gauge! Major Brown admits that the rival lines are, in part at least, in the interest of Boston—that freight on these lines may all be destined to that market. But if from our wide gauge, we send off wide gauge branches to the districts from which Boston is taking so much of our trade, we "almost of necessity" control it. It goes to New York beyond doubt. There is no division of spoils. The Erie Railroad and its branches accomplish but one purpose, so far as New York is concerned. But if the main stem is a narrow gauge, the branches are narrow, and by Major Brown's testimony, they may out-do the rival lines at the South, and at least divide the trade with New York, all of which is lost to our stockholders.

(To be continued.)

Buffalo, New York and Erie Railroad.

The earnings of this road for the fiscal year ending September 30, 1859, were:

From passengers	\$148,353 46
" freight	372,653 87
" other sources	20,242 27

\$541,249 60

And the expenses were:

Repairs of road	\$90,943 75
" iron	5,845 67
" bridges	5,933 84
" buildings, etc. .	9,869 73
" engines	27,471 67
" cars	34,121 42
" tools, etc.	2,746 88
Fuel	30,154 38
Oil and waste	12,584 79
Loss and damage	9,495 71
Conducting transportation ..	103,123 31
General superstructure ...	8,674 64
Taxes	13,417 06
Office expenses, etc.	4,110 58
Contingencies	3,434 81

368,928 24

Leaving a net surplus of.....\$172,321 36

—applicable to the payment of interest on the debt of the company. In the meantime the actual value of the property of the company has been largely increased.

Having given a statement of the operations of the road the past year, the report goes on to say:

"The articles of association were filed, and the corporation organized under the General Railroad Laws of the State, in the month of October, 1857. The railroad of the company extends 142 miles, from Buffalo to Corning, at which last mentioned point it intersects the New York and Erie Railroad. That part of the line between Buffalo and Attica—31 miles—was formerly owned and operated by the Buffalo and New York City Railroad Company; the part between Batavia and Corning—100 miles—was constructed and operated by the Buffalo, Corning and New York Railroad Company. These companies became involved, and in consequence they were unable to complete and maintain their respective lines. The first mortgage on the Buffalo, Corning and New York Railroad, and the second mortgage on the Buffalo and New York City Railroad were foreclosed, the property and franchises sold, and conveyances taken from the purchasers thereof to the Buffalo, New York and Erie Railroad Company. By these proceedings, the present company became the owners of the line, subject only to a mortgage of \$500,000 on that part of the road between Buffalo and Attica, which, with arrears of interest, amounted to \$605,000. The remainder of the line from Attica to Batavia—11 miles—was constructed by this company in 1858, as hereinafter stated.

A new first mortgage was executed on the whole road for \$2,000,000, and a second mortgage for \$380,000, to secure the payment of bonds issued for the same amounts, and bearing even date therewith, making a total mortgage debt of \$2,380,000, being \$16,760 per mile of the entire road. Stock to the amount of \$680,000 was issued, making a total of debt and stock, \$3,060,000, or \$21,549 per mile on the entire line. Of the first mortgage bonds, \$605,000 were set apart to extinguish and retire the bonds for \$500,000 and interest on the Buffalo and Attica division before-mentioned; \$370,000 of this amount have already been exchanged for the bonds of this company. Agreements have been made for the exchange of \$20,000 of the remaining \$130,000, and it is expected that in the course of the ensuing year the whole, or nearly so, of the outstanding bonds of the old company will be extinguished. Another amount—\$150,000—of the first mortgage bonds were set apart to be used in paying the expenses of constructing the connecting link between Attica and Batavia, but were subsequently used for another and equally important purpose, as hereinafter

stated. The company still hold \$43,200 of their own first mortgage bonds. The residue of the first, and all of the second mortgage bonds and stock were used in the purchase of the road from the Trustees and grantees of the former companies, and the extinguishment of the various claims thereon. The amounts so paid are all represented in the item of "Cost of road and equipments," in the annexed statements.

Prior to the organization of the company, the Rochester and Genesee Valley Railroad Company had completed and opened their line from Rochester to Avon, a distance of 18 miles. This road was constructed on the same gauge as the Buffalo, Corning and New York, and New York and Erie Railroads, so that a continuous line, with a uniform gauge, was established from the city of Rochester to the city of New York, and also to Buffalo. It was a matter of great importance that this should be continued, as originally designed, as well for the benefits resulting to this line of road from the large local and through traffic to and from Rochester, as for the interests of the towns along and adjacent to the line, whose connections East and West would be injuriously affected by any change. It became known in the summer of 1858 that efforts were making to connect this road with the New York Central Railroad, by lease or otherwise, and by change of gauge, to divert its business entirely to the New York Central line. It was deemed of great importance to prevent this change being made; and to affect this object it became necessary to purchase a controlling interest in the Rochester and Genesee Valley road. This was done in July, 1858, and first mortgage bonds of the company, to the amount of \$150,000, were used for that purpose; and thus this company has secured the continuance of the Rochester connection on terms which are deemed equitable and entirely satisfactory to those interested in the respective roads.

The extension of the Genesee Valley Railroad from Avon to Mount Morris—16 miles—was completed in June of the present year. This division is now operated by this company, under a temporary lease, and proves a valuable tributary to the general business of the main line, and especially to the Rochester division. It opens the rich valley of the Genesee river, and the flourishing towns of Genesee and Mount Morris, to the Eastern and Western markets, and gives increased facilities to the local traffic with Rochester and other neighboring towns.

Immediately after the organization of the company, the construction of the road between Attica and Batavia was commenced, and although delayed by vexatious litigation, the work was completed and the road opened on the 21st day of June, 1858, at a cost of \$182,247, including land damages, engineering and other expenses. This amount is represented in the charge of "Cost of road and equipments," and forms a part of the floating debt stated in the balance sheet herewith published. An effort was first made to purchase the track owned by the New York Central Railroad Company, between those points, and an offer was made for it at a price exceeding its real value. That company, however, proffered to retain it, although it had but a circuitous connection with their own main line, and could hardly be a source of profit to them, even without competition. A new line was therefore necessary, and it was constructed by the side of the New York Central road.

The title to a part of the real estate needed for the business of the company in Buffalo, had not been perfected by the former company. It became necessary to complete the purchases so as to render available to the present company the valuable and convenient depot grounds on Exchange and Michigan streets, as well as the approaches to the warehouse and freight depot on Buffalo Creek and the Ohio Basin. This has been done at an expense of \$29,500, and the company now have title to and possession of ample depot grounds, with convenient approaches for the accommodation of their passenger and freight traffic.

Since the organization of the present company two locomotive engines have been purchased, and

64 freight cars purchased and constructed, at a total cost of \$41,351. New and permanent bridges, water tanks and station buildings have been erected, the machine shops enlarged, side tracks constructed and enlarged, cattle pens and platforms constructed, platform scales put in, and other permanent improvements made, at a cost of \$50,315, all of which are chargeable to "Cost of road and equipments." The total expenditures for these various purposes, since October 1, 1857, and which are entirely independent of the ordinary expenses of the company, added to the cost of the new road from Attica to Batavia, amount to about the sum of \$253,000, and will sufficiently account for the existence of the floating debt exhibited in the balance sheet.

The construction account of the company is closed, and all expenditures made hereafter, under whatever emergency, must be met as ordinary expenditures, growing out of its current business. It is hoped, and appearances justify the belief, that the business of the company will be sufficient to extinguish the floating debt within a reasonable period, and at the same time enable them to improve the condition of the road, equipments and machinery.

During the last year the business of the company with Philadelphia, Baltimore, and other points south of Elmira, has materially increased, especially the traffic with the coal and iron regions of Pennsylvania. The extent of this southern business will render it advisable, as soon as the circumstances of the company will permit, or independent aid can be obtained, to extend the road of the company from Corning to Elmira, a distance of 18 miles. A direct connection will thus be effected with the lines of road south to Baltimore, and south-easterly to Philadelphia, and with the intersecting net work of roads traversing the interior country between those points. These roads traverse the whole coal and iron district of Pennsylvania East of the Alleghany Mountains. Our line affords the only direct railroad connection between Buffalo and Western Canada and this extensive mineral region; and although the traffic is already large—amounting the last year to 9,100 tons of coal and 11,900 tons of iron—the business is still in its infancy. By this route over 200 miles are saved between Baltimore, and 100 miles between Philadelphia and Buffalo. The business naturally seeking such a line can never be performed or managed satisfactorily, either as regards expense or time required, without a direct connection. It is not unreasonable, therefore, to assume, that the proposed extension to Elmira would greatly facilitate the existing and add largely to the future business of the road. Among other considerations in favor of the project, is the certainty that it would give this company the transportation of the great Southern mails, destined to Western New York, Canada West, Detroit, and the entire Upper Lake region north of Chicago, as being by far the most speedy and safe line for its transit. The additional revenue from this extra postal service would of itself be nearly equal to an interest of 7 per cent. per annum on the cost of the extension, leaving out of view what would be equally sure to follow, a largely increased passenger and freight business.

Statements from the Assistant Superintendent, Master Machinist, and Superintendent of Car Repairs, show that with an increased business the condition of the road and its equipments has been essentially improved during the year. The Buffalo division of the road had, for the greater part, been in use fifteen years; from Batavia to Corning over six years, so that while the corporation was but recently formed, its road was old, and needed at once large outlays for extraordinary repairs. With the improvements recommended by the Superintendent during the ensuing year, the current expenses of maintaining and operating the road will thereafter be sensibly diminished. The cost of the improvements recommended will be about \$17,000.

The rolling stock of the company has been largely improved during the year, and is in good condition for effective service. It consists of 28 loco-

motive engines, 26 passenger cars, 6 second class passenger cars, 9 baggage cars, and 377 freight cars.

The value of its rolling stock cannot be estimated at less than \$500,000, and all, or nearly all, in good working condition. The real estate of the company in the city of Buffalo has been acquired at an original cost of about half a million of dollars.

The total number of miles run by all trains was	505,581
Cost of repairs to engines and tenders, per mile run	\$5.43
Do. passenger and baggage cars, pr. mile run ..	5.67
Do. freight cars ..	7.92
Do. fuel used ..	7.15
Do. oil and waste ..	2.55
Do. maintaining road ..	24.21
Do. operating ..	35.75
Do. rep's of machin'y, eng's and cars ..	12.23

GENERAL STATEMENT.		CR.
Capital stock	\$680,000	00
Funded debt, as follows:		
1st mortgage bonds ..	\$2,000,000	00
2d ..	380,000	00
Real estate	30,721	59
	2,410,721	59
1st mortgage, B. & N. Y. C. R. R. (between Buffalo and Attica)	181,500	00
Earnings of transportation	541,249	60
Floating debt:		
Bills payable	\$66,274	98
Pay rolls	67,949	53
Individ'ls (run'g acc'ts) ..	117,917	50
	252,142	01
Balance of transportation account for the 11 months ending Sept. 30, 1858	141,096	77

	\$4,206,709	97
	Dr.	
Cost of road and equipment	\$3,150,762	14
1st mortgage bonds on hand	228,800	00
Rochester and Genesee Valley Railroad stock	150,000	00
Buffalo and New York City Railroad bonds	6,115	72
Quincy and Toledo R. R. bonds	8,084	99
Coupon account, 1857	12,215	00
Interest paid during the year	150,224	02
Fuel and supplies on hand at this date	75,715	11
Expenses of transportation	368,928	24
Cash and cash items	55,864	75
	\$4,206,709	97

The officers of the company, for the current year, are:

A. D. PATCHIN, *President*.

ISAAC C. COLTON, *Assistant President*.

GILBERT CAMERON, *Treasurer*.

New Orleans, Opelousas and Great Western Railroad.

The President and Directors of this company now give public notice that, desirous of contracting for the extension of the road from Berwick's Bay to Opelousas, they offer for negotiation the bonds of the company for \$2,000,000, dated 1st April, 1859, and payable in thirty years, bearing interest at the rate of eight per cent. per annum, payable semi-annually in April and October.

These bonds are secured by a first mortgage on the First Grand Division of the road between Algiers and Brashear—80 miles—including the franchises, rolling stock, and all the depots, wharves, &c., appertaining to the same.

This division is, for all business purposes, a complete *separate* road in itself, now in full operation, terminating at Berwick's Bay, and there connected with Texas by a tri-weekly line of steamships.

Punctual payment of the interest is provided for by contract with the Louisiana State Bank, for special monthly deposits, which cannot be withdrawn for any purpose whatever, payment being

made by the bank only on presentation of the coupons.

For the gradual redemption of the bonds, a contract has been made with Edmund J. Forstall, Esq., in behalf of and for the benefit of any and all bondholders, and with the Louisiana State Bank, establishing a Sinking Fund, by deposits commencing in 1866, in the months of January, February and March, and also in July, August and September, (and in the following years until final payment,) to pay off, semi-annually, \$42,000 of the bonds, or \$84,000 annually, sufficient to extinguish the whole amount at maturity.

The funds thus deposited cannot be used for any other purpose whatever, or be withdrawn from the bank, but are to be paid only on presentation of bonds offered semi-annually, after public notice, and accepted from the lowest bidders.

It is calculated that the proceeds of these bonds and other means of the company, will be sufficient to construct and equip the whole road from Berwick's Bay to Opelousas, and to pay off our whole floating debt—opening up a country of great fertility and agricultural resources, and increasing very materially the revenues of the road.

It is with this object, and with these views, that these bonds, so perfectly well secured, are now offered on favorable terms.

Copies of acts of mortgage, contracts for payment of interest, and also for establishing a Sinking Fund; maps showing the route of the road, and its important connection with Texas, can be examined on application at the office of the company.

WILLIAM G. HEWES, *Pres't*.

NEW ORLEANS, Nov. 1, 1859.

The Stanstead, Shefford and Chambly Railroad of Canada.

This road was originally designed by its charter to commence at the easterly end of the Victoria Bridge, opposite Montreal, and to extend through Chambly and Shefford and Stanstead Counties, to the province line, near the southerly end of Lake Memphremagog; there to connect with the Passumpsic River road, leading toward Boston. The route for the first 30 to 40 miles passes through the French *Seignories*; and for the remainder of the distance, through that portion of Lower Canada usually known as the *Eastern Townships*. The whole distance from the St. Lawrence river to the boundary line of Vermont, is 95 miles. The principal means relied upon for its construction were stock subscriptions by the municipalities along or in the neighborhood of the route, which, by an act of Parliament called the Municipal Loan Fund Act, were permitted to subscribe to the stock of the road to the extent of 20 per cent. on the amount of their assessment rolls, payable in the bonds of the respective municipalities. These bonds by a subsequent act were guaranteed by the Provincial Government, and are now known as *Municipal Loan Fund Debentures*. They are of course, a permanent and standard security, readily commanding from 95 cents to par. The French municipalities did not avail themselves of the advantages of this act, and the private subscriptions on this portion of the line being very limited, the burden of building the road was thrown upon the more enterprising "Eastern Townships."

In 1855, the company procured an amendment to their charter authorizing the construction of a branch to St. John. This was obtained with the view of giving the Eastern Townships a road to Montreal, by diverging from their main line at Granby, a point 45 miles from Montreal, and connecting with the Champlain and St. Lawrence Railway at St. John, 20 miles from Montreal, leaving the main line from Granby to Montreal

untouched, until the municipalities through which it would pass should be ready to bear their share of the burthen.

The act chartering this branch created a distinct and separate class of stock and securities for its construction, and it was in all respects a distinct and separate road, except that it was under the control and direction of the Directors of the Stanstead, Shefford and Chambly Company.

In 1858, an amendment to the charter was procured, amalgamating the branch and main line and it is upon this route that the road is now being constructed. By starting from St. John, therefore, instead of the St. Lawrence river opposite Montreal, the company have been enabled to apply their means to the extension of the road, 15 miles further than would otherwise have been the case. In fact they have been enabled to do more than this; for the first 20 miles of the main line from the St. Lawrence, involved heavy expenditures for wharves, land damage and bridges, wholly avoided by starting from St. John.

The road is now in operation to Granby, a distance of 30 miles from St. John, and the work is in such an advanced state from this point to Waterloo and Frost village, 15 miles further, as to insure its completion to these places in all next summer.

The only possible objections which can be urged to the present route via St. John, in comparison with the original route direct to the St. Lawrence, are the slightly increased distance to Montreal, and the dependence upon another road to this city which is a necessity of this arrangement.

Although these may have force when the line reaches the boundary of Vermont the present aim of the townships which furnish the means for the road is to obtain an outlet to Montreal, and their true policy is to get as far as possible into the townships with their means. They still retain the charter for the direct line, and should it be deemed expedient eventually to construct it, the branch to St. John will always be a valuable connection. From Frost village an extension of 15 miles connects the road with the navigation of Lake Memphremagog at its northerly end. To quote from the last report of the company—"Without further extension an important increase of traffic from Stanstead and the United States at the head of this Lake will at once be secured. The Passumpsic Railway is now in operation to within 15 miles of the southerly end of this lake to which it will shortly be completed. During the season of navigation this beautiful lake will form an efficient connection between the two roads, as soon as its extremities are reached by each; and it cannot be doubted that when the unrivalled scenery of this celebrated lake is made accessible, it will become a greater point of attraction during the summer months than any other in the North. For freight traffic the cheapness of slack water navigation will compensate for the expense of trans-shipment; and during the most important season of the year, the Canadian and American lines will be working in connection, both for freight and passengers, until the completion of the connecting link between the two ends of the Lake maintains an uninterrupted communication between Montreal and Boston via the Connecticut Valley at all seasons of the year. When this line is completed, the distance from Montreal to Boston

as compared with other lines will be as follows:—

	Via S. S. & C. R. R. Miles.	Via Rouses Point. Miles.
Montreal to Boundary line	95	44
Boundary to Boston	200	260
Total	295	304

Via Grand Trunk Railroad.

Montreal to Boundary line	128 miles.
Boundary to Portland	165 "
Portland to Boston	106 "

Total.....399 "

This route will, therefore, be the shortest line from Montreal to Boston, having 9 miles the advantage of the Rouses Point line, and 104 miles the advantage of the Grand Trunk. From the Boundary line at Stanstead, a line 21 miles in length would make a connection with the Grand Trunk Railway at Island Pond. The distance to Portland by the two lines would then compare as follows:—

	Via S. S. & C. R. R. Miles.	Via Grand Trunk R.R. Miles.
Montreal to Island Pond	116	144
Island Pond to Portland	149	149
Total	265	293

The distance from Montreal to Portland by this route would, therefore, be 28 miles less than by the Grand Trunk.

The whole line of the S. S. & C. Road abounds in valuable timber, and minerals of various kinds, among which are the following:—Magnetic and specular oxides of iron—Chromic iron—Granite and other stone suitable for building and mill stones—Flag stone—Serpentine—Soap Stone—Roofing slate—Jasper—Magnesite—Whetstones—Stone paints, etc., etc. The water power is inexhaustible that at the outlet of Lake Memphremagog far surpassing that of Lowell. As an agricultural district the county of Stantead is unsurpassed. The whole country is rich in resources only needing this road for their development. Its ultimate completion is now placed beyond a doubt. The means are on hand and the iron provided for the completion of the road to Frost village during next summer. That all this has been accomplished within two years and during two years of almost unparalleled discouragements to all railroad enterprises is due almost solely to the indomitable energy and perseverance of the Managing Director A. B. Foster Esq., M. P. P., who has devoted almost his whole time to the accomplishment of the undertaking.

This statement, however, in no ways detracts from the credit due to the President of the Company, the Hon. Louis T. Drummond, late Attorney General of Canada East, who has also from its inception, given his strong aid to the work, but it is well known that the active duties of management in Canadian Railways, are generally devolved upon a "Managing Director." As such since the work commenced, Mr. Foster has had the entire charge. It is to his careful and economical management as well as to his well known skill and experience as a railroad man, that the eastern townships of Canada may consider themselves indebted for the almost certain prospect that now dawns upon them for an outlet for their products and an inlet for their supplies in all directions, North and South, East and West.

The officers of the Company are:—
Hon. LOUIS T. DRUMMOND, M. P. P., *President*.
A. B. FOSTER, Esq., M. P. P., *Manag'g Director*.
L. S. HUNTINGTON, Esq., *Secretary*.
FRANCIS PRUTYN, Esq., *Engineer*.

The Bush and Lobdell Wheel.

The following statement in respect to the endurance of a pair of car wheels made by BUSH & LOBDELL, of Wilmington, Delaware, is made by a master mechanic of an eastern railroad. The wheels in question were put on a box car, with the journal of 2½ inches, 3¼ inch shoulder, and ran without cessation, the ordinary service of the road for 14 years.—The car was then condemned, but the wheels were still found to be good, and they were taken off, bored out and fitted to a 3 inch journal, and put under a heavier freight car, where they have run for over two years, and are still to all appearance, good and strong.—He states that quite a number of the same lot of wheels have run for 16 years, and still continue to be in use.

Journal of Railroad Law.

DAMAGES—NEGLIGENCE OF COMPANY'S SERVANTS CANNOT BE IMPUTED TO A PASSENGER.

The case of Chapman vs. The New York and New Haven Railroad Company, lately decided in the New York Court of Appeals, involved the question whether where there is a collision of trains owned by separate companies, which collision is the result of negligence on the part of both trains, a passenger in one train can maintain an action against the company owning the other.

The general rule of law is that where an accident occurs through any negligence of the party suing, which directly contributed to the injury complained of, no action can be maintained, although the defendant was also guilty of negligence, even to a greater extent than the plaintiff. To maintain an action, the party suing must be able to show that the defendant was guilty of negligence, and that himself was innocent of it.

In the case of which we now speak, the counsel for the company sued, contended that this rule was applicable. It was urged that the persons in charge of the train in which plaintiff was riding were guilty of negligence, and that the plaintiff must be considered as responsible for that negligence.

The facts of the case were as follows. The plaintiff was a passenger on the New York and Harlem Railroad. The tracks of the Harlem and New Haven Railroad Companies are, as is well known, coincident for a few miles from the starting point of those roads in the city of New York. While the plaintiff was traveling on the Harlem road, a collision occurred between the train in which he was, and a freight train of the New Haven Company. The cause of the collision, as shown on the trial, was, that the defendant's train was standing upon the track, used by both companies, in a dark, foggy morning, at a time when such train was bound by the regulations of the road to leave the track clear for the passenger train then expected. There was evidence tending to show negligence in not taking suitable precaution to warn the passenger train of the incumbrance on the road. There was also evidence tending to excuse the managers of the passenger train in running at speed under the circumstances, and in not observing a signal made from the freight train just before the collision. The plaintiff had a verdict

and judgment, which, having been affirmed by the General Term of the Superior Court, the defendant appealed to the Court of Appeals.

After argument, the opinion of that Court was as follows:

JOHNSON, CH. J.—The collision from which the plaintiff's injury resulted, occurred on the track of the New York and Harlem Railroad Company, between a train of that company and a train of the defendants. The plaintiff was a passenger in the Harlem train, which ran into the defendants train, both being in motion towards New York. There was evidence of negligence in the management of each train, and the position on which the defendants rely is, that such negligence on the part of the Harlem train as would preclude that company from an action against the defendants, will also preclude the plaintiff from sustaining his action. The general rule is, that one who receives an injury from the negligence of another may maintain an action for his damages. Upon this rule a natural and reasonable exception has been engrafted, that if the injured party, by his own negligence, has contributed to the injury, he cannot maintain an action, unless the negligence of the other party has been so gross in its character as to be equivalent in law to a wilful injuring. I do not think this exception, or any reasonable extension of it, can be applicable to the plaintiff. He was a passenger on the Harlem cars, conducting himself as he lawfully ought, having no control over the train or its management; on the contrary, bound to submit to the regulations of the company and the directions of their officers. To say that he is chargeable with negligence because they have been guilty, is plainly not founded on any fact of conduct on his part, but is mere fiction. The doctrine contended for is stated, and in a measure sustained by the decision in Thorogood vs. Bryan. That was an action by a passenger, in an omnibus, against the proprietors of another omnibus, by which the plaintiff was injured. Wishing to alight, he did not wait for the omnibus to draw up to the side of the street, but got out while it was in motion, and far enough from the foot-path to allow another carriage to pass between it and the path. The other omnibus coming up, ran over him. The jury were told that if they thought want of care on the plaintiff's part, or on the part of the driver, in not drawing up to the side of the street to put the plaintiff down, had been conducive to the injury, no recovery could be had. Before the decision of this case, the case of Catlin vs. Hills was argued, which was an action by a passenger, on a steamboat, against the proprietors of another steamboat, between which a negligent collision took place, whereby the passenger was injured. In the course of these discussions, Bridge vs. Grand Junction Railway Company was also considered, in which the doctrine in question seems to have originated. Judgment was not given in Catlin vs. Hills, an arrangement between the parties having taken place, but in the first case mentioned, the ruling at the trial was maintained. It seems to have been put on the ground that the plaintiff having voluntarily trusted himself on the omnibus had so identified himself with its management that the driver's negligence would deprive him of any right to an action against the owners of the other vehicle. Upon the facts of that case, where the driver's negligence consisted only in his not preventing the

plaintiff from getting out until he had drawn up to the foot-path, there was great room to say that it was as much attributable to the plaintiff as to the driver. But I do not see the justice of the doctrine in connection with the case before us. It is entirely plain that the plaintiff had no control, no management, even no advisory power, over the train on which he was riding. Even as to selection, he had only the choice of going by that railroad, or by none. To attribute to him, therefore, the negligence of the agents of the company, and thus bar him of a right of recovery, is not applying any existing exception to the general rule of law, but is framing a new exception, which does not in fact rest upon the reason of the original exception, and is based on fiction, and inconsistent with justice.

The judgment should be affirmed.

Dubuque and Pacific Railroad.

This road is complete and open to Masonville, 57 miles west of Dubuque. The road is wholly graded to Independence. The road, it is said, will be open to Cedar Falls, 100 miles from Dubuque, by next July.

Details of the Steamer Great Eastern.

Collected and estimated by CHAS. H. HASWELL, New York.

Hull built by John Scott Russell & Co. Pad-wheel designed by John Scott Russell, and built at Millwall Works. Propeller engines built by James Watt & Co., Soho Works.

HULL.

Length on deck over all.....	692 ft.
Length on deck from fore-part of stem to after-part of stern post, above the spar deck.....	680 "
Breadth of beam at midship section..	83 "
" " over 'p'dle wh'l guards.....	120 "
Depth of hold to spar-deck.....	56 " 3 in.
" " main deck.....	48 " 3 "
" " lower ".....	41 " 3 "
" " berth ".....	34 " 3 "
Height from rail to under-side of bottom.....	62 " 4 "
Length of engine and boiler space, under lower deck.....	350 "
Tonnage.....	22,500 tons.

*WATER-WHEEL ENGINES.

Description—Oscillating.	
" of boilers—horizontal tubular—furnaces at each end—one smoke-pipe in common for each set of two.	
Diameter of cylinders, four of.....	74 in.
Length of stroke.....	14 ft.
Diameter of water-wheel.....	56 "
Length of blades.....	13 "
Depth.....	3 "
Number ".....	thirty.
" of boilers.....	four.
Length.....	17 " 6 "
Breadth.....	17 " 9 "
Height.....	13 " 6 "
No. of furnaces (five at each end).....	ten.
Width.....	2 " 11 "
Length of grate bars.....	7 "
Number of tubes.....	3,200
Diameter " external.....	3 "
Thickness ".....	No. 12 wire gauge.
Length.....	5 " 4 "
Diameter of smoke-pipe.....	5 " 10 "
Height.....	86 "
Area of grate surface.....	370 "
Heating surface, tubes alone.....	17,600 "
Thickness of plates, sides.....	3/8" bottom 7-16 in.
front tub. 1/2" back tub. 9-16 "	
Maximum pressure of steam in pounds.....	25.
" revolutions per minute.....	55.
Point of cutting off.....	one-fourth.
Weight of boilers, without water, each.....	51 tons.
" water.....	39 "

* The term "water-wheel" is according to the author's copy.

PROPELLER ENGINES.

Description—Horizontal direct-acting.	
" of boilers—same design as those for the water-wheel engines.	
Diameter of cylinder.....	84 in.
Length of stroke.....	4 ft.
Diameter of propeller.....	24 "
Pitch.....	41 "
Number of blades.....	ten.
" boilers.....	six.
Length.....	17 " 6 "
Breadth.....	18 " 4 "
Height.....	13 " 10 "
No. of furnaces (six at each end).....	12
Width.....	2 " 5 "
Length of grate bars.....	7 " 6 "
Number of tubes.....	4,920
Diameter " external.....	3 "
Thickness ".....	No. 10 wire gauge.
Length.....	5 " 6 "
Diameter of smoke-pipes (three).....	6 "
Height.....	86 "
Area of grate surface.....	406 "
Heating surface, tubes alone.....	27,300 "
Thickness of plates, sides.....	7-16" bottom 1/2" in.
front tub. 1/2" back tub. 3/8" "	
Maximum pressure of steam in pounds.....	25.
" revolutions per minute.....	55.
Point of cutting off.....	one-fourth.
Weight of engines and boilers.....	1,500 tons.
" boilers, without water, each.....	55 "
" water, each.....	45 "
Capacity of coal bunkers, in tons of coal.....	12,000 "
Consumption of coal per hour, estimated.....	10 "
Draft of water at load line.....	30 feet.
" " light.....	20 "
Area of immersed midship section at light draft of 20 feet.....	1,360 sq. ft.
Area of immersed midship section at load draft of 30 feet.....	2,180 "

HULL.—Frame of wrought iron plates. Bottom doubled at an interval of 2 feet 10 inches, in a height of 39 feet from underside. Outer and inner plates, 3/4 of an inch thick—connected, fore and aft, by 36 fore and aft webs, 1/2 an inch thick—2 1/2 feet apart at side of keel, and running to 4 1/2 feet at top of sides, crosswise by webs every 10 feet. These webs are secured to the outer and inner plates by angle iron.

Description of coal—Bituminous and Anthracite.

Details and Remarks.—Four decks. Spar deck, 2 ft. 5 ins. deep. Ten water-tight athwartship bulkheads. Two traverse bulkheads for 350 feet. Launching draft, 14 ft. 6 ins.; displacement equal to 10,500 tons.

Each pair of cylinders of water-wheel engines is arranged to be detached from the other by a friction clutch, and each cylinder can be detached from connexion with the other.

All surfaces of cylinders, steam-chests, and steam-pipes are jacketed and heated by steam from an auxiliary boiler.

Estimated power, water-wheel engines at 11 revolutions per minute and 15 lbs. pressure. Cut-off at 1/4. 3,000 horses; at 16 revolutions and 25 lbs. Cut-off at 1/4. 5,000 horses. Propeller engines at 42 revolutions and 16 lbs. pressure. Cut-off at 3/4. 5,000 horses.

Boilers proved with a cold pressure of 50 lbs. Each set of boilers has an independent steam engine (donkey). There are two auxiliary engines for hoisting, pumping, &c. Area of canvass, 6,500 square yards. Chains, cables, 2 1/2 inches diameter. Anchors, chains and capstans, 250 tons.

Weight of propeller..... 36 tons.

" shaft..... 60 "

" rudder stock (18 ins. diameter)..... 22 "

Two propeller steamers swung at sides, abaft of wheel-house, of 120 tons burthen each.

Accommodation.—1st class passengers, 800. 2d class passengers, 2,000. 3d class passengers, 1,200.

Result of Trial Trip.—Draft of water, forward, 22 ft. 2 ins.; aft, 25 feet—mean, 23 feet 7 inches.

Water-wheel engines: pressure of steam, 15.5 lbs. Cut-off at 4-14 lbs. of stroke. 11 to 11.5 revolutions. Indicated power, 3,330 horses.

Propeller engines: pressure of steam 16 lbs. Cut-off at 3/4 of stroke. 41 revolutions. Indicated power, 4,800 horses.

Speed: with jib and fore spankers set, having an area of canvass of 2,500 yards, 14.5 knots.

Consumption of fuel: 3.5 lbs. per horse power per hour.—*Journal Franklin Institute.*

Steam Engineering in 1859.

Introductory.—No apology is required for calling attention to the present state of steam engineering, especially when it is a well known fact that, at no previous period has there been a greater spirit of inquiry respecting the duty that should be realized from the steam engine than at the present time; indeed, it may be said, that among engineers themselves, there is a decided dissatisfaction on this point.

The following observations are entirely of a general character, preparatory to a consideration of details, and they are intended to refer to what *has been* done, what *is being* done, and what *can be* done; also how far the present state of steam engineering will compare with the days and deeds of Watt after crediting him with the mechanical improvements of nearly a century.

In 1769, James Watt specified his three great inventions—separate condenser; encasing the working cylinder with steam or other source of heat, to prevent premature condensation; and employing the expansive action of steam.

The title of this specification was, "A Method for Lessening the Consumption of Fuel in Fire-Engines." The inventions were not merely mechanical improvements, but they were the development of the principle on which Watt based all his hopes of economy—namely, that *heat is the source of all power in steam*; and his aim was to prevent all needless and premature condensation and consequent loss of power.

His correspondence also, and the nature of the inventions referred to, prove his belief that heat is the mainspring of the steam engine. The truth and correctness of that belief have been fully manifested in the experience of the period that has elapsed since 1769.

Previous to Watt's inventions, when, in Newcomen's engines, the condenser was the working cylinder itself, the waste heat in this defective system amounted to more than three-fourths of the total steam generated; and when to that waste were added losses incidental to the generation and working of the steam in a defective machine, the result realized was a mere fraction of the power represented in the combustion of the fuel.

Watt's first invention of the separate condenser lessened the waste condensation to a great extent; his second invention of encasing the working cylinder with steam, &c., was only an extended application of the principle of the first; and his third invention of using the expansive action of steam, could only be applied with success in combination with the other two: indeed, they are such a united trio that, in condensing engines, neither can be dispensed with without involving a considerable loss of effect, even when working with steam of only atmospheric pressure.

It is not a doubtful but a well proved fact, that steam cannot be deprived of its temperature, without a proportionate loss of its pressure; it is also a well known fact, when steam of a certain temperature, say 250°, is brought into contact with iron, wood, or air, having a temperature of say 80° only, there is a constant action going on proportionate to the conducting powers of the low temperature material, by which the steam is deprived of a portion of its heat and pressure, and the loss thereby increases rapidly with the difference between the two temperatures.

As a homely illustration on this point, we may refer to the effect of different temperatures in the case of the human body and the atmosphere in which it may exist. In the human body, the average temperature is 90°, and we find that we cannot remain in a surrounding temperature of 32° without losing a considerable portion of our sensible heat.

The amount of the loss, by conduction and radiation, in the steam engine, is dependent on many circumstances. It is enough at present to draw attention to the fact that there is a loss, and that a considerable one.

To the appreciation of the importance of preserving the heat in steam intact, was due, to a great extent, Watt's success as an improver of the steam engine, and, whenever such preservation is neglected, loss and partial failure are inevitable.

It is not assumed that any new ideas or facts are developed in the preceding remarks; they are only intended to direct attention to those true principles of economy in the development of steam power, without which that economy is impossible, and one reason for referring to what may be termed first principles is, that we may have to trace present defects to their neglect.

There must, of necessity, be a difference between the results of theoretical calculation and those of practical experiment, but it is not a necessity that the amount of that difference should average more in 1859 than in the days of Watt, after crediting him with the advantages of mechanical construction we now possess.

It is to be feared that these mechanical advantages are more than counterbalanced by neglect of the true principles of economy in the use of steam, and that we are utilizing a small percentage of the total power of steam than Watt himself.

In these introductory remarks we shall not refer to certain sources of loss in the generation of steam, or to those arising from the difficulty of utilizing the heat in the condensed or exhausted steam; these will be referred to on a subsequent occasion.

We may fairly compare the duty of the steam engine, as improved by Watt in 1769, with the average duty realized by steam engines now in general use; and we will only notice *exceptional* cases when they prove that an increased duty is both possible and practicable.

There are three separate classes—the professional, manufacturing, and the purchasing—immediately interested in the construction of a steam engine, each of which has its own particular influence.

The professional engineer is comparatively of a late creation, and his influence is quite subservient to that of the manufacturer or the purchaser; his position and success in life are, to a great extent, dependent upon his opinions being somewhat in advance of the age, and if he unites a fair amount of scientific knowledge with sound practical experience, he will not encourage the perpetuation of unsound and defective engineering; his responsibility and power are at present very limited, and it would be unjust to blame him for departures from true principles, when such have been the result of circumstances over which he had no control.

The manufacturing engineer has to satisfy the claims of what are too often opposite and conflicting interests. On the one hand he is supposed to supply the market with the best description of steam engines, and on the other he has to make money, and avoid what may be called needless expenditure in producing his goods; he is also influenced by the opinions and requirements of his customers.

Now it does not follow that in manufacture the *cheapest* is the *best*; on the contrary, it is too often the other way, for it is well known, to produce an article at a cheap rate, and make the sale of it profitable, repetition must be encouraged, and alteration avoided.

To take an instance: in manufacturing a steam engine a certain outlay is required for patterns, and when it is purchased at the market price for engines of a certain class and size, in a general way, that price is not affected by the cost of the patterns; but it is of every consequence to the manufacturer, as a matter of profit and loss, whether that cost is debited to one engine or to twenty; it follows, therefore, that, in this instance, there is in the process of manufacturing steam engines a great inducement to repetition, in opposition to the

more important demand for improvements tending to economy and general efficiency. And we may add, there is little hope of an immediate change in a system that, unfortunately, opposes such a strong barrier to real improvements, for the reason that a manufacturer will not ruin himself to benefit his customer.

We must look to the increasing intelligence among the purchasers and users of steam power for the change required, the influence exercised in the production and quality of steam power by the third or purchasing class being greater than is generally supposed. The man who holds the purse-strings is the man of influence, and the engineering character of the manufacturer has been, and always will be, greatly changed and modified by that of the purchaser.

Such a state of depressed improvement is not to be submitted to without a murmur, nor is it at all evident that great changes for the better could not be made if the manufacturing engineer was more constantly and pointedly to enlighten the dark understanding of his customers.

The best interests of the employer of steam power, are, in truth, identical with the purchase and use of the best and most economical machinery; and we believe the manufacturing engineer will ever prefer to lead the van in efficiency and economy, if he is allowed a fair profit on his manufactures.

And now, having stated some of the drawbacks to extensive improvements in the production and use of steam power, we wish to call attention to the actual efficiency of the steam engine of 1859.

We have previously referred to the three inventions specified by Watt in 1769, and we propose to inquire what actual duty has been realized in engines, constructed in accordance with the principles of that specification.

The first practical application of steam power was for the purpose of pumping, and in no class of engines have economical principles of construction received such attention as in that used for removing water from deep mines; and it may be observed incidentally, with reference to the expansive action of steam, it was peculiarly adapted to the conditions of pumping, where great variation of power was requisite.

(To be continued.)

Buffalo Grain Trade.

Lake navigation is now at a close, or nearly so and we accordingly present our readers the following statement showing the total receipts of the different kinds of grain this year and last, as well as the totals for a series of years:

	1859.	1858.
Wheat in flour, bu.	7,094,330	8,072,600
Wheat, bu.	9,833,602	10,735,909
Corn, bu.	3,102,605	6,621,668
Oats, bu.	1,287,276	2,275,241
Barley, bu.	360,145	389,223
Rye, bu.	124,314	125,214

Total 21,802,272 28,219,855

The increase in the above is as follows: In the first item, decrease, 978,270 bu., decrease in wheat, 902,307 bu.; decrease in corn, 3,519,063 bu.; decrease in oats, 987,965 bu.; decrease in barley 29,078 bu.; decrease in rye, 900 bu. Total falling off, 6,417,583 bu.

The annexed table shows the total receipts of grain by lake each year for the past nine years:

Year.	Grain alone. Bushels.	Grain includ'g Flour, Bus.
1850.....	6,618,004	12,059,559
1851.....	11,449,661	17,740,781
1852.....	13,892,937	20,390,504
1853.....	11,078,741	15,956,526
1854.....	18,553,455	22,252,235
1855.....	19,788,473	24,472,278
1856.....	20,123,667	25,763,907
1857.....	16,348,930	19,578,695
1858.....	20,147,255	28,210,855
1859.....	14,707,942	21,802,272

Bonds Issued by Cincinnati to Various Railroad Companies.

Below we give a list of the amount of bonds issued by the City of Cincinnati to various railroad companies, and the date of which they are redeemable. All of these bonds bear interest at the rate of six per cent. per annum. The amount issued to the Covington and Lexington Railroad, \$100,000, may be regarded as lost by the recent sale of the road, the city holding only a stock security, which is cut off by the transfer:

Companies.	Amount.	When due.
Little Miami	\$60,000	1860
"	20,000	1865
"	100,000	1880
Hillsboro' and Cincinnati	100,000	1880
Eaton and Hamilton	150,000	1881
Covington and Lexington	100,000	1881
Ohio and Mississippi	600,000	1882
Cincinnati and Marietta	150,000	1884
Ohio and Mississippi (in payment of wharf property)	234,000	1885
Same company, for same purpose.	250,000	1890
Total	\$1,754,000	

—Cincinnati Enquirer.

Pittsburg, Fort Wayne and Chicago R. R.

We give the following letter from Mr. Cass, the President of this Company:

OF. OF PITTS'G., FT. WAYNE & CHI. R.R. Co. }
Chicago, Dec. 16, 1859. }

EDITORS *Times-Gentlemen*:—Through your columns I desire to assure the shareholders of the Pittsburg, Fort Wayne and Chicago Railroad Company, that the Board of Directors still retain possession of the road and property in the States of Illinois and Indiana; and indeed the Superior Court in this city to-day granted an injunction restraining J. K. Edgerton, Esq., the Receiver appointed by the Federal Court in Ohio, from interfering with the company, its agents, or property in this State. The Board of Directors are informed by the most eminent counsel in Ohio, that the appointment of Receiver as to the property in that State is void. The Board is also assured that the order of the District Court at Pittsburg, appointing a Sequestrator, can be set aside.

I would also assure the friends of the company, and the patrons of the road, that every effort will be made, and I doubt not with entire success, to so conduct the business of the road as to merit, and secure the large traffic that such an important and advantageously located road ought to command; and which will result in ample revenues to enable the company, in good times, to discharge all the liabilities.

C. W. CASS, *President pro tem.*

The Victoria Bridge.

Last night a freight train crossed the Victoria Bridge for the first time; and on Monday the 19th inst., the passenger traffic will regularly pass over. We are sure that all parties will hail with unfeigned satisfaction the announcement that at last the gap which has so long necessarily existed between the seaboard and our Canadian neighbors, and the great West, is now bridged, and that all impediment to the full and free intercommunication between the United States and the Canadas is removed. We shall look for the fruits of this great enterprise in the increased traffic between our city and the North and West.—Portland Advertiser, Dec. 13.

Valuation of Memphis.

The value of real estate and improvements thereon, within the city limits, amounts to \$15,565,725; slaves, to the number of 1382, \$1,207,950; and other taxable property, including jewelry, carriages, musical instruments, etc., \$118,140; making a total of \$16,987,815. The assessed value of Memphis property at this date last year was \$15,464,815—showing the gratifying increase of \$1,523,570 in the taxable wealth of the city within one year.—Memphis Bulletin.

Cincinnati Stock Sales.
By KIRK & CHEEVER.

For the week ending December 20, 1859.
BONDS. Per cent.

Little Miami, 1st Mort.	6s	85	and int.
Covington and Lexington, 2d Mortgage	7s	65	
Ohio & Miss., E. D., Construction	7s	25	set.
Cinc., Ham. and Dayton, 2d Mortgage	7s	85	
Indianap. & Cincinnati, do.	7s	75	

STOCKS.

Cincinnati, Hamilton & Dayton	Ex Div.	62
Columbus and Xenia		80
Indianapolis & Cincinnati		49
Little Miami		82

Railroad Earnings.

The earnings of the Pacific Railroad for November, 1858 and 1859, were:

	1858.	1859.
Passengers	\$28,021 83	\$24,228 51
Freight	25,093 51	32,663 69
Mails	2,037 50	2,100 00

.....\$55,152 84 \$58,992 20
 Increase in 1859.....\$3,839 36

Southwest Branch.

Passengers	\$585 62
Freight	851 25

\$1,436 87

The receipts of the Grand Trunk Railway of Canada for the week ending Dec. 3, were.....\$68,483 21
 Week ending Dec. 4, 1858.....51,979 13

Increase.....\$16,504 08
 Total traffic from July 1st.....\$1,152,943 40
 Same period last year.....1,014,950 80

Increase.....\$137,992 60
 Mileage and receipts of St. Thomas Branch are not included in this return.

The revenue of the Baltimore and Ohio Railroad for November, was as follows:

MAIN STEM.

From Passengers	\$73,976 40
" Mails	7,833 33
" Express	5,258 97
" Tonnage	288,675 03

\$375,743 73

WASHINGTON BRANCH.

From Passengers	\$24,439 78
" Mails	1,000 00
" Express	1,300 00
" Tonnage	6,500 80

33,240 58

N. W. VIRGINIA BRANCH.

From Passengers	\$3,456 20
" Mails	866 66
" Tonnage	17,980 39

22,303 25

The following is a comparison of the revenue of the road for the months of November, 1858 and 1859:

	Nov., 1858.	Nov., 1859.
Main stem	\$320,193 46	\$375,743 73
Washington branch	35,438 35	33,240 58
N. W. Virginia branch	25,247 94	22,303 25

Totals.....\$380,879 75 \$431,287 56
 —showing a net increase of \$50,407 81 in November, 1859.

The financial year of the Company commenced with October. Comparing the revenue so far of the present with that of the past fiscal year, the following result is shown:

	1859.	1858.
October	\$412,929 61	\$391,395 10
November	431,287 56	380,879 75

Total.....\$848,217 17 \$772,274 85
 Total increase for the present fiscal year, \$75,942 32.

The earnings and expenses of the Watertown and Rome Railroad for November, 1858 and 1859, were as follows:

EARNINGS.

	1858.	1859.
Passengers	\$12,040 20	\$12,064 56
Freight	28,939 01	30,123 96
Mails, etc.	1,933 10	2,471 63

Total.....\$42,912 31 \$44,660 15

EXPENSES.

Maintaining road	\$3,208 91	\$4,183 24
Repairs of machinery	1,914 04	2,119 80
Operating road	8,030 09	8,369 38
Overcharges refunded	23 46	12 40

Totals.....\$13,176 50 \$14,684 82

Net.....29,435 81 \$29,975 33

The earnings of the New York Central Railroad for November, 1859, were.....\$652,406 42
 1858.....600,919 81

Increase.....\$51,486 61

The following is the comparative earnings of the Catawissa Railroad Company:

	1858.	1859.
October—Gross earnings	\$30,779 92	\$30,496 13
Less paid connecting roads	5,513 28	5,468 62
	\$25,264 64	\$25,027 56

November—Gross earnings	\$29,435 16	\$32,185 18
Less p'd connecting roads	5,108 64	5,665 24
	\$24,326 42	\$26,519 94

Increase of November, 1859, over the same month, 1858, \$2,193 52.

The November earnings and expenses of the Cleveland and Mahoning Railroad were as follows:

From Passengers	\$3,898 15
" Freight	13,491 19
" Coal	13,937 46
" Mail	262 50

Total earnings.....\$31,589 30

Operating expenses.....9,213 88

Net increase.....\$22,375 42

The traffic of the Great Western Railway of Canada for the week ending December 16, 1859, was as follows:—

Passengers	\$15,304 45
Freight and live stock	18,874 52
Mails and sundries	1,650 27

Total.....\$35,829 24
 Corresponding week of last year.....37,038 27

Decrease.....\$1,209 03

The earnings of the Ohio and Mississippi Railroad for the month of November, 1859, were:

Passengers, etc.	\$157,013 44
Do. 1858	129,988 49

Increase.....\$27,024 95

The earnings of the Hannibal and St. Joseph Railroad for November, were \$81,309 68.

The business of the Indianapolis and Cincinnati Road for November is very satisfactory. The figures are:—

Passengers	\$14,027 68
Freight	28,201 55
Mail	925 00
Express	520 00

Total.....\$43,674 23

November, 1858.....37,738 82

Increase.....\$5,935 51

The November earnings of the Stonington road were:

Passengers	\$11,157
Freight	8,837

Total.....\$19,994

The receipts of the Mississippi and Tennessee Railroad for 1858 and 1859 were as follows:

	1858.	1859.
Total receipts	\$23,880 35	\$33,091 04
Operating expenses	6,693 57	7,330 02

Net receipts.....\$18,186 84 \$25,711 02
 18,186 82

Increase in 1859.....\$7,524 18

The number of bales of cotton transported in 1858 was 10,739; in 1859, 16,282; showing an increase of 5,543 bales.

The earnings of the Central Railroad Company of New Jersey for the month of November, 1859, were.....\$87,344 80
 November, 1858.....72,982 35

Increase, 20 per cent.....\$14,362 46

Annexed is the official statement of the Buffalo and State Line Railroad Company:

EARNINGS.

	1858.	1859.
From passengers	\$36,565 29	\$35,181 05
From freight	49,383 20	45,685 49
From other sources	1,236 32	1,471 00

Total.....\$87,234 81 \$82,337 54

Total decrease.....\$4,897 27

EXPENSES.

Construction	\$2,847 86	.....
Maintaining road	17,303 76	\$15,908 42
Repairs of machinery	4,160 92	4,630 82
Operating	17,103 27	13,409 20

Total.....\$41,415 81 \$33,848 44

Total Decrease.....\$2,144 78

Sunbury and Erie Railroad.

This road was opened to Warren on the 15th inst., with suitable observances.

Pittsburg and Conneville Railroad.

From the report of the President of this Company, which has been forwarded by an officer of the road, we learn that the receipts for the past year amounted to \$57,838 36, and the current expenses \$52,469 00, making a net income of \$4,740 48. The receipts this year exceed those of last by \$4,454 76—showing a net increase of receipts over expenditures of \$3,768. The aggregate expenses of the Company since its organization in 1846, amount to \$1,039,189 69. There has been paid \$36,178 73 of the floating debt during the past year, leaving its present amount \$175,550 65. The work on the Turtle Creek Division of the road is reported to be progressing finely, and will be finished next summer.

A New Road Eastward from St. Louis.

The charter granted at the last session of the Illinois Legislature to Ex-Governor Casey and others, for a railroad from East St. Louis (Bloody Island) to Carmi, Illinois, has not been availed until within the last month. The line has been surveyed, running through Belleville, Mascoutah, Nashville and Ashley, on the Illinois Central road. The Belleville Democrat is our authority for stating that within a few days arrangements have been made with a strong company to build the road immediately.

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (.....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.						
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.	Road in progress or projected.	Cars.				Property and Assets.					Liabilities.					Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trailers.	Gross.	Net.	Dividends.	Price of shares.
					Engines.	Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.											
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.				
ALABAMA.																									
30 Jun. '59	43.3			72.3	3	2	19	Alabama and Florida	1,086,278	*		539,396	473,500	101,205	1,127,174	27.3		59,430	22,359						
28 Feb. '59	30.3			58.1	12	12	19	Alabama and Mississippi	461,606	30,991		335,010	109,500	21,632	518,965	30.3		55,791	31,852						
31 May '59	99.2			68.4	1	7	84	Ala. and Tennessee Rivers	2,101,007	144,549		1,954,915	713,226	212,496	2,264,468	99.2		165,628	78,907						
30 Jun. '59	57.0			171.3				Mobile and Girard	1,500,000							57.0		76,773	21,006						
1 Jan. '59	319.2	14.7		213.0	25	18	361	Mobile and Ohio	7,252,801	681,859	114,894	3,441,859	4,061,547	726,546	8,360,702	202.0		709,787	420,000						
28 Feb. '59	88.5	28.4			20	14	272	Montgomery and West Point	1,819,403	279,435	100,000	1,419,672	922,621	18,966	2,462,492	116.9		446,153	211,880	6					
16 Dec. '59				295.8				North East and South West	728,000			105,760													
				26.1				Tennessee and Ala. Central																	
ARKANSAS.																									
30 Nov. '58	38.5			301.4				Cairo and Fulton																	
				107.5				Memphis and Little Rock	553,877	*		351,524	446,000	10,725	811,949										
80 Sep. '58	22.5			41.8				Sacramento Valley	1,547,100	*		791,100	756,000		1,547,100			185,108	102,726						
CONNECTICUT.																									
31 Jan. '59	23.9				3	6	30	Danbury and Norwalk	333,237	49,773		279,050	85,000	3,502	404,622	23.9		56,044	20,618	6					
30 Sep. '59	122.4			75.1	16	20	250	Hartford, Provid. and Fishkill	3,908,455	302,511		1,936,740	1,810,500	319,443	4,323,922	122.4		246,523	152,777						
31 Aug. '59	61.4	10.6						Hartford and New Haven	3,108,018	254,000	102,889	2,350,000	964,000	16,463	3,932,432	72.0		314,763	223,460	10	125				
31 Dec. '58	74.0				11	19	212	Housatonic	2,438,847	*	8,559	2,000,000	278,500	76,675	2,555,887	159.0		271,273	60,330						
31 Dec. '58	57.0				7	15	178	Naugatuck	1,678,301	*		1,031,800	437,550	30,713	1,706,802	57.0		199,536	314,068						
30 Nov. '58	62.3							N. Haven, N. London and Ston.	1,470,661	*		738,538	750,000		1,488,538	60.1		76,758	8,946						
31 Dec. '58	48.4	8.8						New Haven and Northampton	1,400,000	*		922,500	500,000		1,481,723	55.2		172,369	70,487						
30 Nov. '58	66.0				5	167	1	N. Lond., Willimant. & Palmer	1,561,241	*	5,453	510,900	1,055,600	272	1,575,147	66.0		91,134	104,464	30,512					
31 Mar. '58	62.2	63.8			29	72	368	New York and New Haven	4,593,698	661,547		3,000,000	2,219,002	79,722	5,582,071	74.0		932,550	231,500	3					
31 Mar. '58	59.0	7.0						Norwich and Worcester	2,245,406	170,792		2,522,300	324,180	69,614	2,598,672	66.0		265,417	44,557	41					
DELAWARE.																									
31 Dec. '58	71.0			19.4				Delaware	1,146,311	*		252,561	735,000	123,750	1,146,311	71.0		66,628							
30 Nov. '58	14.3							Newcastle and Frenchtown	699,514		25,000	762,320			767,278	14.3		19,896							
FLORIDA.																									
—	59	154.2						Florida		*															
30 Apr. '59				45.1				Florida and Alabama	292,291	*		317,847	154,000	70,620	543,237										
30 Jun. '59	31.3		2.0	28.6	2	1	24	Flo., Atlantic and Gulf Central	396,310	28,608		205,781	204,600	164,070	594,836	19.3		10,255	1,504						
—	59	26.5	8.9	227.0				Pensacola and Georgia								29.4									
GEORGIA.																									
31 July '58	86.7				15	11	105	Atlanta and La Grange	1,179,381	*		1,000,000	187,500	23,384	1,459,075	86.7		362,061	197,357	8	125				
—	59	30.0		133.5				Atlantic and Gulf—M. Trunk								30.0									
31 Dec. '57	53.0							Augusta and Savannah	1,032,200	*		733,700	298,500		1,032,200	53.0		125,427	69,679						
30 Apr. '59	43.5			23.7				Brunswick and Florida	755,000	*		151,887				81.0									
30 Nov. '58	191.0				52	28	633	Central of Georgia	3,750,000	*	550,152	3,750,000	199,851	6,645,001	229.0		714,787	1,363,722	755,015	10	—				
31 Mar. '59	171.0	61.0			18	16	171	Georgia (and Bank)	4,174,492	*	829,550	4,150,000	373,000	7,368,665	232.0		1,154,621	544,363	8	100					
31 July '59	102.5				7	2	107	Macon and Western	1,500,000	*	5,073	1,438,800	52,500	1,851,721	102.5		325,192	163,124	7 1/2	103					
31 July '59	50.0				3	4	33	Muscogee	774,244	162,534		669,950	249,000		1,026,968	50.0		202,714	110,516	8	—				
1 May '58	68.1							Savannah, Albany and Gulf	1,386,634	52,373		1,275,901	10,200	180,621	1,473,140	71.6		547,876	337,769						
31 July '59	106.1	56.5	14.8	44.3	15	18	168	South Western	3,165,000	*		2,254,000	631,000			147.2		847,876	387,769						
30 Sep. '58	138.0				52	24	705	Western and Atlantic	5,901,497	*		—	—	—	—	138.0		852,139	457,916						
ILLINOIS.																									
—	220.0							Chicago, Alton and St. Louis	10,000,000			3,500,000	4,500,000		10,000,000	220.0									
30 Apr. '59	138.0				62	31	990	Chic., Burlington and Quincy	6,068,054	1,400,872	680,158	4,629,340	2,990,000		8,149,084	210.0		1,044,673	171,515						
31 Dec. '58	45.0				6	14	101	Chicago and Milwaukee	1,799,894	67,889	120,000	988,000	762,865	188,085	2,060,065	45.0	14 mo.	243,282	135,284						
—	138.0			75.0				Chicago and Northwestern				4,250,000	6,350,000	2,500,000	13,330,000	138.0									
30 Jun. '58	181.8				58	57	960	Chicago and Rock Island	6,776,119	*	175,165	5,603,000	1,397,000	5,651	7,548,104	228.4		1,407,846	629,029	62 1/2					
10 Nov. '58	33.2							Fox River Valley	580,000	*		580,000				84.0									
31 Dec. '58	121.0	138.5	73.6		60	63	1,369	Galena and Chicago Union	8,027,478	1,311,917	211,003	6,026,400	3,783,015	292,466	10,300,617	125.5		808,231	1,547,561	620,328	4	66 1/2			
—	175.0							Great Western	5,022,926			1,800,000	3,088,426	324,500	5,022,926	175.0									
31 Dec. '58	454.8	252.5			113	96	2,305	Illinois Central	19,674,214	3,247,799		10,249,210	20,000,000	1,297,277	31,596,487	708.3		1,976,578	556,624	56 1/2					
—	148.0							Illinois River																	
—	46.6							Ohio and Mississippi	4,870,586	*		1,780,295	3,292,403			148.0									
—	186.0							Peoria and Bureau Valley								oper. by Chic.		R. Ia.	125,000						
—	100.0							Peoria and Hannibal								oper. by Chic.									
31 Dec. '58	100.0							Peoria and Oquawka	5,400,000	*		1,569,889	2,200,000			186.0									
—	10							Quincy and Chicago	1,978,555	*		800,000	1,200,000		2,000,000	100.0	oper. by Chic.	Bur. & R. Ia.	Quincy.						
31 Dec. '58	168.5	39.8	12.2		31	30	424	Rock Island Bridge								oper. by Chic.		823,767							
—	108.0							Terre Haute, Alton & St. Louis	7,608,958	628,487		3,026,903	5,035,615	741,040	8,865,282	208.3									
INDIANA.																									
—	29.0							Cincinnati and Chicago	2,080,433	*		1,196,679	1,006,125			108.0									
31 Aug. '57	109.0							Cincinnati, Peru and Chicago		*						29.0									
1 Jan. '58	72.4				19	21	278	Evansville and Crawfordsville	2,233,413	*	2,750	986,061	1,219,100	51,772	2,283,748	109.0		249,867	119,432						
31 Dec. '58	89.8				23	19	313	Indiana Central	1,666,280	244,081	25,641	1,051,050	1,166,000	47,850	2,111,059	109.0		368,189	132,094	6					
31 Dec. '58	84.0							Indianapolis and Cincinnati	2,497,952	540,043	25,689	1,689,900	1,362,284	140,689	3,458,108	110.0		448,658	230,834	9	49				
31 Aug. '57	78.0							Ind., Pittsburg and Cleveland	1,904,956	*	10,000	835,971	1,025,200	19,719	2,109,836	84.0		232,905	92,550						
—	64.0							Jeffersonville	1,839,576	*		1,014,252	681,000	99,400	2,109,836	108.0		222,737	74,328						
—	64.0							Lafayette and Indianapolis	1,350,000	*		1,000,000	600,000		2,000,000	64.0									
—	86.0	49.0						Madison and Indianapolis	2,984,516	*		1,647,700	1,336,816			135.0		206,114	82,632						
—	283.0							Louisv., N. Albany & Chicago	6,000,000	*	*	2,800,000	3,000,000	2,000,000	6,000,000	283.0		645,827	371,402						
—																									

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.						
	Main Line.	Lateral and Branch Lines.	2nd Track and Siding.	Road in progress or projected.	Engines.	Cars.			Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Liabilities.					Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Gross.		Dividends.	Price of shares.			
						Passenger.	Freight, etc.					Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Balance Total, incl. all other assets and liabilities.	Gross.			Net.						
																				No.			No.	No.	No.
M.	M.	M.	M.	No.	No.	No.																			
MAINE.																									
31 Dec. '58	22.0			6.0	4	10	25	Androscooggin	645,271	*		145,787	511,500			32.0	22,001	30,957	17,263						
31 May, '59	55.0				9	10	128	Androscooggin and Kennebec	2,210,947		27,925	457,900	1,748,457	101,209	2,307,566	137.0	73,186	281,829	69,766						
30 Jun. '59	149.0		25.0		41	17	349	Atlantic and St. Lawrence	6,066,875	857,566		2,494,900	3,472,000	9,572	5,976,472	149.0	429,791	545,741	150,226	6					
31 Dec. '58	12.5				4	2	45	Bangor, Oldtown and Milford	175,232	*		135,000			175,516	12.5	25,437	33,059	16,530						
31 Dec. '58	63.0	9.0			12	11	109	Kennebec and Portland	2,871,264	*		1,107,526	1,763,738			72.5	169,240	145,074	70,746						
31 Dec. '58				23.0				Penobscot	308,413	*		180,000	143,678												
31 May, '59	54.7				4	10	93	Penobscot and Kennebec	1,611,413	104,019	78,014	555,228	1,206,800	128,576	1,890,604	54.7	oper. by	An. & K.	67,324						
31 May, '59	51.3				11	13	118	Portland, Saco and Portsmouth	1,494,792	*	5,208	1,500,000			1,500,000	51.3	141,664	208,299	104,029	6	91				
31 May, '59	37.0							Somerset and Kennebec	783,763	*		169,200	556,600			37.0		55,403	28,404						
31 May, '59	18.6			33.5				York and Cumberland	1,090,000	*		370,000	450,000	270,000	1,090,000	18.5									
MARYLAND.																									
30 Sep. '58	279.6	7.2			228	87	3,489	Baltimore and Ohio	20,019,288	3,538,360	2,981,982	13,111,500	10,668,645	412,483	29,400,161	286.8	3,626,805	3,856,485	1,326,290						
30 Sep. '58	30.0				7	33	167	Washington Branch	1,650,000	*		1,650,000			1,824,806	39.0	187,427	499,423	266,969	6	100				
31 Dec. '58	138.0	4.0			42	38	1,455	Northern Central	6,943,457	733,934	220,965	2,290,000	5,395,800	655,507	8,681,557	154.5	606,482	810,604	304,649						
MASSACHUSETTS.																									
30 Nov. '58	21.2				6	4	80	Berkshire	600,000	*		600,000			600,000	oper. rat. by	Housat.	42,000	7						
30 Nov. '58	24.8	1.8	43.6		20	26	644	Boston and Lowell	2,239,253	183,345		1,830,700		440,000	21,965	2,619,210	28.6	274,655	407,399	166,109	6	97			
31 May, '59	70.3	7.4	50.8		30	39	640	Boston and Lowell	3,947,004	368,357	105,937	4,076,570				81.7		818,681	399,657	7	102				
31 Dec. '57	74.5		2.1					Boston and New York Central	3,622,203	69,941		2,241,000	374,550	1,299,039	3,923,319	74.5		88,483	7,062						
30 Nov. '58	43.5	12.0	22.8		22	27	200	Boston and Providence	3,333,807	191,175		3,160,000	185,220		3,362,710	55.5	292,649	527,764	259,176	6	101				
30 Nov. '58	44.7	24.0	69.2		31	64	997	Boston and Worcester	4,251,682	437,416	100,000	4,500,000	600,000	60,774	5,078,100	68.7	498,325	923,223	332,270	6	100				
30 Nov. '58	46.1	1.1	2.7		7	10	109	Cape Cod Branch	907,761	123,864		681,689	144,600	114,417	896,106	47.2	78,282	106,846	49,483						
30 Nov. '58	50.0	2.4	8.9		12	13	330	Connecticut River	1,614,364	187,558	20,000	1,591,100	223,000	28,000	1,814,100	75.4	158,515	238,390	90,877	2					
31 May, '59	44.2	33.4	19.4		28	40	320	Eastern	4,134,475	456,523	262,102	2,853,400	2,105,500	172,218	5,128,719	100.5	373,641	603,135	319,526						
30 Nov. '58	19.9	1.3	2.8					Essex	742,592	4,416		299,107	277,961	197,423	774,492	oper. rat. by	Eastern	12,296							
30 Nov. '58	50.9	16.8	70.1		29	28	643	Fitchburg	3,189,851	350,149		3,540,000			181,453	67.7	803,392	572,967	278,555	6	98				
30 Nov. '58	14.0	2.4			3	3	45	Fitchburg and Worcester	293,658	40,226		210,000	64,200	65,735		26.0	35,557	35,476	12,849	6					
30 Nov. '58	9.0		2.0					Grand Junction (Boston)								9.0									
30 Nov. '58	24.9		2.3					Hampshire and Hampden	598,299			292,651	200,000	105,649		oper. r. by N.	H. & N. P.	23,294							
30 Nov. '58	12.4		2.0		2	3	28	Lowell and Lawrence	332,883	30,275		200,000	100,000			12.4	22,435	42,784	18,540	3					
30 Nov. '58	14.6	17.1			12	11	301	Nashua and Lowell	558,919	95,684		600,000				14.6	123,396	180,065	71,606	3					
30 Nov. '58	20.1	1.4	1.1		7	18	144	New Bedford and Taunton	493,039	61,906		600,000			12,800	21.5	62,220	137,914	28,968						
30 Nov. '58	26.9		2.4		5	9	43	Newburyport	570,086	69,006		220,240	198,520	221,335	36.0	70,226	44,974	9,237							
30 Nov. '58	8.6		23.4					N. York and Boston Air Line	416,133			222,176	675,210	4,643		8.6	18,063	16,606	1,647						
30 Nov. '58	79.5	7.8	25.1		25	46	359	Old Colony and Fall River	3,028,445	334,503		3,015,100	161,500	30,935	3,748,970	87.3	365,197	551,399	237,660	6	104				
30 Nov. '58	15.6		0.8		1	2	1	Pittsfield and North Adams	432,430	11,247		450,000			450,000	oper. r. by Western.		27,000							
30 Nov. '58	43.4	14.9			12	18	374	Providence and Worcester	1,534,911	254,555		1,550,000	300,000	46,500	1,897,969	43.4	199,895	270,402	110,344	6	97				
30 Nov. '58	16.9		1.7		3	3	195	Salem and Lowell	366,987	82,543		243,305	226,900			16.9	29,822	50,556							
30 Nov. '58	21.9							Stockbridge and Pittsfield	444,600	4,100		448,700			450,000	oper. r. by Ho	uaston	31,409	7						
30 Nov. '58	7.1			35.5				Troy and Greenfield	329,741			288,428	169,000	9,854											
30 Nov. '58	69.0	8.0	6.5		12	8	194	Vermont and Massachusetts	3,309,287	207,348		2,214,225	1,003,675	6,500		77.0	99,256	225,079	105,037						
30 Nov. '58	173.4	94.3			72	47	1,149	Western (incl. Alb. & W. S. etc.)	9,785,509	1,095,713	15,120	5,150,000	6,032,520	245,500	13,528,766	210.6	944,951	1,700,293	869,363	8	110				
30 Nov. '58	45.7	8.8			10	8	145	Worcester and Nashua	1,279,936	140,961		1,141,000	200,000	31,210	1,416,555	45.7	152,903	185,127	83,849	5					
MICHIGAN.																									
1 Jan. '59	17.3				2.7	2	1	Bay de Noquet and Marquette																	
30 Sep. '59	57.0							Chic. Detroit & Can. G. T. Junc.																	
1 Jan. '59	188.0							Detroit and Milwaukee	8,270,623	647,596		2,329,155	4,707,500												
31 May, '59	284.0			183.0	98	123	1,523	Flint and Pere Marquette																	
1 Mar. '59	240.0	293.0			91	135	976	Grand Rapids and Indiana	12,847,233	*	1,149,009	6,057,840	8,284,063	119,089	14,548,411	329.0		2,417,915	886,697	35					
31 May, '59	284.0			69.8				Mich. St'n & N'n Indiana	14,517,892	1,007,906	1,312,534	8,975,400	9,343,000	816,460	10,595,407	539.0		2,019,425	777,273						
MINNESOTA.																									
31 May, '59	146.6			620.0				Minnesota and Pacific					600,000												
31 May, '59	71.4			175.0				Southern Minnesota					375,000												
31 May, '59	83.2			112.5				Minneapolis and Cedar Rapids					600,000												
31 May, '59				200.0				Minnesota Transit						191,130											
31 May, '59				60.0				Root River Valley					500,000												
MISSISSIPPI.																									
1 May, '59	146.6			41.7	11	6	155	Mississippi Central	3,395,965	*		1,641,947	1,346,363	383,129	3,717,469	146.5		239,585	117,371						
1 Oct. '59	71.4			27.8	7	4	41	Mississippi and Tennessee	1,254,894	159,018		798,285	456,949	275,060	1,974,444	59.7		176,462	116,433						
31 Dec. '58	83.2			60.4				Southern Mississippi	2,750,000	*		1,000,000	1,400,000			83.2		250,047	121,659						
MISSOURI.																									
30 Nov. '58	12.0			65.8	1			Cairo and Fulton	281,645	9,200															

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "all." Running dots (....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.				or Road in progress projected.	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.			
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Engines.		Passenger.	Freight, etc.	Property and Assets.			Liabilities.					Road operated, incl. road leased, etc.	Mileage run by loco- motives with trains.	Earnings.		Dividends.	Price of shares.		
								Railroad and Appurten- ances.		Rolling Stock.	Invested in foreign works.	Share Cap- ital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Balance Total, incl. all other assets and li- abilities.			Gross.	Net.				
M.	M.	M.	M.	No.	No.	No.	\$	\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	P. c.	P. c.			
NEW YORK.																							
30 Sep. '58				140.0																			
30 Sep. '58	32.9		3.8		5	12	58	Albany and Susquehanna	227,356				275,793		8,697		32.9	93,894	84,119	11,215			
30 Sep. '58	33.3		34.0					Albany, Vermont and Canada	1,557,502	136,039			439,005	1,575,099	50,000		37.5	34,424	60,524	32,413			
30 Sep. '58	34.9	2.6		73.6	4	6	39	Albany and West Stockbridge	2,239,934				1,000,000	1,239,934			37.5	34,424	60,524	32,413			
30 Sep. '58	14.8		1.6					Black River and Utica	1,153,069	81,405			804,648	662,500	62,570		14.8	16,580	23,554	9,204			
30 Sep. '58	142.0		13.6					Blossburg and Corning	499,661				250,000	220,000			220.0	355,480	429,754	123,122			
30 Sep. '58	68.3		18.0		26	32	353	Buffalo, New York and Erie	2,975,325	*			680,000	2,490,583	164,938		87.8	356,145	814,116	359,609			
30 Sep. '58	24.6		38.1		28	34	312	Buffalo and State Line	2,460,251	312,736			1,913,000	1,049,000	172,378		34.6	59,539	59,421	5,092			
30 Sep. '58	17.4		2.1					Cayuga and Susquehanna	1,016,058	79,542			687,000	426,000	7,042		30 Sep. '58						
30 Sep. '58	46.8		2.9					Chemung	400,000				330,000	70,000			30 Sep. '58						
30 Sep. '58				63.2				Elmira, Canadawaga & N. Falls					352,742	14,000			30 Sep. '58						
30 Sep. '58				15.0				Erie and New York City	237,708				69,374	23,716	396,416		30 Sep. '58						
30 Sep. '58	17.3	0.5			5	3	50	Genesee Valley	91,380		27,000		175,000	38,500			30 Sep. '58						
30 Sep. '58	144.0	106.5			57	107	537	Hudson and Boston (West'n)	148,900				3,758,466	8,842,000	455,003		30 Sep. '58						
30 Sep. '58				73.8				Hudson River	10,146,617	1,132,372			7,771				30 Sep. '58						
30 Sep. '58				182.0				L. Ontario, Auburn & N. York	74,203				2,715,156	870,000	116,856		30 Sep. '58						
30 Sep. '58	84.0	2.5			19	34	185	Long Island	3,497,538	178,320			1,000	2,715,156	870,000	116,856	30 Sep. '58						
30 Sep. '58	297.8	253.1	313.8		218	258	2,569	New York Central	2,211,659	354,611			1,000	2,715,156	870,000	116,856	30 Sep. '58						
30 Sep. '58	446.0	19.0	282.5		210	183	2,684	New York and Erie	2,575,490	5,577,077		3,193,000	24,182,400	14,402,635	49,079	40,633,635	30 Sep. '58						
30 Sep. '58	130.8	2.1	36.9		63	89	430	New York and Harlem	29,908,749	4,148,885		973,083	11,000,000	26,371,611	1,707,575	39,079,086	30 Sep. '58						
30 Sep. '58	118.0	2.8	17.7		28	8	417	Northern (Ogdensburg)	7,303,339	634,777			5,717,100	5,151,287	147,640		30 Sep. '58						
30 Sep. '58	85.9		2.2		7	6	44	Oswego and Syracuse	4,086,712	702,079				1,484,000			30 Sep. '58						
30 Sep. '58	75.4		2.0		6	4	33	Pottsdam and Watertown	669,919	100,462				18,431			30 Sep. '58						
30 Sep. '58	25.2	2.1			6	13	70	Rensselaer and Saratoga	1,523,846	63,382			396,340	818,500	150,138		30 Sep. '58						
30 Sep. '58	18.4	1.3			2	3	10	Rochester and Genesee Valley	743,977	156,573			610,000	140,000			30 Sep. '58						
30 Sep. '58	18.0	1.0			2	3	10	Sackett Harbor and Ellisburg	371,556	17,714			178,485	278,400	56,810		30 Sep. '58						
30 Sep. '58	21.0	1.0			2	3	10	Saratoga and Schenectady	480,684	*			300,000	86,500			30 Sep. '58						
30 Sep. '58	40.9	6.6	3.9		9	12	84	Saratoga and Whitehall	820,615	74,904			600,000	395,000	5,456		30 Sep. '58						
30 Sep. '58				13.2				Statens Island	40,000				40,000				30 Sep. '58						
30 Sep. '58	11.0							Brooklyn and Jamaica	369,856				284,850	85,000			30 Sep. '58						
30 Sep. '58	61.3				13	12	117	Syracuse, Binghamt. & N. Y.	2,857,607	*			1,200,130	1,500,000	59,418		30 Sep. '58						
30 Sep. '58	27.2				7	4	65	Troy and Boston	1,296,302	125,887			568,297	797,500	231,083		30 Sep. '58						
30 Sep. '58	6.0							Troy and Greenbush	258,058	36,073			275,000				30 Sep. '58						
30 Sep. '58	2.1							Troy Union	732,114				80,000	630,000			30 Sep. '58						
30 Sep. '58	96.8			11.0		7	11	298	Watertown and Rome	2,159,293	*	28,000	1,498,500	690,000	55,071	2,278,611	30 Sep. '58						
NORTH CAROLINA.																							
30 Sep. '58	95.2	2.0						Atlantic and North Carolina	1,850,000	*			1,600,000	400,000			30 Sep. '58						
30 Sep. '58	223.0							North Carolina	4,235,000	*			4,000,000				30 Sep. '58						
30 Sep. '58	97.0							Raleigh and Gaston	1,240,341	*			973,300	126,200			30 Sep. '58						
30 Sep. '58	161.0				22	20	144	Wilmington and Manchester	2,586,238	*	201,500	1,127,511	1,060,000	111,886	2,892,909	30 Sep. '58							
30 Sep. '58	161.9				24	32	144	Wilmington and Weldon	2,809,223	*	107,000	1,340,213	791,055	102,391	3,114,954	30 Sep. '58							
15 Mar. '58				43.0				Western North Carolina	190,793	*	4,700	290,212	70,800			30 Sep. '58							
OHIO.																							
30 Dec. '58					17	12	208	Atlantic and Great Western	613,231				866,939	77,294			30 Dec. '58						
1 Aug. '58	118.2				41	39	508	Bellefontaine and Indiana	3,008,919		11,000	1,879,370	1,274,828	39,028	3,370,281	30 Dec. '58							
31 Mar. '58	60.3				22	28	432	Central Ohio	6,578,515	806,633	106,133	1,627,906	3,889,300	1,252,440	6,964,557	30 Dec. '58							
30 Sep. '58	37.0				62.1			Cinc., Hamilton and Dayton	2,648,264	504,592	26,500	1,025,800	1,411,000	32,618	3,694,710	30 Dec. '58							
1 May. '58	131.8				31.0	10	832	Cinc. and Indianapolis Junction	8,250,841	*		2,441,176	3,032,000	228,973		30 Dec. '58							
31 Dec. '58	135.4	5.8			42	31	439	Cinc., Wilmington and Zanesv.	6,250,841	*		4,746,100	38,000	8,242	5,343,275	30 Dec. '58							
31 Dec. '58	67.0				18.0			Cleveland and Columbus	4,087,571	684,955	67,422	4,746,100	38,000	8,242	5,343,275	30 Dec. '58							
31 Dec. '58	95.4	1.2			31	39	453	Cleveland and Mahoning	1,920,953	*		580,000	1,202,300	161,200	1,943,500	30 Dec. '58							
30 Nov. '58	101.0	102.5			42			Clev., Painesville & Ashtabula	3,338,114	620,632	523,000	3,000,000	1,367,000	119,812	4,858,932	30 Dec. '58							
30 Apr. '58	109.2	79.4			32	52	430	Cleveland and Pottsdam	9,320,285	*		3,942,368	4,918,325	653,321	9,601,102	30 Dec. '58							
31 Dec. '58	61.4				53.0	5	99	Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720	358,605	7,858,918	30 Dec. '58							
31 Dec. '58	72.0				31.0	6	103	Clev., Zanesville and Cincinnati	1,574,693	*		369,673	675,250	632,486		30 Dec. '58							
30 Nov. '58	54.6				72.0			Columbus and Indianapolis	2,555,000			1,600,000	205,000			30 Dec. '58							
31 Dec. '58	72.0				72.0			Columbus and Xenia	3,746,000	392,909	112,734	1,490,000	290,700	60,500	1,965,539	30 Dec. '58							
31 Aug. '58	36.6				6	3	87	Dayton and Michigan	3,746,000			1,620,000	212,000			30 Dec. '58							
31 Aug. '58	16.0				47.0	3	21	Dayton and Western	309,262	104,912		289,692	700,000	90,482	1,080,174	30 Dec. '58							
31 Aug. '58	45.0				6	6	72	Dayton, Xenia and Belpre	800,496			437,838	422,658										

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

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Years ending.	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.			
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected.	Engines.	Cars.			Property and Assets.			Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.		Dividends.	Price of share.
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.			
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.		
PENNSYLVANIA, (Continued.)																						
31 Dec. '55	28.0						Philadelphia and Trenton	1,000,000				1,000,000			1,000,000		oper. by	Cam. & Amboy	7			
30 Nov. '58	98.0	6.0			31	60	Phila., Wilmington and Balt.	7,235,522	762,225	76,081	5,600,000			2,547,379	198,961	8,782,996	194.0		1,095,847	344,182	5	
31 Oct. '57	48.0						Pittsburg and Connellsville	2,285,606			1,031,173	1,100,000			513,403	2,644,756	48.0		45,586	4,318		
31 Dec. '55	10.3						Pittsburg and Erie										10.3					
31 Dec. '55	467.0				94	96	Pittsburg, Ft. Wayne & Chicago	14,631,110		91,100	6,260,555			9,029,765	1,657,594	17,046,252	467.0	1,894,029	1,667,232	601,658		
30 Sep. '57	31.0						Pittsburg and Steubenville	1,947,462			1,221,277			280,000								
31 Dec. '55	25.0						Schuylkill Valley										25.0					
1 Jan. '59	40.2						Sunbury and Erie	5,517,941	37,933		3,903,843			527,000	309,591	6,876,132	40.3					
31 Mar. '59	78.0						Tioga	1,098,263														
31 Mar. '59	50.0						Williamsport and Elmira	3,650,682	380,847		1,500,000			2,361,973	161,272	4,148,920			191,970	96,308		
RHODE ISLAND.																						
31 Aug. '55	50.0		2.0		9	13	N. Y., Providence and Boston	2,158,000			1,508,000			306,500		2,158,000	50.0	147,231	208,439	96,571	5	
30 Nov. '58	13.6		0.5			5	Providence, Warren & Bristol	434,698	1,588		287,917			109,937	36,139		13.6	23,514	23,005	1,278		
SOUTH CAROLINA.																						
31 Dec. '55	13.2	1.5		182.4	2	26	Blue Ridge	2,126,539			1,916,515			217,577		2,104,092	13.2					
31 Dec. '55	54.9			47.4	4	3	21 Charleston and Savannah	801,615	34,372	250,000	706,365			195,266	197,905	1,099,536	51.9					
31 Dec. '55	109.6				13	9	Charlotte and South Carolina	1,719,045			1,201,000			354,000			109.6		283,263	151,536	6	
31 Dec. '55	40.3						Cheraw and Darlington	600,000			400,000			200,000			40.3					
1 Jan. '59	143.2	21.3					Greenville and Columbia	2,439,789	324,161		1,429,008			1,415,000	345,546	2,919,554	143.2		341,190	125,871		
21 Aug. '55	22.5						Kings Mountain	196,230			200,000					200,000	22.5					
31 July '55	32.0						Laurens	543,403			400,000			106,218		575,729	32.0		27,568	8,527		
23 Feb. '50	102.0						North-Eastern	2,011,652			985,743			960,410	108,172	2,057,325	102.0		220,014	96,145		
31 Dec. '55	136.0	106.0			62	59	South Carolina	5,517,384	1,103,130	374,060	4,179,475			2,770,463	193,086	7,701,337	242.0		1,501,008	820,511	7	
31 July '55	25.1						Spartanburg and Union										25.1					
TENNESSEE.																						
31 Dec. '55	30.0						Cleveland and Chattanooga	567,210														
30 Jun. '55	110.8						Edgfield and Kentucky															
30 Jun. '55	130.3						East Tennessee and Georgia	3,376,943			1,289,155			1,910,688	278,319	3,501,197	110.8		264,959	156,195		
30 Jun. '55	271.0	28.0			10	13	East Tennessee and Virginia	2,529,418	117,512		629,800			1,968,950	406,659	3,041,940	130.3		191,198	95,231		
30 Jun. '55	32.0						Memphis and Charleston	5,276,573	609,776	109,006	2,258,115			2,594,000	837,992	6,354,752	299.0		1,330,812	778,036		
30 Jun. '55	52.0						Memphis and Ohio	3,200,000									52.0					
30 Apr. '59	48.1						Memphis, Clarkesv. & Louisv.	195,364														
30 Nov. '55	34.2						Mississippi Central and Tenn.	1,023,470			309,562			624,500	118,659	1,052,721	48.1			43,436		
30 Nov. '55	151.0	8.0					McMinnville and Manchester	565,459			140,097			406,000		505,459	34.2	run by	Nash. & Chatta.			
30 Nov. '55	151.0						Nashville and Chattanooga	3,733,472		160,000	2,292,405			1,674,000	55,944	4,121,557	151.0		641,552	279,207	3	
30 Jun. '55	43.6						Nashville and Northwestern	1,000,000														
30 Jun. '55	15.0						Tennessee and Alabama	935,997			309,754			626,889	83,037		15.0		55,775	29,405		
30 Jun. '55	32.0						Winchester and Alabama									operated by	Nash. & Chatt.					
30 Jun. '55	184.0						TEXAS, (all aided by State).															
30 Jun. '55	36.0						Buffalo Bayou, Braz. & Col'do										36.0					
30 Jun. '55	43.0						Galvest., Honat. & Henderson										43.0					
1 May '59	50.0						Houston and Brazoria										50.0					
30 Jun. '55	25.0						Houston and Texas Central	1,132,747			1,270,123			335,000	128,205	1,691,443	25.0		76,938			
30 Jun. '55	23.0						San Antonio & Mexican Gulf										23.0					
30 Jun. '55	23.0						Southern Pacific										23.0					
VERMONT.																						
31 Aug. '55	90.7				19.6	7	181 Connect. & Passumpsic Rivers	2,245,724	185,421		1,200,000			800,000		6,392,141	90.7	95,256	171,625	67,853		
31 Aug. '55	119.9					26	18 Rutland and Burlington	3,989,708	556,275	92,859	2,233,376			3,145,001	1,013,764	6,392,141	119.9	396,762	354,288	81,561		
31 Aug. '55	92.0					10	6 Rutland and Washington	1,771,683			950,000					1,790,683	92.0	154,997	174,429	1,566		
31 Aug. '55	122.0					42	23 Vermont Central	8,402,055			5,000,000			3,553,000	1,423,299	10,276,299	122.0	569,323	995,507	228,614		
31 Aug. '55	47.0						Vermont and Canada	1,380,695			1,350,000					1,350,695	47.0	oper. by Vt. Central			40	
31 Aug. '55	23.7					4	52 Vermont Valley	1,212,274	89,612		516,664			793,200		1,308,864	23.7	47,324	43,998	10,493		
31 Aug. '55	54.0	10.5					Western Vermont	1,083,500			332,000			700,000		1,083,500	54.0	oper. by Troy				
VIRGINIA.																						
31 Aug. '59	41.3						Alex., Loudoun & Hampshire	1,492,194	42,000		1,403,018			36,188	88,131	1,534,194	41.3					
30 Sep. '55	75.8						Manassas Gap	3,262,990	209,901		3,038,500			418,000	292,936	3,939,729	75.8					
31 Mar. '55	79.2						Norfolk and Petersburg	1,696,907	64,027	10,500	1,346,876			458,893		1,803,769	79.2		125,599	65,554		
30 Sep. '55	103.5						Northwestern Virginia	5,322,150			4,680,605			5,719,229		371,590	103.5		345,427	248,004	loss	
30 Sep. '55	112.5	9.1					Orange and Alexandria	4,339,375			1,899,329			1,490,500	292,842	4,745,256	112.5		258,575	151,872		
30 Sep. '55	123.3	10.1					Petersburg and Lynchburg	3,040,636	374,996		1,395,300			1,651,500		3,044,796	123.3		410,166	201,344		
31 Dec. '55	69.2	21.3					Petersburg and Roanoke	988,791	192,940		883,200			127,427	34,344	1,313,057	69.2		310,988	186,085	5	
30 Sep. '55	140.5	1.8					Richmond and Danville	3,588,653			1,981,017			1,126,407	25,163	4,424,671	140.5		491,674	267,192		
31 Mar. '55	75.1						Richm., Frederick & Potomac	1,985,579		52,800	1,033,600			690,115	116,550	2,183,232	75.1		208,126	145,656	7	
30 Apr. '59	22.2						Richmond and Petersburg	1,087,949			836,100			201,408	34,651	1,250,186	22.2		187,542	82,485	6	
30 Sep. '55	88.3						Richmond and York River	488,190	22,810		657,812			85,000		742,612	88.3					
31 Aug. '55	80.0						Seaboard and Roanoke	1,390,988		33,700	644,000</											

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F." Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
Alabama and Florida:					Chicago and Milwaukee:					Eaton and Hamilton:				
1st Mortgage	\$300,000	7	1867		1st Mortgage (convertible)	\$512,000				1st Mortgage	\$757,734	†	var.	
Convert. (guar. by Dir.)	150,000	7	1863		Income	62,000				Erie and North-East:				
Land Mortgage	23,500	7	1869		Real Estate 2d Mortgage	188,864		1868		Exchanged for Buff. and St. L.	149,000			
Alabama and Miss. Rivers:					Chicago and Rock Island:					Evansville and Crawfordsville:				
State (Ala.) Loan	123,171				1st Mortgage	1,397,000	7	1870	94					
Mortgage	109,500				Chic. St. Paul and Fond du Lac:					Florida:—				
Alabama and Tenn. Rivers:					1st Mortgage (on 1st Division)	3,000,000	†			Internal Improvement (State)	1,655,000	7	1861	
1st Mortgage convertible	526,000	7	1872		2d Mortgage (1st Land Grant)	3,000,000	†			Free Land, 2d Mortgage	1,500,000	8	1861	
2d Mortgage	225,705	8	1864		Real Estate	350,000	†			Florida and Alabama:				
Albany, Vt. and Canada:					Cincinnati, Hamilton and Dayton:					Internal Improvement (State)		7	1791	
1st Mortgage	500,000	7	1867		1st Mortgage	461,000		1867	92	Free Land, 2d Mortgage		8	1791	
Albany and West Stockbridge:					2d Mortgage	950,000		1880	83	Florida, Atlantic and Gulf Centr.:				
Albany City (S. F.)	1,000,000	6	'66-'76		*Cincinnati, Wilm. and Zanesville:					Internal Improvement (State)	300,000	7	1791	
Androscoogin and Kennebec:					1st Mortgage	1,300,000				Free Land, 2d Mortgage	200,000	8	1791	
1st Mortgage (Coupon) '60-'64	1,000,000	6	'62-'64		2d Mortgage	574,000				Fox River Valley:				
Stock, convert. (Coupon)	710,000	6	'63-'66		3d Mortgage	158,000				1st Mortgage	400,000	†		
Atlantic and St. Lawrence:					Income	250,500				2d Mortgage	180,000			
Dollar Bonds (Coupon)	988,000	6	1866		Tunnel Right	1,000,000				Galena and Chicago Union:				
Sterling Bonds (Coupon)	484,000	6	1878		Cleveland and Mahoning:					Litchfield	52,015	7	1859	
City of Portland Loan (Coup.)	1,500,000	6	'68-'70		1st Mortgage	694,500				1st Mortgage (S. F.)	1,993,000	7	'62-'63	83
Baltimore and Ohio:					2d Mortgage	469,000				2d Mortgage (S. F.)	1,738,000	7	1875	86
Maryland Sterling	3,000,000	5			3d Mortgage	38,800				Galveston, Houston and Henderson's:				
Mortgage Coupons	2,500,000	6	1885		Clev. Painesville and Ashtabula:									
"	700,000	6	1880	84	1st Mortgage	564,000	7	1861	99					
"	1,128,500	6	1875	86	2d Mortgage	303,000	7	1861						
"	1,000,000	6	1868		Special (Sunbury and Erie)	500,000								
Balt. City Loan	4,886,811	6			Cleveland and Pittsburg:									
Bellefontaine and Indiana:					1st Mortgage (Main Line)	800,000	7	1860	67	*Great Western, Ill.:				
1st Mortgage convertible	791,000	7	1866		2d Mort. (M. L.) or 1st Extension	1,188,000	7	1873	57	1st Mortgage (W. Div. 100 m.)	1,000,000	10		
2d Mortgage	140,000	7	1870		3d Mort. (M. L.) or 2d Extension	1,165,000	7	1875		1st M. (E.D. 84 m.), 2d M. (W.D.)	1,350,000	7		
Real Estate (1861, '63, '68)	129,000	7	var.		4th Mort. (M. L.) or 3d Extension	1,154,000				Old Sang. and Morg. Railroad	41,000			
Income (S. F.)	190,500	7	1859		Income	118,000				2d Mortgage	823,000			
Belvidere Delaware:					Dividend Bonds and Scrip.	491,825				Chattell (Equipment) Mortgage	374,426			
1st Mort. (guar. C. and A.)	1,000,000	6	1877		Cleveland and Toledo:					Greenville and Columbia:				
2d Mortgage	445,500	6			Junction 1st Mortgage 1st Div.	377,000	7	1867		1st Mortgage, Coupon	1,145,000			
Camd. and Amh. R.R. Co.	244,000	6			Junction 2d Mortgage 2d Div.	305,000	7	1872						
Black River and Utica:					Junction 1st Mortgage 1st Div.	324,000	7	1862		Hannibal and St. Joseph:				
1st Mortgage	370,000	7	1869		Tol., Nor. and Clev. 1st Mort.	522,000	7	1863	70	Missouri State Loan	3,000,000	6		
Boston, Concord and Montreal:					Tol., Nor. and Clev. 2d Mort.	299,600	7	1863		Land	3,509,500	7		
1st Mortgage	200,000	6	1870		Junction Income	61,500	7	1862		Income (convertible)	310,000	7		
2d Mortgage	300,000	7	1870		C. and T. Income	192,950	7	1863		Plain	11,000	7		
3d Mortgage Coupons	150,000	6			C. and T. Income (convertible)	409,900	7	1864		Harrisburg and Lancaster:				
4th Mortgage Coupons	200,000	7			C. and T. Income (convertible)	373,000	7	1864		New Dollar Bonds	459,872	6	1883	98½
Sinking Fund	200,000	6			C. and T. Dividend (convert.)	199,735	7	1865		Hartford and New Haven:				
Boston and Lowell:					C. and T. Income (convertible)	129,000	7	1870		1st Mortgage	1,000,000	6	1873	98
Mortgage	440,000	6	1873		C. and T. (S. F.) Mortgage	640,000	7	1885		Hartf'd, Providence and Fishkill:				
Boston and Worcester:					Junction (Lloyd's)	5,000	7	1862						
Mortgage (plain)	100,000	6	1860		*Cleveland, Zanesville and Cin.:									
Mortgage (convertible)	500,000	6	1860											
Buffalo and State Line:														
1st Mortgage	500,000	7	1866	90	*Columbus, Piqua and Indiana:									
Income (1/2 in '59, 1/2 in '62)	200,000	7	var.											
Unsecured	200,000	7	1864		Columbus and Xenia:									
Erie and North-East	149,000	7			1st Mortgage	18,000		1859		Hudson River:				
Burlington and Missouri:					Dividend (due 1860, '61, '62, '66)	272,700		var.		1st Mortgage	4,000,000	7	1860	104
1st Mort. on 1st Division	690,000				Connecticut River					2d Mortgage	2,000,000	7	1860	95
Burlington Loan	75,000				Mortgage (due 1859, '60, '62, '63)	210,000	6	var.		3d Mortgage	3,000,000	7	1867	
Cairo and Fulton (Mo.):					Connecticut and Passump. Rivers:					Illinois Central:				
State (Mo.) Loan	650,000	6	'78-'79		1st Mortgage	800,000				Optional Right Scrip.	65,000	7	1868	
Camden and Amboy:					Cumberland Valley:					Construction	12,885,000	7	1875	84½
Mortgage	367,000	6	1864		1st Mortgage	116,500				Construction	4,115,000	6	1875	95
Mort. (chgd from Sterl'g)	888,000	5	1864		2d Mortgage	97,000				Free Land	3,000,000	7	1860	
Mortgage	800,000	6	1849		Dauphin and Susquehanna:					Indiana Central:				
Mortgage	1,700,000	6	1875							1st Mortgage (convertible)	600,000	7	1866	
Sterling (\$210,000)	1,008,000	6	1864							2d Mortgage	284,500	10		
Sterling (\$225,000)	1,080,000	6	1864							Income	281,500	10		
New Loan (1st d \$337,000)	2,500,000	6	1887		Dayton and Michigan:					Indianapolis and Cincinnati:				
Unsecured	800,000	6	1863							1st Mortgage	500,000	7	1866	
*Catawissa, Williamsap. and Erie:										2d Mortgage	400,000	7		
1st Mortgage	1,500,000	7	1865	32	Dayton and Western:					Real Estate Mortgage	200,000	7	1858	
2d Mortgage	389,036	7	1896		1st Mortgage	300,000				Dividend	86,284	7		
Chattell Mortgage	380,000	10	1871		2d Mortgage					Income and Domestic	176,000		var.	
Cayuga and Susquehanna:					Delaware:					Indianap. Pittsb. and Cleveland:				
1st Mortgage	300,000	7	1865		1st Mortgage	500,000				1st Mortgage	656,000			
Unsecured	89,000	7	1862		Guaranteed	65,000				2d Mortgage	167,000			
Central of Georgia:					State Loan	170,000				Income	166,000			
Mort. (due 1859 to 1863)	158,767	7	var.		Delaware, Lackawanna and W'n:					Domestic	34,200			
Central of New Jersey:					1st Mortgage	900,000		1871		Jeffersonville:				
1st Mortgage	1,500,000	7	var.		1st Mortgage (E. Extension)	1,500,000		1875	89	1st Mortgage	289,000			
2d Mortgage	1,500,000	7	1875		2d Mortgage	2,600,000		1881		2d Mortgage	392,000			
Income	375,000	7	var.		Income (due 1862, '65 and '67)	1,263,170		var.		*Keanebec and Portland:				
*Central Ohio:										1st Mortgage (City and Town)	800,000	6	1870	
1st Mortgage	450,000	7	1861		Detroit and Milwaukee:					2d Mortgage	230,000	6	1861	
1st Mortgage	500,000	7	1864		1st Mortgage (convertible)	2,500,000	7	1875		3d Mortgage	250,000	6	1862	
2d Mortgage	800,000	7	1865		2d Mortgage	1,000,000	8	1866		*Kentucky Centr. (Cov. and Lex.):				
3d Mortgage	950,000		1885		3d Mortgage (convertible)	150,000	10	1863		1st Mortgage	160,000	6		
4th Mortgage (S. F.)	1,339,250		1876		4th Mortgage (G. W. R. R.)	500,000	8			2d Mortgage	260,000	7		
Income (1858, '59 and '60)	1,238,200		var.		Dubuque and Pacific:					2d Mortgage (convertible)	1,000,000	7		
Income (1st to Muskingum Co.)	100,000		1862		New Construction	800,000	†			3d Mortgage	600,000	7		
Charleston and Savannah:					Dubuque Western:					Guaranteed by Covington	200,000	6		
1st Mortgage (endorsed)	510,000	6			1st Mortgage	344,000	†			Guaranteed by Cincinnati	100,000	6		
2d Mortgage	1,000,000	7			Eastern (Mass.):					Income	400,000	10		
Cheshire:					Income (due \$75,000 annually)	525,000	6	var.		Income	210,000	6		
Mort. (1860, '63, '75 and '77)	786,400	7	var.		2d Mortgage (convertible)	710,000	5	1862		Kent'ky Centr. (Lex. and Danv.):				
Chicago, Burlington & Quincy:					3d Mortgage (convertible)	445,000	6	1874						
Consolidated 1st Mort.	1,660,000	8	1883		1st M. (State) \$75,000 a year after '65	500,000	5	var.						
Chic. and Aur. 1st Mort.	405,000	7	1867							Keokuk, Ft. D. Moines and Minn.:				
Ch. and Aur. 2d M. (S. F.)	303,000	7	1869		State, 1st Mortgage	970,000				City of Keokuk, 20 years	400,000	8		
Cent. Mil. Tr. 1st Mort.	400,000	7	1864		Endorsed by State of Tennessee	150,000				City of Keokuk, (special tax)	150,000	10		
Cent. M. T. 2d M. (Conv.)	281,000	8	1868		Mortgage (ordinary)	790,688				Lee County, 20 years	150,000	8		
Chicago, Alton and St. Louis:					East Tennessee and Virginia:					Keokuk, Mt. Pleasant and Muscat.	150,000	8		
1st Mortgage		†			State, 1st Lien	1,602,000				Lee County	200,000	8		
2d Mortgage		†			Endorsed by State of Tenn.	200,000				City of Keokuk	50,000	8		
3d Mortgage		†			1st Mortgage (after State)	100,000				Henry and Louisa Company's				
					Redeemable in Stock	66,980				Lehigh Valley:				
										1st Mortgage	1,500,000	6		

AMERICAN RAILROAD BOND LIST.

(*) signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F." Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
La Crosse and Milwaukee:					Montgomery and West Point:					Orange and Alexandria:				
1st Mortgage (Eastern Div.)	\$903,000	†			Alabama State Loan	\$122,622				State Loan	\$400,000			
2d Mortgage (Eastern Div.)	1,000,000	†			Mortgage (due 1860, '63 and '65)	350,000	6	var.		1st Mortgage	612,500	6		
1st Land Grant (Western Div.)	4,000,000	†			Mortgage	450,000	8	1866		2d Mortgage	1,567,500	8		
2d Land Grant (Western Div.)	353,600	†			Muskegon:					Pacific (Mo.):				
3d Mortgage (whole road)	1,700,000	†			1st Mortgage	249,000	7			State (Mo.) Loan	7,000,000	6		
Farm Mortgage	1,087,700	†			Nashville and Chattanooga:					State Loan (S. W. Branch)	2,800,000	6		
Unsecured Bonds	1,785,000	†			Mortgage (State endorsed)	1,500,000				Construction	4,500,000	6		
Lexington and Frankfort:					Chat. and Clev. Subc. (endors.)	150,000				Panama:				
Mortgage, due 1864, '69 and '74	130,000	6			Not endorsed	24,000				1st Mortgage Sterling	1,250,000		1859	
Little Miami:					*New Albany and Salem:					1st Mortgage Sterling	1,250,000		1865	100
Cincinnati Loan	100,000				Crawfordsville	175,000	7			2d Mortgage Sterling	1,009,000		1872	
1st Mortgage	138,000	6			1st Mortgage	500,000	10			Pennsylvania:				
2d Mortgage	7,000	6			1st Mortgage	2,225,000	6			1st Mortgage (convertible)	4,905,000	6	1888	
3d Mortgage	981,000	6			New Haven and Hartford:					2d Mortgage	1,928,000	6	1875	
Long Island:					Mortgage					2d Mortgage Sterling	1,539,840	6	1875	
State Loan (S. F.)	100,000	5	1876		*N. Hav., N. Lond. and Stonington:					For Canals, etc.	7,400,000	6		
1st Mortgage	500,000	6	1870		Mortgage	450,000	7			Pennsylvania Coal Company:				
Louisville and Frankfort:					Mortgage	200,000	6			1st Mortgage	600,000	7		
Louisville Loan	174,600				Extension	100,000	10			Penobscot and Kennebec:				
1st Mortgage	248,000				New Haven and Northampton:					Bangor City 1st Mortg. (Coupon)	800,000	6	1874	
Louisville and Nashville:					1st Mortgage	500,000		1869		2d Mortgage (Coupon)	250,200	6	1876	
State (Tenn.) 1st Lien	300,000	6			New Jersey:					3d Mortgage (Coupon)	150,600	6	1871	
1st Mortgage	2,000,000				Company's (various)	711,000		var.		Pensacola and Georgia:				
McMinnville and Manchester:					New London, William and Palmer:					State Internal Improvement			7 35 y's	
State (Tenn.)	372,000	6			1st Mortgage	600,000	7†			Free Land				
Mortgage	24,000	7			2d Mortgage	300,000	6†			Peoria and Ogawaka:				
Mortgage	10,000	6			Income (convertible)	152,000	6†							
Madison and Indianapolis:					New London City	100,000	6†			Peru and Indianapolis:				
State (Ind.) Loan					N. Orleans, Jackson and Gt. North:									
Mortgage					State (Miss.) Loan	155,000				Petersburg:				
*Marietta and Cincinnati:					1st Mortgage	3,000,000	8	1886		Mortgage (due 1863 to 1872)	103,000	7	var.	
1st Mortgage [convertible]	2,496,000	7	1868		N. Orleans, Opelousa and Gt. West:					Petersburg and Lynchburg (S. Side):				
2d Mortgage	2,000,000				Louisiana State Loan	621,000				State (Va.) Loan (S. F.)	800,000	7		
3d Mortgage	1,500,000				New Orleans City Loan	1,500,000				1st Mortgage (1866-70-'75)	365,000	6	var.	
Sterling Income	333,000	4			1st Mortgage (S. F. and Land)	2,000,000	7			3d Mortgage (1862-70-'72)	378,000	6	var.	
Domestic	928,617		59-62		New York Central:					Special Mortgage (1865-'68)	175,000	6	var.	
Memphis and Charleston:					Albany Loan—Alb. and Sch'dy.	127,000	5	1864	102	Last Mortgage (1861 to 1869)	132,500	8	var.	
State (Tenn.) Loan	1,100,000	6			State Loan—Sch'dy and Troy	100,000	6	1867		Phila., Germant'n and Norrist'n:				
1st Mortgage	1,600,000	7	1880		State Loan—Rochester and Syr.	77,382	5†	1861		Consolidated Loan	274,900			
Memphis, Clarkesv. and Louisv.:					State Loan—Buffalo and Roch.	55,300	5†	1865		Loan of 1842	100,000			
State (Tenn.) Loan	910,000	6			State Loan—Roch., L. and N. F.	298,000	7	1861		Philadelphia and Reading:				
Memphis and Ohio:					Stock Subscription	785,000	6	1883		Mortgage	705,000	5	1890	91
State (Tenn.) Loan	1,340,000	6			Premium Consolidated Stock	8,000,000	6	1883		Mortgage	1,572,800	6	1890	91
Michigan Central:					Real Estate	221,000	6	1883		Mortgage (convertible)	886,000	6	1890	91
1st Mortgage Sterling	467,489	6			New Convertible	3,000,000	7	1864		Mortgage (convertible)	134,000	6	1890	
1st Mortgage (convertible)	500,000	8			*New York and Erie:					Mortgage	3,209,600	6	1870	78
Unconvertible	258,000	8			1st Mortgage	3,000,000	7	1867	92	Mortgage (convertible)	3,586,500	6	1890	
1st Mortgage (convert.) Dollar	3,831,000	8			2d Mortgage	2,000,000	7	1869	90	Lebanon Valley R. R. (convert.)	1,500,000	7	1886	
1st Mortgage (S. F.) convertible	3,087,000	8			3d Mortgage (convertible)	6,000,000	7	1871		Real Estate Mortgage	516,450		var.	
Mich. Southern and N'n Indiana:					4th Mortgage (convertible)	3,715,000	7	1880	50	Phila., Wilmington and Baltimore:				
Michigan Southern	993,000	†	1857		5th Mortgage	1,253,500	7	1883	79	Mortgage Loan	688,925	6	1890	
Northern Indiana	955,000	†	1861		Unsecured (convertible)	3,423,000	7	1871	26	Mortgage Loan	1,096,500	6	1884	
Erie and Kalamazoo	300,000	†	1862		Unsecured (convertible)	3,001,000	7	1862	28	Improvement	119,000	6	1863	
Michigan Southern	259,000	†	1863		Sinking Fund	3,925,500	7	1875		Pittsburg and Connelleville:				
Northern Indiana	299,000	†	1863		New York and Harlem:					Pittsburg Loan	500,000			
Jackson Branch	203,000	†	1865		1st Mortgage	8,000,000	7	1873	92	Alleghany Co. Loan	750,000			
Goshen Air Line	1,335,000	†	1868		2d Mortgage	1,000,000	7	1864	93	Connellsville Loan	100,000			
Detroit and Toledo	336,000	†	1876		3d Mortgage	1,000,000	7	1867		McKeesport Loan	100,000			
General Mortgage (S. F.)	2,458,000	†	1885		New York and New Haven:					Baltimore Loan	1,000,000			
2d Mortgage	2,175,000	†	1877		1st Mortgage	311,000	7	1860		Cumberland Loan	200,000			
Milwaukee and Beloit:					1st Mortgage	965,000	6	1866	91½	*Pittsburg, Ft. Wayne and Chicago:				
1st Mortgage	630,000	8			1st Mortgage	929,000	6	1875		1st Mortgage (O. and P.)	1,000,000		1865	
Milwaukee and Chicago:					N. York, Providence and Boston:					2d Mortgage (O. and P.)	750,000		1866	
1st Mortgage	400,000	8			1st Mortgage	331,000	6			Income (O. and P.)	1,991,000		1873	
2d Mortgage	200,000	7			North Carolina:					Bridge (O. and P.)	199,500			
Milwaukee and Horicon:					State Loan	2,000,000	6			1st Mortgage (O. and I.)	1,000,000		1872	
1st Mortgage	420,000	8			State Loan	1,000,000	6			2d Mortgage (O. and I.)	380,000		1873	
2d Mortgage	600,000	8			North-Eastern (S. C.):					1st Mortgage (F. W. and Chic.)	1,250,000		1873	
Farm Mortgage	150,000	10			1st Mortgage	700,000				Real Estate (F. W. and Chic.)	498,000		1874	
Milwaukee and Mississippi:					2d Mortgage	224,500				Mortgage, Consolidated Comp'y	1,223,000		1887	
1st Mortgage (convertible)	526,000	8†	1862	42	Real Estate	35,910				Pittsburg and Steubenville:				
1st Mortgage (convertible)	650,000	8†	1863		Northern Central:					Mortgage	800,000	†	1865	
1st Mortgage (convertible)	1,250,000	8†	1877		Balt. and Susq. R. R. (Coupons)	150,000	6	1866		Platte County:				
South-West Branch	350,000	8†	1866		Md. State Loan (B. and Susq.)	150,000	6			State (Mo.) Loan	300,000	6	1879	
2d Mortgage	600,000	10†	1862		York and Cumberland 1st Mort.	175,000	6	1870		Potsdam and Watertown:				
Construction	500,000	7†	1859		York and Cumberland 2d Mort.	25,000	6	1871		1st Mortgage	800,000	7†	64-74	
3d Mortgage	500,000	8†	1862		York and C. guar. by Baltimore	500,000	6	1877		Quincy and Chicago:				
Mississippi Central:					N. C. Contract	292,300	6	1875		1st Mortgage	1,200,000		1873	
1st Mortgage	1,007,363	7			Construction	1,903,500	6	1885		Racine and Mississippi:				
Income	91,200	10			Northern (Ogdensburg):					1st Mortgage (Eastern Division)	680,000	†		
Tennessee State					1st Mortgage	1,500,000	7†	1859		1st Mortgage (West'n Division)	757,000	†		
Mississippi Central and Tenn.:					2d Mortgage	3,077,000	7†	1861		Coupon	100,000		1862	
State (Tenn.) Loan	529,000	6			North Missouri:					Rensselaer and Saratoga:				
Income	95,500				State Loan	2,000,000	6			1st Mortgage			7	1863
Mississippi and Missouri:					State Loan	2,000,000	6			Richmond and Danville:				
1st Mortgage (convertible)	1,000,000	7			State Loan	350,000	6			State (Va.) Loan	600,000			
2d Mortgage (S. F.)	400,000	8			North Pennsylvania:					Guaranteed by State	200,000		1875	
Oskaloosa Division	1,425,000	7			Mortgage	2,500,000				Mortgage (Coupon)	250,000		1859	
Land Grant	7,000,000	7			Chattel Mortgage	214,500	10			Registered	150,000		1860	
Mississippi and Tennessee:					Northern (N. H.):					Richmond, Fred. and Potomac:				
Tennessee State Loan	98,000	6	1885		Mortgage (due 1860, '64 and '74)	219,500		var.		Sterling (£67,000)	324,000		1860	
Mississippi State Loan	202,799	6			Norwich and Worcester:					Convertible	54,500		1875	
1st Mortgage	171,000	7	1876		Mass. State Loan	400,000	6	1877		Dividend Certificates	35,800		1857	
Mobile and Ohio:					Mortgage	205,800	6	1860		Dividend Certificates	265,800		1869	
City (Mobile) Tax Loan	400,000	6			Mortgage	16,000	7	1860		Richmond and Petersburg:				
Tennessee State Loan	674,860	6			Dividend Scrip and Bonds	102,330	6	var.		Coupon	159,000		1875	
Alabama State Loan	389,410	6			Ohio and Mississippi (O. and Ind.):					*Rutland and Burlington:				
Income	759,415	8	1861		1st Mortgage	2,193,500	†	1858		1st Mortgage	1,800,000			
Income	354,723	8	1862		2d Mortgage	316,995	†			2d Mortgage	913,500			
Income	375,132	8	1865		Construction	4,637,920	†	1858		3d Mortgage	426,400			
Income	18,700	8	1867		Income	3,591,185	†	1858		Sacramento Valley:				
Sterling	878,035	6	1863		Ohio and Mississippi (Ill.):					1st Mortgage	400,000			
Mississippi State Loan	200,970	6								2d Mortgage	356,000			

AMERICAN RAILROAD BOND LIST.

For explanations see preceding pages.

Description.	Amount.	Interest.	Due.	Price.
Sandusky, Dayton and Cincinnati:				
Mortgage	182,000	10	1856	----
Mortgage	997,000	7	1866	----
Mortgage	1,000,000	7	1875	----
Dividend	224,000	6	'60-'62	----
Sandusky, Mansfield and Newark:				
1st Mortgage	1,200,000	7	1858	----
Saratoga and Whitehall:				
1st Mortgage	250,000	7	1858	----
1st Mortgage (R. and W. Br.)	100,000	7	1856	----
Unsecured	45,000	7	1858	----
Seaboard and Roanoke:				
1st Mortgage	300,000	---	1860	----
3d Mortgage	75,000	---	1870	----
4th Mortgage	60,000	---	1856	----
South Carolina:				
State Loan	200,000	5	1868	----
Sterling	183,333	6	1863	----
Sterling	2,000,000	5	1866	----
Auditor's	246,500	7	-----	----
Southern Mississippi:				
1st Mortgage	500,000	---	-----	----
South-Western (Ga.):				
1st Mortgage	631,000	---	1875	----
*Springfield, Mt. Vern. and Pittsb.:				
1st Mortgage	500,000	---	-----	----
2d Mortgage	450,000	---	-----	----
*Steubenv. and Ind. (P. C. and C.):				
1st Mortgage	1,500,000	---	-----	----
2d Mortgage	900,000	---	-----	----
*St. Louis, Alton and Chicago:				
1st Mortgage	2,000,000	7	1871	----
2d Mortgage	1,535,000	7	1871	----
3d Mortgage (Income)	1,000,000	10	1871	----
St. Louis and Iron Mountain:				
State (Mo.) Aid	2,501,000	---	-----	----
St. Louis City Subscription	500,000	---	-----	----
St. Louis County Subscription	1,000,000	---	-----	----
Carondelet Subscription	50,000	---	-----	----
Sunbury and Erie:				
Mortgage	1,000,000	7	1871	----
Mortgage	7,000,000	5	1871	----
Syracuse, Binghamton and N. Y.:				
Terre Haute, Alton and St. Louis:				
1st Mortgage (convertible)	1,000,000	7	'62-'72	55
2d Mortgage (convertible)	2,000,000	7	'68-'70	---
1st Mortgage (Bel. and Ill.)	517,000	7	1873	----
2d Mortgage (Bel. and Ill.)	494,000	7	1869	----
3d Mortgage (Bel. and Ill.)	503,000	10	1874	----
Tennessee and Alabama:				
State (Tenn.) Loan	514,000	---	-----	----
Mortgage	46,000	---	-----	----
Terre Haute and Richmond:				
1st Mortgage (convertible)	235,000	7	-----	----
Toledo, Wabash and Western:				
1st M. (L. Er. Wab. and St. Louis)	2,500,000	7	1865	----
2d M. (L. Er. Wab. and St. Louis)	1,200,000	7	1869	----
3d M. (L. Er. Wab. and St. Louis)	1,200,000	7	1891	----
Real Estate (L. Er. W. and St. L.)	300,000	7	1861	----
1st Mortgage (Toledo and Ill.)	900,000	7	1865	----
2d Mortgage (Toledo and Ill.)	800,000	7	1865	----
3d Mortgage (Toledo and Ill.)	600,000	7	1865	----
*Vermont Central:				
1st Mortgage	-----	---	-----	17
2d Mortgage	-----	---	-----	----
Virginia Central:				
State (Va.) Subscription	1,869,595	---	-----	----
Mort. guaranteed by State of Va.	100,000	---	1880	----
Mortgage	206,000	---	1872	----
Mortgage (coupons)	941,000	---	1884	----
Dividend, due 1865, '66 and '75	238,346	---	var.	----
Income (1859 to 1863)	161,859	---	var.	----
Virginia and Tennessee:				
State (Va.) Loan	1,000,000	6	1887	----
1st Mortgage	500,000	6	1872	----
Fractional Mortgage	23,500	6	1868	----
2d or Enlarged	1,000,000	6	1884	----
Salt Works Br. Mort. due '58-'61	203,000	6	var.	----
3d Mortgage (Income)	431,000	6	1865	----
Warren (N. J.):				
1st Mortgage	568,500	---	1875	----
Watertown and Rome:				
Mortgage (due by instalments)	688,500	7	var.	----
Western (Mass.):				
Sterling (\$899,900)	4,319,520	5	'68-'71	----
Albany City (Alb'y and W. S.)	1,000,000	6	'66-'76	----
*Western Vermont:				
1st Mortgage	700,000	---	1861	----
Williamsport and Elmira:				
1st Mortgage	1,000,000	7	-----	----
2d Mortgage	700,000	7	-----	----
Chattel Mortgage	495,000	7	-----	----
Wilmington and Manchester:				
1st Mortgage	596,000	---	-----	----
2d Mortgage	1,000,000	---	-----	----
Income	177,000	---	-----	----
Wilmington and Weldon:				
Mortgage, payable in England	443,555	---	-----	----
Sterling, issued in 1858	144,500	---	-----	----
Company's, endorsed by State	205,500	---	-----	----
Winchester and Potomac:				
Mortgage	120,000	6	1867	----
York and Cumberland:				
1st Mortgage	305,000	7	-----	----

Railroad Reports.

RAILROAD COMPANIES will oblige us by sending us copies of their Reports as soon as they are published.

American Railroad Journal.

Saturday, December 24, 1859.

New York Central Railroad.

We have given the substance of the Report made by this company to the State Engineer. Accompanying it is a Report by a committee of stockholders, consisting of J. P. Moore, C. Stebbins, M. Delano and J. T. Clark. The report of these gentlemen may be easily summed up. They certify the Report to the State Engineer to express correctly the financial condition of the Company. —That the construction account has increased, \$108,196, during the year, viz., for real estate \$34,786; for new track, \$57,079, and for new buildings, \$16,331. —That the funded debt has decreased \$68,863. —That the whole amount of Bonds extinguished by the operation of the sinking fund has been \$1,162,400. —That the road and equipment is in good condition. —That the company own 211 engines; (seven less than last year); the weight of which, excluding tenders, average all the way from 10 to 32 tons. —That they have 3,477 cars of all kinds, (69 less than last year), which average in weight from 15,360 to 28,600 lbs. The number of persons employed on the road (4,936) is also given, with the wages paid, which average from three shillings, per day, to \$3.511 92, per month, leaving it uncertain whether the reckoning was kept by lunar or calendar months.

We expected something different and better, but, probably, without any good reason. This company has a mode of proceeding peculiar to itself. As a crisis, however, appears to be approaching in the relations it sustains to the public, we supposed, at the close of its fiscal year, a period which other companies seize upon to make reports to their stockholders, that the Central would take the occasion to refer to these relations, to vindicate its policy, if this could be done, and to meet some of the charges that have been so constantly reiterated against it, and never denied, as to have gained firm hold in the popular mind. All these causes combined have given rise to a formidable party actuated by a sentiment of the bitterest hostility, and who are seeking to interfere, by law, with the action of the road in a manner that would be fatal to its prosperity. These charges and this opposition receive the greater credit and support from the studied silence of the company. They have not only never been noticed, but since its organization, in 1853, no report has yet been made by the directors to the stockholders. Since that time \$8,796,183 have been expended in construction; and in construction and operating expenses, \$29,610,701! Of the manner in which this vast sum has gone, not one word has yet been communicated directly from the directors to the stockholders, and nothing even approaching a satisfactory account was rendered! The only information obtained has been through the reports made to State Engineer, which consists in setting figures to certain blank forms furnished by the latter, and which are given by the company without the least elucidation or explanation. These figures tell nothing but results. The processes to them are entirely withheld. A million dollars might

have been squandered annually without an inkling of the fact getting to the stockholders.

One question at issue is, shall a body of men occupying an official position, be entrusted with a property which has cost its present owners \$40,000,000, and concerning which they expend \$6,000,000 annually, reaching in the aggregate \$30,000,000, under their administration, be suffered to do all this without once communicating with its owners? There would seem to be no excuse for such neglect under any circumstances. There might be some show of apology, perhaps, were there no suggestions impugning their management. But the gravest charges of delinquency, or something worse, are constantly made. Take for example the matter of fuel. In 1856 and 1857, the average cost of the article for these years was \$808,285; the cost per mile run was 21 cents. For the past year it has been 12. For 1856 and 1857 there is, therefore an apparent excess of expenditures for these objects, of \$600,000. To what was the excess due? The engines of the company were the same in 1856 and 1857, as in 1859. The quality of wood used has certainly not grown any better. Its cost has been steadily increasing. In 1856, it was \$3.30 per cord; in 1857, \$3.49, and in 1859, it was \$3.84. If the character of engines has remained the same; if the wood has not appreciated in quality, which has not been the fact; and if it has been steadily increasing in value, why is it that the cost of this article was 60 per cent. greater in 1856 and 1857 than in 1859! the company do not deign to tell us.

Public rumor, however, is not so silent. It tells us that by some sort of *hocus pocus*, in the years named, the company were defrauded out of a half a million of dollars in wood alone. We understand that the managers of this company confess, privately, to the loss of a large sum, perhaps by false measurements. If we mistake not, one of the persons loudest in his denunciations of the corrupt practices of the company in this very matter of fuel, was Mr. John T. Clark, a member of the Committee of Stockholders, who, for the past two years has acted as *white-washer* to the company. It would be pleasant to know how Mr. Clark's mind was disabused of the convictions which he expressed so strongly, and which he declared himself ready to make good. Knowing his previous position, we were very much surprised at his report in 1858, certifying all was right. We immediately wrote him for an explanation in reference to this matter of fuel, finding no allusion to it in his report. Mr. Clark did not deign a reply; why, the reader must judge. If his mind was disabused of its previous convictions in a legitimate manner, then certainly the company does itself great injustice in not disabusing the public conviction in the same way. Such indifference, under charges so grave, certainly implies a great want of keen susceptibilities.

In the late report to the State Engineer is a charge for \$60,000, for rent of the Canandaigua and Niagara Falls Railroad. We know by rumor what this charge means, but from no official allusion ever made to it. In 1858, the Central Company took a lease of the Canandaigua and Niagara Falls Railroad at an annual rental of \$60,000. If such be the fact, should it not have been communicated to the stockholders and their consent obtained?—or, if not obtained, should not some

statement have been submitted, showing the necessity for a lease of this branch, and the value it has, or is likely to prove, to the Central. The Directors are not the owners of this road. They are the agents for its owners. Should they not, therefore, occasionally report to its owners transactions where millions are involved, the expediency of which are gravely questioned.

But there is a graver necessity to move this company to speak, than any we have recited. By a majority of the people of the State, we believe, the policy of the Central Railroad is regarded as hostile to their best interests—that it is seeking to destroy the revenues and break down the Erie Canal, for the purpose of creating a gigantic monopoly on its ruins. To meet this alleged policy of the Central, the canal tolls are to be re-imposed. Such is the conviction of a very large and powerful party, who will leave no stone unturned to effect its objects. In this contest, the company certainly are on the right side. An adequate statement of the question involved, in all its relations, would, we are confident, forever put to rest the movement we have described. If not met in this way, it may very probably be successful, to the utter ruin of the road. That the company should fail to seize upon a view of this question, that can certainly be turned to their advantage—so much so as to silence a very ugly and formidable opposition, exceeds our comprehension. Perhaps they think other means more formidable and effective than appeals to reason and good sense. There may be reasons, too, where they wish to avoid public discussion altogether. However, this may be, the course pursued is the one most calculated to strengthen the opposition to the company, and confirms, by its studied silence, whatever charge may be uttered against it.

Bridges on the Grand Trunk Railway of Canada.

The Grand Trunk Railway Company, during the past two years, have, with two exceptions, entirely reconstructed all the bridges on their line, between Portland and Montreal. They number altogether fifty-two, and, originally, were all upon the Howe plan. Twelve have been reconstructed of iron, and thirty-eight of wood. Of the latter, eleven are upon the Howe plan, and twenty-seven upon McCallum's. Of the two remaining to be renewed, one is to be of iron and the other of wood, on McCallum's plan.

No road on this continent possesses at this time, probably, so thoroughly constructed a series of bridges as the Grand Trunk Railway, whether of iron or wood. The latter, constructed upon the McCallum plan, are well worthy the examination of railroad managers. Built under the watchful eye of Mr. D. STARKE, the Engineer, every timber and every piece of iron is of the best quality. Every care has been bestowed upon the workmanship. The whole of the timber is planed; all the joints are thoroughly laid in white lead, and the whole frame-work is twice painted. They are then carefully covered upon furring, skilfully arranged so as to give perfect ventilation on all sides of the timber. The covering is also painted. The strength and rigidity is unequalled, and there can be no doubt that they will do service for a great many years.

The adoption of so many of these bridges upon a line where it has been generally reported and sup-

posed that nothing but iron structures were used, is the best testimonial that could be furnished as to the merits of this peculiar plan. Aside from this, it is in evidence also that the Grand Trunk Railway Company have taken the proper and sensible dollar and cent view of this bridge question. The strength of either structure, properly proportioned and properly built, is fully admitted, and the question is simply one of first cost and maintenance.

A bridge upon the McCallum plan, for 150 feet span, built in the best manner and covered, costs \$6,000; one of iron, for the same place, costs \$30,000. The interest, on the difference of cost, at 6 per cent. per annum, will rebuild the wooden bridge once in four years. It is simply a question whether it is better to pay six cents per annum, in the shape of interest on costly structures, or one cent per annum in the shape of maintenance of the cheaper plan, which, for the time being, is equally safe and serviceable.

Experience has shown that there is not the slightest necessity for interrupting the passage of a single train during the renewal of these bridges. In some instances they have been built in place; and in others, they have been built immediately alongside the old bridges and when entirely finished, the old structures have been moved out later, and the new ones moved in, between the passage of two trains. The process is not an expensive one, and involves no risk either of accident or delay.

Hannibal and St. Joseph Railroad.

Attention is invited to the advertisement of this company inviting bids for a loan of \$900,000. Accompanying the proposal is a circular from which we make the following extracts:

The Hannibal and St. Joseph Railroad connects the Mississippi, at Hannibal, one hundred and forty-five miles above St. Louis, with the Missouri, at St. Joseph, about six hundred miles above St. Louis, by the river—the length of the road being two hundred and seven miles. Besides occupying a most desirable East and West route, for through travel, and running through a fine country, it has become possessed by grants from Congress of six hundred thousand acres of the best land in the world.

The cost of the road and property of the Company, Sept. 1, was	\$11,102,826 82
Increased since by construction and interest, including interest of Jan'y 1st, 1860	335,785 18
	\$11,438,612 00
Represented by Missouri State Bonds, at 6 per cent.	\$3,000,000 00
Bonds based upon its lands, at 7 per cent.	5,000,000 00
Convertible second Mortgage Bonds, at 7 per cent.	757,000 00
Plain Bonds	11,000 00
Floating Debt, Sept. 1. .	\$564,214 82
Which will be increased to Jan'y 1, by interest and other outlay	335,785 18
	900,000 00
Stock paid	1,770,612 00
	\$11,438,612 00

Although at first sight the Stock basis may seem small, it should be noted that it has, in addition, the valuable grant of land, which, it is estimated, will realize over \$7,000,000, and will, in that case, reduce the cost of the road to a very small figure, and ensure large dividends to the stockholders.

The road was opened through for business in February, 1859, and under the sharpest possible

competition with the established lines of boats upon the Missouri, which, before, had controlled the whole through traffic, and during the most depressing season which has been known at the West for twenty years, has earned net \$39,500 per month towards paying its interest.

After funding our floating debt, we shall commence the year with the following advantages over the last one:—Our titles to the whole of our lands being secured, we are enabled to offer them all for sale, with prospect of selling freely at good prices.

The crops, still in the country, are known to be abundant, and must swell our spring receipts. The emigration to the gold regions promises to be large, and steadily increasing. The steamboat opposition, though not entirely destroyed, will certainly be reduced to moderate competition.

The Platte County Railroad, connecting with ours at St. Joseph, is so far constructed (by other parties) that it will help our spring traffic and weaken our river competition; and, finally, with good crops, bringing fair prices, the general business of the West cannot fail to improve.

Under these circumstances, the Directors count upon largely increased earnings. A safe calculation is believed to be \$60,000 per month, average net earnings, which will pay the Interest and Sinking Fund on our Bonded Debt, including the present issue, while a very small additional increase of earnings, or decrease of interest by the operation of land sales, will provide a fund for dividend.

Notwithstanding these favorable prospects, the necessity of sustaining unimpaired the credit of the Company, which has passed safely through the trials of 1857, will induce the Directors to sell the Bonds now offered to the highest responsible bidder; and they earnestly call upon each stockholder to send in a bid for his pro rata share of the Bonds, and thus protect himself from the sacrifice which he may otherwise meet from a too low sale of them.

Watertown and Rome Railroad.

A meeting of the directors of this company was held in this city on the 15th inst., at which Addison Day was appointed Superintendent in the place of Carlos Dutton, who has retired in consequence of the continued illness of his family. In August, 1855, the mortgages and floating debt of the company were about \$850,000. To pay the floating debt and the mortgage bonds which were maturing annually at the rate of about \$45,000, the company executed a mortgage on its property of \$800,000, payable in 1880, with a provision for a sinking fund to pay off the whole amount at maturity. The company have now on hand cash and cash assets sufficient to pay off their entire floating debt, all of which matures within about sixty days. The market for railroad securities has been such that the directors have declined to submit to the loss on a sale of these bonds at current prices, and have paid the maturing bonds and the floating debt out of the annual earnings, at the expense of depriving the stockholders of cash dividends. Under these circumstances, a dividend of ten per cent., payable in these bonds, in lieu of cash, has been declared, to be called for on the first day of March next. This bond dividend will still leave the indebtedness of the Company considerably within the 800,000 mortgage, payment of which is provided for by the sinking fund. The condition of the road and its equipment has never been better than at the present moment.

Resignation of Wm. H. Clement.

This gentleman, who has occupied the position of General Superintendent of both divisions of the Ohio and Mississippi Railroad, has tendered his resignation, to take effect on the 1st of January next.

By reference to our advertising columns, it be seen that Messrs. RICHARD NORRIS & SON, Locomotive Steam Engine Builders, and Manufacturers of Railway Tools and Machinery, at Philadelphia, have appointed Mr. EDWARD GIBSON, of No. 90 Cedar Street, as their New York agent. Mr. Gibson also proposes to transact a General Railway Commission business. Orders are solicited for articles required in the construction, equipment and operating of railways.

Finances and Public Works of Virginia.

We copy from the late message of the Governor of this State the following extracts in reference to the finances and public works of this State.

The sinking fund shows:

Debt due on the 1st Jan., 1852 ... \$11,971,838 30
Debt created since 19,480,321 33

Total of old and new debt \$31,452,159 93
Redeemed of old \$1,261,843 00
Investment in bonds
for redemp'n of new 1,083,657 20
Total redeemed & in-
vested for redemp'n 2,345,500 20

Leaving of old debt.. 10,709,995 30
Leaving of new debt. 18,396,664 13
Total of the old and
new, unredeemed
and uninvested... \$29,109,659 43

The annual interest to be provided
for as the whole debt now stands,
adding unredeemed and invest-
ment together, is \$1,666,729 36
For each half year..... 803,414 08

I earnestly unite with that report in recommend-
ing—

1st, That all taxes, State and corporation, on State bonds be repealed and forbidden. The tax tends to keep the bonds below par a per cent. far greater than the amount of the tax, and that fact alone costs the State more than the Treasury gains by the tax. It is a tax, too, upon our own citizens, for the advantage of non-residents who are benefited by speculation in our stocks to the extent of any fictitious cause which keeps them down in the market below their intrinsic value. It drives our State bonds out of the State because they are held to greater advantage elsewhere than at home, by the amount of the tax and by the greater amount to which it affects the credit of the bonds.

2nd, I recommend that the commissioners be required in all cases to invest the sinking fund in our bonds at par. That is in the true sense and spirit of the constitutional provision of the fund. It contemplated that the bonds should never be sold below par by the State; should be redeemed in a limited period of time, and that was with the view of having them always honored at par. Whenever the State is seen, by its officers, in the market, shaving its own bonds for its own investment, it cannot but injuriously affect their credit. The fact of a perpetually operating sinking fund always redeeming them, and always investing in them, at par, would tend more than any other intrinsic cause could, to keep them at par. Let the motto of State credit be: We will not sell nor pay our bonds at less than par, and we will not buy because we cannot sell at less. And this policy is not only the best because most moral and honest, but it is the most profitable in dollars and cents too; for—

3d, The cost of keeping bonds below par is incalculable. Those opposed to public improvements, and to appropriations for them, are short-sighted in resisting them by this mode of keeping down our bonds in the market. They embarrass appropriations by depreciating our credit, and if appropriations are made, their application is embarrassed or prevented by the inability, as they imagine, of selling bonds below par. But the bonds are issued to the companies at par. They

are immediately sold at a discount, the appropriations are diminished so much, and the contracts on the works raised so much more by the operation. This cost and loss and risk at last falls upon the State, and is far greater than the discount on the bond. And,

4th, I earnestly ask the Legislature to provide by general law against the failure to pay interest punctually on our guaranteed bonds. The bonds of the State, at one period the present year, went up above 99 in New York, and so continued until about \$67,000 only of the interest due on the guaranteed bonds of the James River and Kanawha Company fell due in July and failed to be paid. The last General Assembly had made provision up to that day only; and though there was plenty of money in the treasury, there was no authority of law in any functionary to pay that interest. Our bonds sank immediately to 95, and since to 93, in the market. I recommend that authority be given the Executive to pay the interest on them as it may happen to fall due.

5th, I recommend that in future, so far as it can be done consistently with existing engagements, the interest due upon our State bonds, and all debts be paid at our own treasury in Richmond, and not elsewhere.

6th, That the mode and rate of borrowing money and selling their securities, by joint stock companies, be prescribed and regulated by law so as to conform better to the conservation of State credit.

The bonds hypothecated in the hands of T. J. Souther in New York and the settlement with him are fully accounted for by the Commissioners and the report of the Attorney General hereto appended. I recommend a careful review and understanding of that subject with a view to an inquiry by the Legislature as to the best mode of preventing such cases in future.

Outstanding floating debt in 1857; on account of sinking fund of treasury notes outstanding 1st October, 1857, on account of interest due literary fund on account of interest on bonds of James River and Kanawha Company, and capitation tax of 1856 \$1,282,466 51
Actually paid up to 1st Oct., 1859.. 950,564 71

Leaving a balance then outstanding
of \$331,901 80
By amount of balance in treasury
that day 66,888 55

Actual floating debt \$265,013 35
Showing a floating debt paid, and
cash in hand since 1st Oct., 1857. \$1,017,453 16
Permanent debt paid and invested
by sinking fund since 1852 2,345,500 20
Leaving the funded debt now 29,109,659 43
Floating debt 265,013 35

Besides thus sinking the permanent
and paying the floating debt there
has been added to the investment
of the literary fund the sum of... \$191,731 80
On the 1st of October, 1858, it was... 1,641,758 37
And on the 1st Oct., 1859, it was... 1,833,470 17

Making the above increase of \$191,731 85
And in addition to this, the public
works have yielded the last two
years an increase of surplus re-
venue of \$292,000 00
Thus: 1855-56 \$168,000 00
1856-57 130,000 00

298,000 00
1857-58 \$170,000 00
1858-59 420,000 00
\$590,000 00

Showing an increase of the last over
the previous year of \$250,000 00

These facts are encouraging, and show that our
debts are diminishing, and our means and sources
of credit are increasing.

If no cause of depression in trade occurs, we

may reasonably assure ourselves of the fruits of
past expenditures for the future and calculate
that with care and good management, they will
yield a steady annual increase.

Aggregate estimated receipts and charges.

Balance in Treasury (Commonwealth proper) on
the 1st of October, 1859 \$104,013 36
Estimated receipts for fiscal year
1859-60 3,771,068 96

Disbursements for fiscal year 1859—
1860 3,660,239 15

Estimated surplus 1st Oct., 1860 \$214,843 17
Estimated receipts for 1860-61 5,785,762 96

Total receipts for 1860-61 \$4,000,606 13
Estimated charges for 1860-61. 3,106,453 31

Surplus on 1st October, 1861. ... \$894,152 82

Public Works.

We have seen how much we can venture to ex-
pend at once on our improvements. We have but
to review them as they now stand, to see their
relative importance. The great argument for
them all is, that they are indispensable to build
up for us a centre of trade: and for the value
and effect of that I must refer you to message to
the last General Assembly.

I repeat that the most important line in the
State is the James River and Kanawha Canal. It
should not be left where it is any longer. On the
11th of February, 1856, I reported that this great
work was left "without funds, without credit,
bound by a mortgage, and resting its whole weight
on the arm of the State." Since then nothing has
been done but to appropriate the sums sufficient
to meet the interest due on its debts up to 1st of
July last; and then the appropriations failed, and
the State failed to pay its interest on guaranteed
bonds. This affected the State credit more inju-
riously than it did that or the canal. I ask for an
immediate appropriation of this interest, and a
permanent provision for it in future. For the rea-
sons given in my message of 1856, I repeat the re-
commendation then made, "that the capital stock
of the company shall be increased to the amount
of 80,000 shares, of which the State shall take 60,-
000 in payment of her debt and liabilities due by
the canal, and the remaining 20,000 shall be sold
if practicable, to private persons, thus commuting
the debt and liability of the State into stock of
the company." This will complete the canal to
Covington, and when the Covington and Ohio
Railroad is completed, the revenue, it is supposed,
will pay the interest on the whole investment.

Besides the connection of this work with the
Kanawha, it has another connection, which em-
braces one of the grandest developments of our
State. The continental water-aid East of the
Andes is from North to South. The only excep-
tion, remarkable, is chiefly in the western part of
Virginia's territory. The New river rises far south
in Carolina, and passing our line, runs northeast
to Montgomery, and thence west of north, cuts
through the whole range of the Alleghany Moun-
tains, and runs north to the mouth of the Gauley,
thence northwest to the Kanawha. It is one of
the most remarkable water passages in the world,
and full of development in every respect. Oppo-
site its junction with the Kanawha, eastward, the
heads of the Monongahela rise and run northward
to Pittsburg. Thus Virginia alone has waters, for
hundreds of miles, running from south to north,
contrary to the general flow of waters. There is
great power in this peculiarity of formation, and
time will show that it is one of the elements of our
future progress and greatness in wealth. It in-
vites Virginia by all means to connect the James
and the New rivers first, and the James and the
Monongahela, if practicable afterwards. I be-
lieve that the connection with New river is practi-
cable, and surveys ought to be ordered for it.
Looking to this, and secondarily to test the pre-
sent location of the James river across the Alle-
ghany ridge, I ordered a small reconnoissance of

the continent fund the past summer. The President and Engineer of the Canal gave me every facility and assistance, and I was further aided by Col. Smith, of the Institute, with a corps of its graduates. The report of Engineer Lorraine will be submitted to you. I trust the General Assembly will, by a liberal appropriation, enable the Institute to purchase a complete set of topographical instruments, and organize a corps of civil engineers for surveys generally, and especially for ascertaining the best mode of connecting the James with New river, and of improving the navigation of the latter. I commend to your attention the full and able report of Col. Ellis on the affairs of the James River and Kanawha Company.

The next most important work is:

THE COVINGTON AND OHIO RAILROAD.

It ought to be completed in the shortest possible time. To that end I recommend an appropriation of two millions per annum until the work is finished to the Ohio. Argument is idle on this policy.

The other works should be classified according to their state of completion. The Charlottesville and Lynchburg road is nearly finished; the Norfolk and Petersburg road is finished; the York River has reached Pamunkey; the Danville road will soon be connected with the works of North Carolina. Upon the whole, then, I recommend for the next two years, the following appropriations:

To the Covington and Ohio road.....	\$4,000,000 00
To the Manassas Gap road.....	200,000 00
To the extension of the Danville road	200,000 00
To the clearing of James and Appomattox rivers.....	150,000 00
To all other works, as it may be distributed.....	450,000 00

Total recommended.....\$5,000,000 00

And by all means I urge the charter to construct the railroad from Strausburg to Winchester.

And the Harper's Ferry Branch of the Manassas Railroad (the Loudoun branch,) diverging from the main stem 21 miles from Alexandria, and 43 miles only in length, upon which \$180,000 has been expended, ought to be constructed, to give us access to the northern border on our own territory.

INTERNAL IMPROVEMENT COMPANIES.

The act passed March 27, 1858, to make investments of the Commonwealth more productive has had a most salutary influence in enforcing payment of interest and sinking fund on loans, and of dividends on preferred stocks.

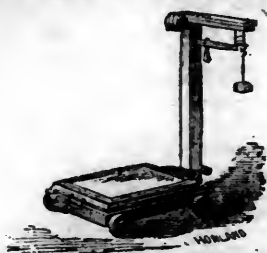
The 1st section (chap. 7, acts 1857-'58) requires all companies to whom the Commonwealth has made a loan or created a preferred stock, or whose bonds it has guaranteed, to report to the Auditor of Public Accounts, within fifteen days of each month, the gross amount derived from tolls, freights, fares and other sources received during the preceding month. Under the provisions of this section reports have been received from the following companies:

Virginia Central Railroad Company average monthly earnings.....	54,442 06
Virginia and Tennessee Railroad Company average monthly earnings.....	58,399 43
Richmond and Danville Railroad Company average monthly earnings.....	47,464 82
South Side Railroad Company average monthly earnings.....	33,472 56
Richmond, Fredericksburg and Potomac Railroad Company, average monthly earnings.....	23,809 19
Richmond and Petersburg Railroad Company average monthly earnings.....	13,317 98
Winchester and Potomac Railroad Company average monthly earnings.....	5,141 49
Roanoke Valley Railroad Company average monthly earnings.....	1,589 28
James River and Kanawha Company average monthly earnings.....	20,029 93
Elk River Bridge Company average monthly earnings.....	145 02

The South Side Railroad Company failed to report in April, May, June, July, August and Sep-

tember. The Roanoke Valley to report in September.

FAIRBANKS'



STANDARD SCALES,

Adapted to every branch of business where a correct and durable Scale is required.

SCALES FOR RAILROADS,
SCALES FOR COAL DEALERS & MINERS,
SCALES FOR HAY AND CATTLE DEALERS,
WAREHOUSE AND TRANSPORTATION SCALES,
PORTABLE AND DORMANT SCALES FOR STORES,
Scales for Grain and Flour Dealers,

Counter Scales, every variety,
BANKERS' AND JEWELLERS' BALANCES,
SCALES FOR FAMILY AND FARM USE,
WEIGH-MASTERS' BEAMS,
POST OFFICE SCALES, ETC., ETC.,

All of which are **WARRANTED** in every particular. Call and examine, or send for an illustrated circular.

FAIRBANKS & CO.,
189 Broadway, New York.

New FIRST CLASS FREIGHT ENGINE.

Cylinder 16x24. Wheels 5 feet. Fire-box 4 ft. 1 1/2 in. long, and 5 ft. 6 in. deep. 138 flues 12 ft. by 2 inches. Boiler 48 inches. Tender 2,000 gallons. For sale low by
WILLIAMS & PAGE,
 44 Water st., Boston.

OIL! OIL!

PEASE'S

IMPROVED ENGINE AND SIGNAL OIL,

FOR
RAILROADS, STEAMERS, PROPELLERS,
AND FOR EVERY CLASS OF
MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and **TWENTY-FIVE per cent. more durable** than Spem Oil, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM

In no case has it failed to meet the approval of the consumer. The *Scientific American* and *Manufacturers' Journal*, after testing this Oil, pronounce it superior to any other for Lubricating. — For sale **ONLY** by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.
 Reliable orders filled for any part of the United States or Europe.

RAILROAD IRON AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Downish Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN,
 Boston, June, 1851. **29 Central Wharf.**

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.
CASWELL & PERKINS,
 Brokers, 69 Wall st.

New York, July 9, 1859.

FEDMUND GIBSON,

AGENT OF RICHARD NORRIS & SON,

LOCOMOTIVE WORKS,

PHILADELPHIA.

ALSO, GENERAL

RAILWAY COMMISSION AGENT.

Railroad Iron, Car Wheels, Axles, Iron, Brass Castings, Spikes,

Chairs, and Locomotive work in general, solicited.

ALSO,

WILLIAMS' PATENT RAILROAD LAMP.

ALL ORDERS PROMPTLY FILLED.

No. 90 CEDAR ST., NEW YORK.

J. R. PARSONS. J. H. DOBBS.

PARSONS & DOBBS,

RAILWAY COMMISSION MERCHANTS,

AND NEGOTIATORS OF SECURITIES,

3 NASSAU ST., (opposite the Custom House,) NEW YORK.

WE ARE PREPARED TO FURNISH, ON THE SHORTEST NOTICE,

ALL ARTICLES REQUIRED IN THE

Construction, Equipment & Operating of Railways

AGENTS FOR THE

JERSEY CITY LOCOMOTIVE WORKS.

WILLIAMS & CO.,

WIG AND TOUPEE

MANUFACTORY.

365 BROADWAY (UP-STAIRS),

NEXT TO THE CORNER OF WALKER ST.

WIGS, TOUPEES

AND ALL KINDS OF

LADIES' HAIR WORK,

WHOLESALE AND RETAIL.

Also attached to this Establishment is a

HAIR DRESSING, CUTTING, DYEING, AND SHAMPOOING

SALON,

Where the best Artists in the City are employed.

The public are requested to call and try.

W. WILLIAMS. J. ALEXANDER.

\$900,000

Hannibal and St. Joseph

Railroad Company's Bonds.

THE HANNIBAL AND ST. JOSEPH RAILROAD

Company will, until Wednesday, 28th December, 1859,

at noon, receive at the Office of the Fiscal Agency of the

Company in Boston, sealed proposals for a **Loan of**

\$900,000, or any part thereof, upon the following sec-

urities:—One-third of each bid must be for the Second

Mortgage 7 per cent. Bonds of the Company, in sums of

\$1,000 and \$500 each, dated July 1, 1858, known as the Con-

vertible Bonds, payable in 25 years, semi-annual coupons,

and principal payable in New York, and being secured

under a Sinking Fund Mortgage to H. H. Hunnewell, Sid-

ney Bartlett and Henry P. Kidder, Trustees. — Two-thirds

of each bid for Third Mortgage 7 per cent. Bonds of the

Company in sums of \$1,000 and \$500 each, dated November

15, 1859, payable in 30 years, semi-annual coupons and principal

payable in New York, secured by a Mortgage on the

Road to H. H. Hunnewell, Sidney Bartlett, and Nathaniel

Thayer, Trustees, which provides for a Sinking Fund out

of the earnings of the Road, calculated to extinguish them

at maturity or sooner.

The said Mortgage being for \$1,500,000.

10 per cent. of each subscription will be payable on the

2d day of January, 1860, and will be retained as secu-

urity therefor until the whole of each subscription is

paid up.

10 per cent. on the Tenth of January, 1860.

20 " " Tenth of February, "

20 " " Tenth of March, "

20 " " Tenth of April, "

20 " " Tenth of May, "

100

For each instalment except the first, Bonds in the pro-

portion above-named for the full amount of the instalment

will be issued, with proper adjustment of interest accrued

when such payments are made; or payments may be made

earlier, allowing a discount of seven per cent. per annum

upon the money paid.

Upon the above-named conditions, the Loans will be

awarded to the highest responsible bidders, the Company

reserving to themselves the right to consider the respon-

sibility of the bidders as well as the rate offered.

Sealed proposals should be addressed to the undersigned,

R. S. WATSON, Treasurer of the Fiscal Agency,

45 City Exchange, Boston, Mass.

December 13, 1859.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,

MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely
the same as that of LOW MOOR and BOWLING,
being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,
44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

RAILROAD IRON.

THE undersigned, having been appointed Agents for
Messrs. BLOKOW & VAUGHAN, proprietors of the
ESTON, MIDDLESBRO', and WITTON PARK
IRON WORKS, YORKSHIRE, ENG.,
are prepared to contract for the sale of RAILROAD
IRON of a superior quality and on the most advantageous
terms.

MEAD & BELL,
17 William st., N. Y.

LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND
WESTERN RAILROAD, this Company are enabled to obtain
the MAGNETIC ORES from the most celebrated mines in
New Jersey, which used in combination with their native ores,
produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and
are, therefore, prepared to execute orders promptly for RAIL-
ROAD IRON of any pattern and weight, Car Axles,
Spikes, and Merchant Iron. They have on hand pat-
terns for T Rails, of the following weights per lineal yard,
viz—25, 30, 36, 40, 45, 50, 60, 62, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at
the office of the Company, 46 Exchange Place, N. York.

Address J. H. SCRANTON, President,
Scranton, Pa.
or DAVID S. DODGE, Treasurer,
46 Exchange Place,
NEW YORK

RAILROAD IRON.

THE RENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may
be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:

BUSSING, CROCKER & DODGE,
32 Cliff St.

CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.

Far superior to the ordinary kind.

FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough
Steel. Gun Metal. Wire and Machinery Steel.
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 Cliff st., New York.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length, 2 to 20
feet as required.

Wrought Iron Welded Tubes,

From ½ to 3 inches bore, with Screw and Socket Connections.
T's, L's, Stops, Valves, Flanges, etc., etc.

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MORRIS, TASKER & CO.,
PASCAL IRON WORKS.

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
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THOS. T. TASKER, JR.

CHAS. WHEELER, JR.,
STEPHEN P. M. TASKER.

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ENGLISH and AMERICAN Railroad Iron for delivery in
N. York and other markets in the United States and
England. For sale by

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MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
CUT NAILS and SPIKES, FIG IRON, etc.

Having the selling agency of a number of the Rolling Mills,
Furnaces and Forges in this State, orders for any de-
scription of IRON can be executed.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are pre-
pared to contract to deliver, free on board at shipping
ports in England, or at ports of discharge in the United States,
RAILS OF SUPERIOR QUALITY,
and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William st.

New York, Aug. 1, 1858.

ROUND OAK IRON WORKS, STAFFORDSHIRE.

LORD WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS and BARS of every variety.
Address RICHARD SMITH, Esq., Dudley.

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BALTIMORE, over Farmers' & Mer. Bank.
NORRIS & BROTHER, Agents.

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S. W. HOPKINS,
METAL BROKER,

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INGOT COPPER, PIG LEAD, BLOCK TIN, SPELTER,
Sheet Zinc, Antimony, Tin Plates, Roofing Plates, Pig
Bar, Hoop, Sheet and Boiler Iron.

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Hon. DANIEL F. TIFMANN, Mayor, New York.
WM. A. COBS, Esq., Pres't Fritton Fire Insurance Co., N. York.
Messrs. T. B. GODDINGTON & Co., New York.
" P. & J. P. HAWES & Co., Boston.
" FARRAR, FOLLETT & Co., "
" E. J. ETTING & BROTHER, Philadelphia.
" NATHAN TROTTER & Co., "
" F. L. PARETT & Co., Baltimore.
" E. PRATT & BROTHER, "
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NEW HAVEN COPPER WORKS, WM. W. GODDARD,

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MANUFACTURERS OF ALL KINDS

Braziers & Sheet Copper,

YELLOW SHEATHING METAL, BOLTS AND NAILS,

COPPER BOTTOMS,

Locomotive Strips, Tubing Bolts and Bars,

COPPER AND BRASS RIVETS AND BURRS.

Large Plates and extra-sized Sheets, rolled to order at short notice.

TINNED COPPER OF ALL DIMENSIONS,
INGOT AND PIG COPPER.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commis-
sion, delivered at an English port, or at a port in the
United States, will be made by the undersigned.

THEODORE DEHON,

10 Wall st., near Broadway, N. Y.

500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA
IRON COMPANY, situated at JOHNSTOWN, Cambria
Co., Penna., and purchased all their real estate, are now pre-
pared to execute, at short notice, orders for RAILS of any
required pattern or weight, on the most liberal terms.
PHILADELPHIA, { NORTH PENNA. R. R. BUILDING.
OFFICE, { No. 407 Walnut st.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in
STAFFORDSHIRE and WALES, are prepared to contract for
delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,

13 Cliff st., N. Y.

STEEL, FILES, ETC.

R. GROVES & SONS,

SHEFFIELD, ENGLAND,

MANUFACTURERS of warranted Cast Steel, superior

quality, for Tools, Machinery, and Engineering purposes.

Single and Double Shear, Bilster, German Spring and Sheet
Steel of every description, also, Cast Steel Files, of high
reputation, especially adapted for the use of Mechanists, and
Saws and Edge Tools of all kinds.

A stock of the above goods constantly on hand.

CORPORATE MARK



CHAS. CONGREVE & SON, Agents,
13 Cliff street, N. Y.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are pre-
pared to make CONTRACTS FOR RAILS deliv-
ered free on board at ports in England, or on ship at ports in the
United States

M. K. JESUP & COMPY,
44 Exchange Place.

New York, 1st June, 1859.

RAILROAD IRON.

THE subscribers are prepared to contract for RAILS
delivered at an English port or at a port in the United
States. Also for all descriptions of

RAILROAD EQUIPMENTS

upon favorable terms.

JOHN W. HULL & CO.,

No. 41 Exchange Place, NEW YORK.

RAILROAD IRON.

THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in **NEW YORK** and **NEW ORLEANS**.

THE GUTTA PERCHA MANUFACTURING COMPANY,
163 BROADWAY, NEW YORK,

(Factory 25th street 10th Avenue.)

MANUFACTURERS

OF EVERY DESCRIPTION OF

Gutta Percha Goods,

Army, Navy, Engineers and Emigrant Equipments,

CLOTHING,

HOSE, PACKING, BELTING,

LOCOMOTIVE BUCKETS,

ENAMELED CLOTHS, ETC.

These goods are free from offensive smell, are pliable and elastic, of fine finish, and unlike India Rubber, will not become decomposed or injured by oils or acids, or affected by the hottest climates.

GEO. N. DAVIS, Treasurer.

WINDOW, PICTURE AND CAR

GLASS.

F. HOPKINS & BROTHER,

IMPORTERS,

193 Pearl St., NEW YORK.

GUTTA PERCHA CEMENT ROOFING.

THE CHEAPEST and most DURABLE ROOFING IN USE.
Sent to any part of the country with directions for application.

SPECIMENS and references can be seen, and any desired information obtained on application, by letter or in person, at our office, 510 BROADWAY, N. Y. (Opposite the St. Nicholas Hotel).
JOHNS & CROSLY.

THE LAWRENCEVILLE MANUF'G CEMENT COMPANY,
OFFICE 96 WALL ST.,
NEW YORK.

THIS Company manufacture **ROSENDALE HYDRAULIC CEMENT** of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings. For sale upon favorable terms by addressing.

WM. N. BEACH, President.
CHAS. E. LAWRENCE, Sec'y.

CEMENT, PLASTER, ETC.

THE HUDSON RIVER CEMENT CO.

HAVE commenced manufacturing for the season, and can now furnish a very superior article of fresh Rosendale Cement, Calcined Plaster, Farmers' Plaster and Marble Dust. Address

HUDSON RIVER CEMENT COMPANY,
18 Jersey City, N. J.

HOFFMAN'S ROSENDALE CEMENT,
OFFICE, 92 WALL ST., NEW YORK.

THE LAWRENCE CEMENT COMPANY are prepared to receive and execute orders for their Cement, to any extent that may be required. They would particularly call the attention of purchasers to the distinguishing brand of their manufacture, viz: **HOFFMAN'S ROSENDALE CEMENT**. This seems to be necessary, as they have established a reputation for the superior quality of their Cement, and there are various other brands offered, as "Rosendale" Cement. It has the unqualified approbation of the most eminent Architects and Engineers, being used in almost every department of the Works under Government. It is put up in the most careful manner, each barrel being well lined with paper, and will be delivered on ship board, in this city, on the most favorable terms. Particular attention given to shipping orders, and Freight obtained on the best terms.

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Rosendale Hydraulic Cement.

THE NEWARK AND ROSENDALE CEMENT COMPANY are now receiving fresh from the Mills their approved **ROSENDALE CEMENT**, warranted pure and free from quick lime, and which has given such general satisfaction in the various government and other public works in which it has been used. Purchasers and shippers should be careful to get the genuine **ROSENDALE CEMENT**, branded "NEWARK AND ROSENDALE" "H. WILDE." This Cement does not swell and burst the hoops when stored in warm climates. It is packed in tight kiln dried barrels, and is especially adapted for safe shipping on long voyages. Terms reasonable, which may be known by addressing,

JOHN H. STEPHENS, President, Newark, N. J., or
HENRY WILDE, Secretary, 90 Wall st., N. Y.

DELAFIELD & BAXTER'S, ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our CEMENT for public works, or other purposes. We warrant it equal in every respect to any manufactured in this country. It attains a great degree of hardness, sets immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength. For sale in tight barrels, well papered, on application at their office, by **DELAFIELD & BAXTER**, 104 Wall st. The above CEMENT is used in most of the fortifications building by government.

FINANCIAL.

BANKING and COMMISSION AGENCY.

A. G. JAUDON,
No. 54 Wall street, NEW YORK.

AGENCIES of a financial nature connected with Railroads A Manufacturing and Commercial Business, and Banking operations generally, receive special attention. STOCKS, BONDS, NOTES and PILLS OF EXCHANGE BOUGHT and SOLD on orders.

CINCINNATI STOCK EXCHANGE.
KIRK & CHEEVER,
STOCK BROKERS AND RAILROAD AGENTS,
No. 83 WEST THIRD STREET,
CINCINNATI, OHIO.
Railroad Stocks, Bonds, etc., bought and sold, on COMMISSION. Regular sales at public auction at the MERCHANTS' EXCHANGE.

SIMEON DRAPER, Auctioneer.

By SIMEON DRAPER,
OFFICE, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES
AT 36 PINE ST., EVERY DAY.
STOCKS and BONDS bought and sold at private sale
Sale every day at 1 o'clock. See Catalogue.

R. H. RICKARD,
MINING AGENT & STOCK BROKER,
Office No. 21 Nassau st., NEW YORK.

BUYS and sells MINING SHARES, MINES and MINERAL LANDS on commission, will examine Mines and Mineral Lands in any part of the United States, and report on their value, etc., etc.

REFERENCES.—P. Chouteau, Jr., & Co., New York and St. Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A. Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., Frost & Forrest, Conn. Mer's N. Y., John F. Butterworth, Esq., N. Y., G. O. Williams & Co., Detroit, Mich., Capt. D. Tyler, Norwich Conn., Kittenhouse, Fant & Co., Bankers, Washington, D. C. Particular attention given to Lake Superior business.

EUGENE THOMSON.
STOCK AUCTIONEER AND BROKER,
No. 37 William st., NEW YORK.

AUCTION SALES OF STOCKS and BONDS every TUESDAY, at 12 o'clock, at the Merchants' Exchange, RAILROAD BANK, INSURANCE, and other SECURITIES bought and sold at the Brokers' Board, at Private Sale, or at AUCTION. All dividends payable in New York collected, and prompt remittances made.

NOTE: NOT BONA FIDE QUOTATIONS FURNISHED THE PRESS. THE MARKET VALUE OF SECURITIES WILL NOT BE SUPPRESSED OR ALTERED, AND DECEPTIVE OR IRRESPONSIBLE CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES.—Messrs. Wm. and Jno. O'Brien, Thos. Denny & Co., Horace Greeley & Co., Cragin & Co., Todd & Co., J. & C. Merriam, Geo. F. Nesbitt & Co., Eugene Plunkett, Esq., (President Excelsior Ins. Co.), John G. Storm, Esq., (President Lenox Ins. Co.), L. G. Irving, Esq., (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Grice, M. D., Rev. Edwin F. Hatfield, D. D., Rev. Theo. L. Cuyler, John Camerden, Esq., Beig. F. Manierre, Esq., New York; Ods Allen, Esq., Albany N. Y.; Messrs Gorham & Co., Providence, R. I.

ALBERT H. NICOLAY,
STOCK AUCTIONEER,
BROKER AND BANKER,
No. 52 WILLIAM STREET,
Near WALL STREET, NEW YORK.

REGULAR AUCTION SALES OF
STOCKS and BONDS,
NOTES and other SECURITIES,
EVERY MONDAY and THURSDAY,
(Which have been the regular established days of sale for many years.)

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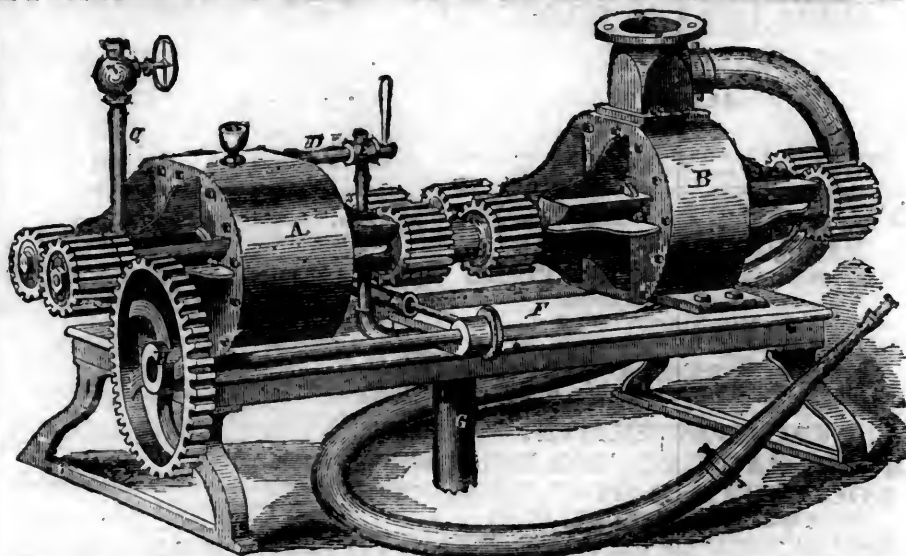
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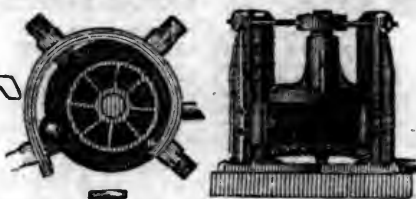
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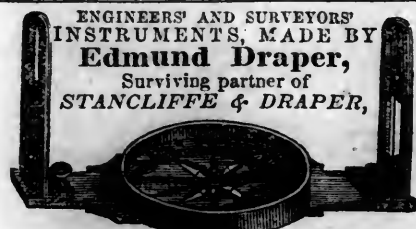
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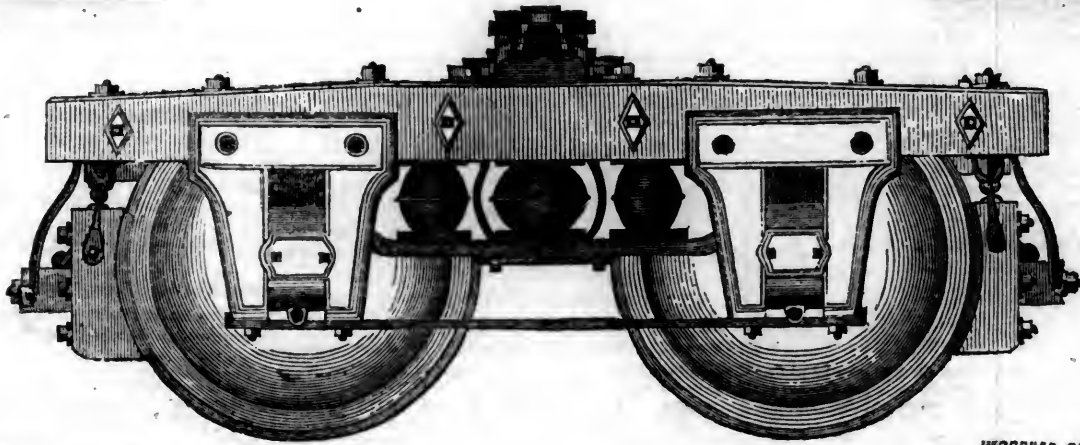
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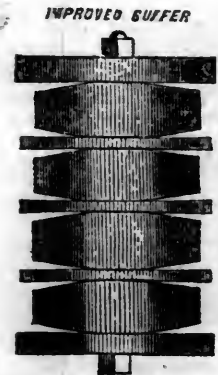
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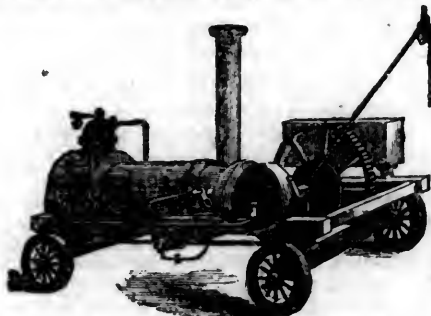
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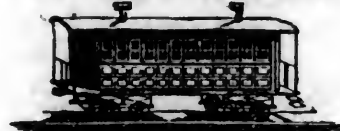
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STEAM NAVIGATION, COMMERCE, FINANCE,
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SECOND QUARTO SERIES, VOL. XV., No. 53.]

SATURDAY, DECEMBER 31, 1859.

[WHOLE No. 1,237, VOL. XXXII.]

Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, December 31, 1859.

The Gauge Question.

(Continued from p. 839.)

In the conflict then for gauges, to avoid which, in the opinion of Major Brown, is so strong an argument for the change of our's, it is evident you will be sustaining the interests of the city of New York; and that in time, the city of New York will sustain the system which secures to her the trade otherwise drawn in whole, or in part, to Boston. It will not only be an honorable conflict, but so profitable, that with the wealth of New York, the aid of Boston will not be wanted; nor any support from those whose interests induce them to seek only the welfare of the rival routes.

No burdens will be imposed upon our stockholders therefore, for it is not a burden to make good investments however large; and as there is nothing in our relations with these branch lines, requiring the particular agency or attention of our stockholders, as such, they will have a good and profitable road, whether these branches are built or not. But as citizens of New York, they should, and no doubt will, when the proper time comes, aid in the construction of branches which are of sufficient importance. The circumstances of the case, and consideration of profits, will secure the wide gauge to these branches, should there not be a single stockholder of our road interested in them; for they will be built by New York and by interests opposed to the rival lines. Boston and the

stockholders of the rival lines would not be so short sighted as to build a branch for instance, from Rochester to our road; they will oppose such a measure, as they have opposed the Erie Railroad, and with more propriety. I therefore see nothing in the battle of the gauges, but certain advantages to New York and our road. So far as the broad gauge may be extended, I see no reason to apprehend any compulsory causes growing out of the continuance of the broad gauge, for building any branch roads, except such as promise to be productive and useful. The result anticipated therefore in the following extract from Major Brown's report, it seems to me, affords the strongest argument in favor of our wide gauge. "Thus the result will inevitably be, that to secure these branches and enable the Erie Railroad to maintain its ground, its friends will have to advance their capital to an immense amount, and enter upon a system of combination and amalgamation of roads as extensive as any now going on in England." Such extensive combination of a system of railways which, from the gauge, "will of necessity" take freight to New York via the Erie Railroad, will be of all things the most desirable; and if we do not want Boston to get more than her share, quite indispensable; for, as Major Brown says, "the city of New York has at length begun to realize the fact that its natural advantages are not alone enough to secure trade." In order that the Erie Railroad branches may have no doubtful tendency in the direction they shall give to trade, you have only to retain the broad gauge, and the trade "of necessity" will come to our main line, and to New York. All these considerations apply with double force to the policy we should pursue in regard to the Pennsylvania works; for while we expect to send branches north, to disturb the relations of trade in that quarter, our Philadelphia and Baltimore neighbors contemplate the same purposes with regard to us. By reference to a memorial of the committee of the citizens of Pennsylvania, to the Senate and House of Representatives, for the admission of the New York and Erie Railroad into the northern counties of Pennsylvania, you will find it stated that the distance from Elmira to Philadelphia is only 252 miles, or 31 miles less than to New York, and much better grades. Nearly half of those lines are already

built. By reference to the report of Canal Commissioners of the State for 1842, and other years, you will find that by the way of Harrisburg, the distance is still in favor of Philadelphia.

You may notice from the report of the Directors of the Baltimore and Susquehanna Railroad, that they are about as near to Harrisburg as Philadelphia is, and, consequently, as near Elmira as New York. They regard their connection with Western New York as important, and from letters which I have received from those quarters, and which are before you, it is manifest they desire you to adopt a narrow gauge. The Legislature of Pennsylvania in giving you a charter, has intended to provide for all these interests in the restrictions upon your rates. But it is there, that the most destructive system of common carriers is generally introduced, and many private companies including the Baltimore and Susquehanna, and the Lancaster and Harrisburg, are very much embarrassed by the system.

That trade will and should pass over portions of the road to and from Philadelphia and Baltimore and intermediate districts is admitted. I advocate no measures intended to operate as restrictions to such trade; but I see no good reasons why we should take steps which other and greater interests forbid; and that may facilitate the competition they evidently expect to carry on with New York over our road, for the trade of the West. They regard the connections in this light, and have been urging them on with a view to this for the last 15 years. At any rate, you must keep off all the cars, and, of course, tranship all the goods coming to or going from your line.

There are several important lines in England which have been opened since the evils of the system of common carriers has been understood, the managers of which have stoutly refused the admission of the carriers on their cars, and have obliged all the goods to be transhipped, although the gauges of these roads are alike. But you would find it difficult to carry out such a measure in this country, especially in the case under consideration, as you are dealing with the citizens of a foreign State, who have admitted you within their jurisdiction, and who, if they find they have not secured all the privileges they want, have retained the right to alter or amend.

These are very important matters, and well worthy the attention of the Board. In this general survey, therefore, of all the interests of our company, whether I examine our ability to command the trade of the West, or our own district, and from branch lines; or whether, to ward off competition and bad practices, I see nothing but the strongest inducements for retaining our broad gauge. The only interests to be injuriously affected by it, if any, are rival interests. That those owning the stock of the Northern lines, or the citizens of Boston, Philadelphia and Baltimore, should desire the change of our gauge, is not surprising; and from those quarters you feel the strongest influences brought to bear upon you, to affect such a change. The cause of this will be explained, by following the example of Major Brown, in giving a little attention to the efforts of rival cities to divert from New York the trade of the West and North, by means of railroads.

Boston, long before the Western Railroad was undertaken, through a committee of the citizens, devised her plan for railroads, which plan was fully matured, and from that time to this, has been steadily pursued. The result you all know, so far as it has transpired; and in general you know how much she has been enriched by the portion of Western trade she has secured. But many of you may not be aware that the effect of the parts of this plan, not yet completed, will far exceed all her past achievements unless counteracted, as they will be by your system, or the interests over which you preside.

The first part of the plan was to connect Albany, in order to take the trade of the West from our improvements, and to demonstrate the capacity of railroads under disadvantages before untried.

The next part of the plan, in course of time, was to get control, by ownership, of the stock of the line from Troy to Buffalo. Many of you may have seen the influence of Boston in our capital, influencing the removal of restrictions to taking freight from the roads. They will succeed in this also; and by that time will control the roads with a majority of stock if possible. And is it not possible? Thus they get to Lake Erie.

The next part of the plan is to reach Lake Ontario. Before the Western road was commenced even, this committee visited our Northern line at a time when engineers were engaged in its survey, and stated to the Chief Engineer, that it was, and would be a Boston line. This was no prophecy, it was a settled plan, and they are now executing it. Before our line is completed to Lake Erie, Boston will have a continuous line to Lake Ontario, by which they can take trade from Rochester (for instance) in competition with our canal. They have two transshipments; but they know that *rates and time*, not the avoiding of transshipments, will command trade; and it is estimated that flour can be taken from the mills in Rochester to Boston by this route, and placed on board of ships, making *five* transshipments, at 75 cents per barrel. The Welland Canal and the country on the borders of Lake Ontario, will contribute largely to the business which may be concentrated at Ogdensburg, their northern termination.

Aside from these grand schemes, so long ago devised, and now nearly accomplished, they have built and are building, branch lines in all directions to manufacturing towns and to Canada.

Such are the plans of Boston. Unlike New York; they, at the outset devised all these schemes for directing the trade of the West and North, and have so far succeeded. New York needs to form a like committee, and to examine the question—how all these plans are to be counteracted. I know of no better way than to consider you, as Directors of the Erie Railroad, this committee on the part of New York, and call upon you to arrange the future movements of her citizens in their investments in railroads. Having such a comprehensive and important object before you, you would find that your main line is located just where it should be, and that the points of departure, the direction and termination of its branches, are only to be considered. You want to reach Lake Ontario at its eastern end with a railroad competent to compete with Boston. From Piermont to Deposit is 161 miles; thence up the valley of the Unadilla, across Oneida County, through, or west of Rome, through Jefferson County to say Sackets Harbor, is but about 160 miles. This branch crosses the rival route at the north of us, passes over the most fertile and populous portions of our State, bringing them as near, or nearer, New York than by any other route. If made on a wide gauge, and if Major Brown's view of the effect of wide gauges (in retaining freight after it has once secured it) be adopted, it secures to New York a competing line to the Boston scheme, for if the branch should be narrower north of Rome, the trade could more readily go down to Albany, and might, after all, reach Boston that way.

If you desire to reach Oswego, the best way to do so, is by a line diverging from the above; but you also want to reach Rochester, and Lake Ontario there. The meeting referred to, of the citizens of Rochester and others interested in this branch, makes the distance from Rochester to New York 71 miles nearest our own way. Compared with the Albany route, consequently it is 121 miles nearer New York than Boston. We can take flour there, at less than 75 cents, and compete with all of the other routes referred to. These two schemes will accomplish all that will be required, as far as strict and effectual attention to Boston is concerned; or so far as business will really be wanted to make your main line one of large traffic, quite beyond what we can imagine. That other branch lines may be of sufficient importance to warrant their construction, I have no doubt. Syracuse is nearer New York by way of our road than by way of Albany, and a line from that city to Binghamton will pass through a rich country. There are difficulties in the route of considerable magnitude. The Ithaca road will be made a good one, with a broad gauge. The rival lines care much less about your tapping them merely, than about your going through their districts. If they get freight on either line, they are safe enough. What should be aimed at, is, to connect districts of country, and points where exchanges are made, so as to change, or afford means, by which a change of interest may be made in favor of your route and market, by those who carry on the business of the country. Therefore, I would say, in case of a connection with Buffalo, you must have an independent line to that city; that is, a line in no wise under the control of rival interests. This is as easy as to get one half way; and easier, for it will be a bet-

ter thing. You can get the Attica road, or make a new one,—depending upon which is the cheapest. All Major Brown's difficulties about this particular case are easily disposed of in this way. If, as he thinks, Boston has control, and you must have a connection with Buffalo, which will accomplish your objects, you must either remove the Boston control or build a new line. Either is no burthen as soon as it is settled that it will pay.

In this manner the whole plan of movement so far as the north is concerned can be settled, and no break of gauge occur, except with rival lines, giving you all the advantages there may be in the fact, which advantage Major Brown decided to be an entire prohibition to business leaving your line. The efforts of Philadelphia and Baltimore to tap our districts, call for nothing more than to make your road as perfect as possible; not at all events, as has been shown, to change your gauge to meet them, nor the gauge of any branches which may be extended to Pennsylvania. The great objects of the improvements of these cities referred to by Major Brown, is the trade of the West, and the perfection of your line has again been shown to be the chief thing to be looked after. The great argument to wit, the "break of gauge" and the consequent cost and delay of transshipment, has I think been fairly met.

The difficulty has been in the first place greatly overrated. The cost and delay has been put too high, the policy of changing cars has not been questioned, and, therefore, none of the additional expenses of this system has been allowed as an offset against the cost and delay of transshipment.

(To be continued.)

Minnesota.

The late message of the Governor of this State states that there have been issued to various railroads \$2,275,000 of the bonds of the State as follows:

Minnesota and Pacific Company	\$600,000
Minneapolis and Cedar Valley	600,000
Transit	500,000
Southern Minnesota	575,000

Each of these roads has been graded from 38 to 70 miles. Respecting those which have defaulted in the payment of interest, the Governor states:—

"I have deferred giving the notices of foreclosure contemplated by the law, until three of the companies, to wit: The Minnesota and Pacific Company, the Minneapolis and Cedar Valley Company, and Transit Company, have actually made default in the payment of the interest on the State Bonds severally issued to them, due on the 1st of the present month, before addressing such notices to the Trustees of the companies in default. Inasmuch as there is now no power conferred upon any of the State officers to bid in, for the State, the property and franchises of such of the railroad companies as have failed to make payment of the interest due upon the bonds issued to them, I recommend that an act be passed as soon as practicable, giving authority to the Governor, or other State officer, to purchase the property of any such company as may be sold under a foreclosure of the mortgage or trust deed. Such a measure is indispensable to prevent the securities held by the State from passing into the hands of third persons for an inconsiderable sum, and which might result in trouble and litigation, and, it may be, serious loss."

The Minneapolis and Cedar Valley road have filed a waiver of its rights under the decision of the Supreme Court, and accepted the terms originally offered by the Governor, namely, that the

State bonds shall be a first mortgage on the road. The Southern Company will issue but \$2,000,000 first mortgage bonds, of which \$1,250,000 go to the State, and the Transit Company has agreed to limit its issue of first bonds to \$1,600,000 until 62 miles of road shall be built and equipped, and to \$30,000 per mile as each additional mile shall be built. These companies have also agreed to accept, respectively, \$625,000 of State aid, the residue, of equal amount, to be furnished as the roads progress. The Governor thinks there is no good reason why these bonds are not now worth as much as other State stocks, although he does not recommend the imposition of an immediate tax for the payment of interest. The most that can be expected, he says, is that the State shall recognize her liabilities and willingness to pay whenever in condition to do so.

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending Dec. 10, were.....\$51,811 88
Week ending Dec. 11, 1858 45,687 58

Increase\$6,124 29
Total traffic from July 1st.....\$1,204,755 28
Same period last year 1,060,638 39

Increase\$144,116 89
The receipts of the Grand Trunk Railway of Canada for the week ending Dec. 17, were.....\$57,945 26
Week ending Dec. 18, 1858..... 45,070 51

Increase\$12,874 74
Total traffic from July 1st, 1859.....\$1,262,700 54
Do. for same period last y'r 1,105,708 90

Increase\$157,091 64
NOTE.—Navigation closed. Crossing the river between Montreal and Longueuil dangerous.

Covington and Lexington Railroad.

Below we give an abstract of the Report of the Board of Directors of the old company for the year ending November 1st. The assets are stated as follows:

Road\$3,748,971
Engines 142,946
Cars 133,078
Real estate 109,029
Income bonds 105,000
Various accounts 77,044
Other items 64,616

Total.....\$4,375,684

LIABILITIES.

Capital stock\$1,582,169 37
Less amount issued to Cincinnati as collateral 200,000 00

\$1,382,169 37

Mortgage Bonds.

1st mort. bonds, 6 per cent.....\$160,000
1st do. 7 do. 260,000
2d do. 7 do. 1,000,000
3d do. 7 do. 600,000

2,020,000 00

Guaranteed Bonds.

Comp's b'ds for Cincinnati.....\$100,000
Do. Covington 200,000

300,000 00

Income Bonds.

Income bonds, dated July 10, 1854, due July 10, 1859, bearing 10 per cent. interest.....\$200,000
Income bonds, dated Dec. 1, 1854, due December 1, 1859, bearing 10 per ct. interest 200,000
Income bonds, dated Feb'y 1, 1855, due Feb. 1, 1860, bearing 6 per ct. interest, 210,000

610,000 00

Bills payable, old\$20,371 46
Do. current... 2,000 00
22,371 46
Amounts due sundry persons, mostly in stock 13,449 68
Profit and loss 21,112 78
Total.....\$4,375,993 29

Financial Exhibit of the Liabilities of the C. and L. R. R. Co., Nov. 1, 1859.

1st mort. bonds, 6 per cent.....\$160,000 00
1st do. 7 do. 260,000 00
2d do. 7 do. 1,000,000 00
3d do. 7 do. 600,000 00
\$2,020,000 00

C. & L. R. R. bonds exchanged for Cincinnati bonds\$100,000 00
C. & L. R. R. bonds, guaranteed by city of Covington 200,000 00
300,000 00

Income bonds issued July 10, 1854, due July 10, 1859.....\$200,000 00
Income bonds issued December 1, 1854, due Dec. 1, 1859 200,000 00
Income bonds issued Feb. 1, 1855, due Feb. 1, 1860 210,000 00
610,000 00

Bills payable, past due.....\$20,371 46
Bills payable due, $\frac{5}{8}$ per cent., June, 1860, "mortgage"..... 2,000 00
22,371 46

Amounts due sundry persons, mostly in stock 13,449 68

Coupons past due, 2d mortgage bonds\$105,000
Do. past due 3d mort. b'ds. 63,000
Do. past due, guaranteed bonds..... 18,000
Do. past due, Cincinnati b'ds, 12,000
Do. past due, incomes, July issue..... 37,500
Do. past due incomes, Dec. issue..... 34,500
Do. past due, incomes, Feb. issue 17,400
287,400 00

Interest due at 6 per ct. on coupons past due.....\$4,311 50

Total.....\$3,267,532 64
From this total deduct the amount the road, etc., brought at public auction, Oct. 5, 1859..... 2,125,000 00

Liability still against the company.....\$1,142,532 64

Means in possession of the Company to pay or reduce the above Liability.

Income bonds on hand.....\$105,000 00
Am't due from sundry subscribers, mostly worthless..... 77,044 77
Bills receivable 16,378 10
198,422 77

Amount still unprovided for..\$944,109 77

Earnings and Expenses of the Covington and Lexington R. R., from November 1st, 1858, to Oct. 5th, 1859.

From car rent.....\$215 84
" U. S. Mail service 10,204 46
" Adams Express Co..... 8,538 78
" passage 155,654 69
" freight 284,207 27

\$458,820 99
Current expenses..... 231,086 22

Balance being net earnings for 11 mos. 9 days\$227,734 77

Earnings of the C. & L. R. R. for 11 months 5 days, ending October 5th, 1859, and comparison with previous year:

	1857.	1858.	Increase.
November ...	\$43,966 59	\$46,778 19	\$2,811 60
December ...	46,493 90	35,908 24	*10,585 66
1858.	1859.		
January	26,198 12	35,978 29	9,780 17
February ...	23,512 60	30,683 23	7,170 63
March	30,912 08	38,326 48	7,414 40
April	32,265 90	37,638 46	5,372 16
May	37,893 19	42,566 02	4,672 83
June	34,174 83	37,553 10	3,378 27
July	30,819 76	43,650 24	12,830 48
August	41,934 09	48,010 87	6,076 28
September ..	48,165 12	52,795 46	4,630 34
Oct. (5 days),	7,148 56	8,933 31	1,784 75
Totals	\$403,484 74	\$458,820 99	\$65,921 91
		403,484 74	*10,585 66

Total decrease.....\$55,336 25 \$55,336 25

Steam Engineering in 1859.

(Continued from p. 844.)

In Cornwall the duty performed by pumping engines has been regularly tabulated for some years, and the amount of that duty has, in several instances, amounted to upwards of 90,000,000 lbs., raised 1 foot high in an hour, with a consumption of a bushel of coal, or 94 lbs.; and if to the above duty is added the friction of the engine and pumps, an indicated or actual power has been, and can be, obtained by the consumption of less than 2 lbs. of Welsh coal per hour.

The average duty of a number of engines working at different rates of expansion in Cornwall may be much less than the above; but whenever due attention is paid to the maintenance of the heat of the steam in the cylinder, and full scope is allowed to expansive working, the above economy can always be realized.

In the case of condensing engines, for driving mills and manufactories, in which steam jackets and expansion have been combined, an indicated or actual horse power has been obtained, without difficulty, with a consumption not exceeding $2\frac{1}{2}$ lbs. of coal per hour.

We therefore maintain that, by attending to the principles of Watt's specification, an indicated or actual horse power can always be obtained from a well made steam engine, on land or on sea, by a consumption of good steam coal not exceeding $2\frac{1}{2}$ lbs. per hour; and we are aware that this statement is more moderate than well established facts require; indeed, there is every reason to believe we might fairly adopt a much higher standard of economy.

As a concluding remark on this part of the subject, in no instance on record has the best result or highest duty been realized without special arrangements for maintaining intact the temperature of the working steam and extensive expansive action.

Our next inquiry is: What is the average duty realized at the present time on land and on the sea for the consumption of a given amount of coal? In reply to this, the following may be fairly assumed as undisputed facts:

1. That, with land condensing engines, the average consumption of good steam coal per hour, to obtain an indicated or actual horse power, is not less than 4 lbs.

2. That, with marine engines of the best general construction, made by first class firms, the consumption of good steam coal per hour, necessary to obtain an indicated or actual horse power, is not less than $4\frac{1}{2}$ lbs.

3. That, except in a few instances, no provision is made for maintaining the temperature of steam in the steam pipes and passages, and during its expansion in the cylinder, either in land or marine engines.

4. That the advantages derived from the expansive action of steam when the temperature of the steam is not preserved, are often so slight as

* Decrease.

to throw discredit on a principle which, when properly applied, is invaluable in economizing fuel. The conclusions to be drawn from the above are far from satisfactory, and quite justify the tone of these introductory remarks.

The steam engineering of 1859 is in a most defective condition, and the results of such deficiency are incalculable.

In steamships alone we have at least one and a half millions of actual or indicated horse power; and if we only suppose this power to be exerted during one month out of the twelve, we are needlessly throwing away fuel to the amount of 100,000 tons per annum.

Figures and calculations must fail to convey a correct estimate of the loss incurred by defective steam engineering; and in the case of steam shipping, the actual amount of fuel saved is only a portion, and sometimes a small one, of the saving in freight, &c., resulting from coal space available for cargo.

The astonishment expressed at the economy resulting from the use of superheated steam indicates, only too truly, how far we have departed in practice from the first principles.

The facts, that the advantages to be derived from superheated steam can be obtained at a comparatively small outlay, and that its application is easy to existing machinery, will go far to bring it into favor; but it is matter of serious doubt if an improvement that is based on the existence of a previous defect is the *best of the kind*.

The economy resulting from superheating steam must convince the most skeptical that in all engines—where the cylinders are merely clothed to prevent radiation—at least from 20 to 30 per cent. of steam is needlessly condensed, during its passage from the boiler to the condenser, and it is the surplus heat supplied from the superheated steam that prevents this waste, and saves the fuel.

We are but entering the field of improvement in steam engineering, and the amount of duty realized from the combustion of a pound of coal is at present but a small per centage of the total value of the heat given out by that coal.

Boilers, engines, condensers, must all be greatly improved; for each has its peculiar source of waste, the sum total is well known to be considerable.

We have thus, as it were, just glanced at the state of steam engineering in 1859, being conscious of omitting mention of many incidental causes for present defects. When we proceed to refer in detail to steam engine construction, the opportunity will be afforded of embracing all points of interest.

(To be continued.)

Journal of Railroad Law.

DAMAGES—SERVANTS OF ONE COMPANY NOT THE SERVANTS OF ANOTHER COMPANY, ALTHOUGH BOTH USE THE SAME TRACK.

The recent case of Smith against the New York and Harlem Railroad Company involves the question as to whether a switch-tender of one company shall be deemed the servant of another company, where both companies run their respective trains over the same track.

Smith was an engineer in the service of the New York and New Haven Railroad Company, which runs its train between Williams' Bridge and the City of New York over the track of the New York and Harlem Railroad Company. The track was so used under an arrangement between the two companies, by which arrangement the New York and Harlem Railroad Company received a compensation for such use, and was bound to keep the road in good order, supplied with proper switches, watched and adjusted by its own servants, as well for the trains of the New Haven Company as its own.

Smith while so engaged, as such engineer, in running a train of the New Haven Company upon

the portion of the track thus used in common by both companies, was killed. The cars running from the track at Melrose, where there was a switch either wrongly set, or having in itself some inherent defect.

Upon this state of facts Sarah S. Smith, the wife of the deceased, under the statutory provision applicable in such cases, in New York, brought suit against the New York and Harlem Railroad Company, for a compensation for the damages sustained by her.

The complaint averred that by reason of the negligence and unskillfulness of the defendants' switchman, the switch and signal were improperly turned and placed, in consequence of which an engine and train of the New Haven Company, under the conduct of deceased as engineer was thrown from the track and the husband of plaintiff killed.

When upon the trial the evidence upon the part of the plaintiff had closed, the defendant moved to dismiss the complaint on the ground that the accident was occasioned by the negligence of a fellow servant engaged in the same business, and was one of the risks assumed by the deceased by virtue of his employment. The motion was denied and the defendant excepted. The plaintiff had a verdict and a judgment which was affirmed on appeal to the General Term of the court, and from the General Term the defendant appealed to the Court of Appeals. We give two of the opinions of this court, as far as bearing upon the point in question, which were as follows.

GROVER, J.—The defendants' counsel insists that this case comes within the rule that a servant cannot recover for an injury caused by the negligence of a fellow servant employed by the same master in the same general business. The case of the plaintiff differs from the cases to which this rule has been applied in this important fact; the deceased and switch-tender was not employed by the same master. The former was the servant of the New York and New Haven Company, and the latter of the defendant. The presumption from the fact of this case is, that the defendant, for a compensation therefor, gave the New York and New Haven Company the right of running trains over its track, and agreed to provide switchmen and flagmen to attend upon such trains. The switchman and flagmen furnished by the defendant for this purpose, were in no sense the servants of the New York and New Haven Railroad Company. The defendant would be liable to that company for their negligence. This case does not, therefore, come within any of the adjudged cases establishing the above rule. I think it is not embraced by any of the reasons upon which it is founded. One is to secure vigilance and care by each servant in the discharge of his duty to his employer. Whatever importance may be attached to this is inapplicable to this case. Another is to protect the employer from the great hazards to which he would otherwise be exposed; and still another, that the servants may provide against risks of this character by his contract. This case does not fall within either. The deceased was as much a stranger to the defendant as any passenger in the train run by him, and I think entitled equally with them to protection against the negligence of the defendant or its servants.

SELDEN, J.—The accident out of which this

case has arisen occurred to a train of cars belonging to the New York and New Haven Railroad Company, while running upon the defendants' road, and was caused by the misplacement of the switch upon the latter road, through the negligence, as the jury have found, of the switch tender employed by the defendants. The plaintiff's husband, whose death was caused by the accident, was an engineer in the employment of the New York and New Haven Railroad Company; and the defence set up in the answer and insisted upon at the trial is, that the employees of the New York and Harlem Railroad Company, while engaged in passing the trains of the former company over that portion of the road of the latter which is used for that purpose, are to be regarded as the servants and agents of the New York and New Haven Railroad Company, and hence, according to the settled doctrine, that a principal is not responsible to one servant for an injury caused by the negligence of a fellow servant, engaged in the same general business, the defendants are not liable. But it is obvious that this doctrine has no application whatever to the case. The rule applies only where the action is brought for an injury to a servant and agent against the principal by whom such servant was himself employed. There is no pretence that the deceased was in the employment of the New York and Harlem Railroad Company against whom this action is brought. If the defendants are right, then both he and the switch-tender whose negligence caused the injury were servants of the New York and New Haven Railroad Company, and not of the defendants. Had the action been against that company, the question as to the applicability of the doctrine referred to might arise, but here it cannot. As between the deceased and the defendants, no such relation as that of master or servant existed. The question between them, therefore, is the same as if the deceased had been a passenger upon the train to which the accident occurred, and the defendants can only succeed by showing that the switch-tender was not, at the time of the accident, their servant, in such a sense as to render them responsible to any third person for his negligence.

The act of March 29, 1848, authorizes the New York and New Haven Railroad Company to run their cars upon a section of the defendants' road, upon such terms as may be agreed upon between the two companies, the precise nature of the arrangement made pursuant to this statute does not appear. But it is shown that all the switchmen and flagmen who attended to the trains of the New York and New Haven Railroad Company, upon that section of the defendant's road, were employed by the defendants; from which it is to be inferred that the contract between the two companies was such that the New York and New Haven Railroad Company had nothing to do with the selection and payment of this class of employees. Of course, therefore, as between that company and the defendants, the latter would be responsible for the character and conduct of such employees, who, under such circumstances, must be regarded, as to all intents and purposes, their servants and agents, and not those of the New Haven Company, between whom and the employees no privity of contract whatever existed. If then there was nothing in the relations of these two companies to prevent the defendants from be-

ing liable directly to the New Haven Company for the negligence of this class of agents, much less can they exempt themselves from responsibility to third persons. The judge, therefore, was clearly right in charging the jury that if the injury was caused by the carelessness of the switch-tender, without negligence on the part of the deceased, the plaintiff was entitled to recover.

Macon and Western Railroad.

From the report of this company for the fiscal year, ending November 30, 1859, we learn that the earnings of the road during that time were:

From passengers.....	\$131,730 95
" freights.....	231,973 15
" mails.....	10,201 75
	\$373,905 85

The exp's for the same period were:

Repairs of road.....	\$44,135 69
" locomotives.....	13,800 98
" cars.....	15,262 43
" buildings, etc.....	7,486 26
Transportation expenses ..	44,816 30
General ..	7,845 17
Salaries ..	7,899 96
Fuel ..	11,670 64
Oil ..	2,570 33
Miscellaneous ..	9,977 99
	165,465 75

Leaving as net earnings	\$208,440 10
=56 per cent. of the gross.	
To which add interest received.....	1,344 12
25 freight cars sold	15,707 98

Net receipts	\$225,492 20
To which add balance from last report.	142,717 05
	\$368,209 25

From this fund the following disbursements have been made:

Div'ds No. 25, paid 1st Feb.	\$57,552 00
" " 26, " 1st Aug.	100,716 00
Bonds paid and cancelled.	73,000 00
Interest on do.....	4,695 92
Wynn case, charged to	
Profit and Loss	9,351 23
Negro Jesse, do.....	1,200 00
	246,514 25

Balance of assets as per Treasurer's balance sheet	\$121,695 00
Of this balance there is unavailable, but good.....	11,139 83
Do. bad and doubtful	13,213 23
	24,353 06

Leaving an actual cash balance in hands of Treasurer	\$97,341 04
To which may be added the amount due on 2,810 shares capital stock, say \$20 per share, which has been called, payable Dec 1st.....	56,200 00

Making a cash fund on hand of	\$153,541 94
Less bonds due January 1st 1860.....	23,000 00
	\$130,541 94

A liability of about \$12,000 exists against this balance for the value of 240 bales of cotton burned on the road. To offset this the company holds policies of insurance in three different companies to the amount of \$6,100, which it is believed will be collected in the course of sixty days.

The annexed table shows the amount earned in all ways by the company during the past 10 years, to be \$2,984,659—all of which has been collected and accounted for with the exception of \$13,213 23, being the amount due from defaulting agents

at Atlanta. This sum, as stated above as bad and doubtful, is not considered all lost—the company holding deeds of real estate, as security for a portion of the same, valued at \$10,300.

Statement showing the cost of Construction and Equipment, Earnings, etc. of the Macon and Western Railroad for the 10 years ending November 30th, 1858.

Year.	Total.	Average.	Year.	Total.	Average.
1850.....	\$798,317	\$1,353,334	1850.....	\$100,433	\$1,023,918
1851.....	1,238,996	1,248,665	1851.....	96,546	1,823,814
1852.....	1,276,422	1,248,665	1852.....	92,694	\$2,984,659
1853.....	1,339,331	1,248,665	1853.....	97,318	\$1,484,710
1854.....	1,407,460	1,248,665	1854.....	188,676	148,471
1855.....	1,472,214	1,248,665	1855.....	230,886	149,994
1856.....	1,500,000	1,248,665	1856.....	230,886	112,360
1857.....	1,500,000	1,248,665	1857.....	230,886	88,623
1858.....	1,500,000	1,248,665	1858.....	230,886	102
1859.....	1,500,000	1,248,665	1859.....	230,886	3,380,076
	\$13,533,334	\$1,248,665		\$1,484,710	62,934,664
				\$1,484,710	1,894,264
				\$1,484,710	189,436

Table showing the Cost of Repairing and Operating the Road, for 10 years ending Nov. 30th, 1859.

Year.	Maintenance of way.	Rolling stock & tools.	Oper't'g engines and trains.	Miscellaneous.
1850.....	\$39,485	\$20,241	\$36,645	\$11,857
1851.....	28,338	22,242	38,307	17,632
1852.....	26,924	28,016	44,968	19,756
1853.....	36,831	28,952	44,796	20,874
1854.....	43,378	42,787	56,793	20,633
1855.....	43,560	34,239	54,958	24,670
1856.....	65,955	50,721	64,939	26,176
1857.....	54,432	38,295	51,199	18,630
1858.....	61,884	24,840	55,896	19,438
1859.....	58,088	29,869	58,602	18,906
Total	\$458,875	\$320,202	\$507,018	\$198,572
Average ..	45,887	32,020	50,704	19,857

The increase in freight the past year is wholly due to the upward business—the downward traffic having fallen off nearly \$20,000; but which has been compensated for by freights from the northern ports to upper Georgia and Tennessee, caused by the additional facilities afforded by the steamship lines from Savannah, and which has also materially added to the passenger traffic.

The increase in expenses over those of the previous year has been principally in car repairs—that account having increased \$2,672.

The equipments of the road consists of 17 locomotives; six first-class and six second-class passenger cars; and 170 box, platform, stock and coal cars—the estimated value of which is \$222,200.

The total number of miles run by all the trains was 213,160. The cost per mile run for repairs was 6.47 cents; fuel, 5.48 cents; and oil 1.22 cents.

The whole number of passengers conveyed was 58,170—equivalent to 3,815,944 carried one mile; or 37,048 over the whole length of the road. The total amount of freight carried was 231,973 tons.

The materials and tools on hand are valued at \$58,444 22.

BALANCE SHEET.

	Dr.	Cr.
Capital stock.....	\$1,438,800 00	
Bonds	23,000 00	
Profit and loss	107,917 05	
Earnings.....	375,249 97	
Liabilities.....	7,101 18	
Sales of freight cars.....	15,707 98	
	\$1,967,776 18	
		CR.
Construction account.....		\$1,500,000 00
Purchase of Jesse, (a slave).....		1,200 00
Expenses		165,465 75
Dividends.....		158,268 00
Coupons paid.....		4,695 02
Assets.....		123,796 18
Wynn case		9,351 23
		\$1,967,776 18

The officers are:

ISAAC SCOTT, President.

ALFRED L. TYLER, Superintendent.

Railroad Dividends.

The Western Railroad Corporation have declared a semi-annual dividend of 4 per cent., payable January 2 to holders of stock on the 27th inst.

The Stoughton Branch Railroad Company have declared a semi-annual of 4 per cent. payable January 2nd.

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (—) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in "italics."

Years ending.	Railroad.			Road in progress or projected.	Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.		Engines.	Cars.			Railroad and Appurtenances.	Property and Assets.			Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.		Dividends.	Price of shares.
						Passenger.	Freight, etc.			Railroad	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.			
M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.		
ALABAMA.																							
30 Jun. '59	43.3			72.3	3	19	19	Alabama and Florida	1,086,278			539,396	478,500	101,205	4,127,174	27.3		59,430	22,359				
28 Feb. '59	30.3			58.1	2	12	19	Alabama and Mississippi	461,505	30,991		385,010	100,500	21,682	518,965	30.3		55,791	31,852				
31 May '59	99.2			68.4	7	12	84	Ala. and Tennessee Rivers	2,101,007	144,549		1,064,915	713,226	212,496	2,284,468	99.2		155,628	78,907				
30 Jun. '59	57.0			171.3				Mobile and Girard	1,500,000							57.0		76,773	21,006				
1 Jan. '59	319.2	14.7		213.0	25	18	361	Mobile and Ohio	7,252,801	681,859	114,894	3,441,859	4,051,547	726,546	8,360,702	202.0		769,787	420,000				
28 Feb. '59	88.5	28.4		205.8	20	14	272	Montgomery and West Point	1,519,403	279,435	100,000	1,419,672	922,621	18,966	2,462,492	116.9		446,153	211,880	6			
16 Dec. '59				26.1				North East and South West	728,000			105,760											
TENNESSEE AND ALA. CENTRAL.																							
ARKANSAS.																							
30 Nov. '58	38.5			301.4				Cairo and Fulton	553,877	*		351,524	446,000	10,725	811,949								
30 Sep. '58	22.5			41.8				Memphis and Little Rock															
CALIFORNIA.																							
30 Sep. '58	22.5			41.8				Sacramento Valley	1,547,100	*		791,100	756,000		1,547,100	22.5		185,108	102,726				
CONNECTICUT.																							
31 Jan. '59	23.9			75.1	3	6	30	Danbury and Norwalk	333,237	49,773		279,050	85,000	3,502	404,622	23.9		56,044	20,618	6			
30 Sep. '59	122.4			75.1	16	20	250	Albany, Provid. and Fishkill	3,903,455	302,511		1,836,740	1,810,500	319,443	4,323,922	122.4		333,500	152,777				
31 Aug. '59	61.4	10.6						Hartford and New Haven	3,108,018	254,000	102,889	2,350,000	964,000	16,463	3,932,432	72.0		314,763	723,460	204,134	10		
31 Dec. '58	74.0				11	19	212	Housatonic	2,438,847		8,559	2,000,000	278,500	76,875	2,555,337	159.0		271,273	66,330				
31 Dec. '58	57.0				7	15	178	Naugatuck	1,578,301	*		1,031,800	437,500	30,713	1,706,802	57.0		199,536	314,098				
30 Nov. '58	62.3							N. Haven, N. London and Ston.	1,470,661	*	11,060	738,538	750,000		1,488,538	60.1		76,758	8,946				
31 Dec. '58	44.4	8.3						New Haven and Northampton	1,400,000	*		922,500	500,000		1,481,723	55.2		172,369	70,487	5			
30 Nov. '58	66.0				5	5	167	N. Lond., Willimant. & Palmer	1,561,241	*	5,463	510,900	1,068,000	272	1,575,147	66.0		91,134	104,464	30,512			
31 Mar. '58	62.2			63.8	29	72	368	New York and New Haven	4,598,698	661,547		3,000,000	2,219,902	79,722	5,682,071	74.0		432,024	932,550	231,560	3		
31 Mar. '58	59.0	7.0						Norwich and Worcester	2,245,406	176,792		2,322,300	324,130	59,614	2,596,672	66.0		265,417	44,587	41			
DELAWARE.																							
31 Dec. '58	71.0			19.4				Delaware	1,146,311	*		252,561	735,000	123,750	1,146,311	71.0		66,628					
30 Nov. '58	14.3							Newcastle and Frenchtown	699,514		25,000	762,320			767,278	14.3		19,896					
FLORIDA.																							
30 Apr. '58	154.2			45.1				Florida	292,291	*		317,847	154,000	70,620	543,237								
30 Jun. '59	31.3			2.0	2	1	24	Flo. Atlantic and Gulf Central	396,310	28,608		205,781	204,900	164,670	594,536	19.3		10,255	1,504				
30 Jun. '59	26.5	3.9		227.0				Pensacola and Georgia								29.4							
GEORGIA.																							
31 July '58	86.7			133.5	15	11	109	Atlanta and La Grange	1,179,381	*		1,000,000	187,500	23,384	1,459,075	86.7		362,061	197,357	8	125		
31 Dec. '57	53.0							Atlantic and Gulf—M. Trunk	755,000	*						30.0							
30 Apr. '59	43.5			23.7				Augusta and Savannah	1,032,200	*		733,700	298,500		1,032,200	53.0		125,427	69,079				
30 Nov. '58	191.0				52	28	633	Brunswick and Florida	755,000	*		151,887			61.0								
31 Mar. '59	171.0	61.0						Central of Georgia	3,750,000	*	550,152	3,750,000	199,851		5,645,001	229.0		714,787	1,353,722	755,615	10		
31 July '59	102.5				18	16	171	Georgia (and Bank)	4,174,492	*	829,550	4,150,000	373,000		7,368,666	232.0		1,154,621	544,363	8	100		
31 July '59	50.0				7	2	107	Macon and Western	1,500,000	*	5,073	1,438,800	52,500		1,851,721	102.5		325,192	163,124	7 1/2	103		
1 May '58	68.1				3	4	33	Muscogee	774,244	162,534		669,950	249,000		1,026,868	50.0		202,714	110,516	8			
31 July '59	106.1	56.5	14.8	44.3	15	18	166	Savannah, Albany and Gulf	1,386,634	52,373		1,275,901	10,200	180,621	1,473,740	71.6		147.2	171,768	647,876	337,769		
30 Sep. '58	138.0			52	24	705		South Western	3,185,000	*		2,254,000	631,000		3,439,000	138.0		852,139	457,916				
WESTERN AND ATLANTIC.																							
ILLINOIS.																							
30 Apr. '59	220.0			62	31	990		Chicago, Alton and St. Louis	10,000,000		680,158	3,500,000	4,500,000		10,000,000	220.0							
31 Dec. '58	45.0			6	14	101		Chic., Burlington and Quincy	6,068,054	1,400,872	4,629,340	2,990,000			8,149,084	210.0		1,044,573	171,515				
30 Jun. '58	138.0			75.0				Chicago and Milwaukee	1,799,894	67,869	120,000	988,000	762,865	188,065	2,050,065	45.0		14 mo.	243,282	135,284			
30 Jun. '58	131.8				58	57	960	Chicago and Northwestern	4,250,000	*		4,250,000	632,000	2,500,000	13,330,000	138.0							
10 Nov. '58	33.2							Chicago and Rock Island	6,776,119	*	175,165	5,908,000	1,397,000	5,651	7,643,104	22.4		1,407,846	629,029		62 1/2		
31 Dec. '58	121.0	133.5	73.6		60	63	1,369	Fox River Valley	590,000	*		590,000			590,000	84.0							
31 Dec. '58	175.0							Galena and Chicago Union	3,027,478	1,311,917	211,003	6,028,400	3,783,015	292,466	10,300,517	324.5		808,231	1,547,561	620,328	4		
31 Dec. '58	454.8	252.5		81.5	96	2,305		Great Western	5,022,926	*		1,600,000	3,088,426	334,500	5,022,926	175.0							
								Illinois Central	19,674,214	3,347,799		10,249,210	20,000,000	1,297,277	31,596,487	708.3		1,976,578	556,624		58 1/2		
								INDIANA RIVER.															
								Ohio and Mississippi	4,870,586	*		1,780,296	3,292,403			148.0							
								Peoria and Bureau Valley	600,000	*		600,000				oper by Chic.							
								Peoria and Hannibal	5,400,000	*		1,569,889	2,200,000			186.0							
31 Dec. '58	100.0							Peoria and Oquawka	1,975,555	*		800,000	1,200,000		2,000,000	oper by Chic.							
								Quincy and Chicago		*						oper by Chic.							
31 Dec. '58	168.8	39.8	12.2		31	30	424	Rock Island Bridge		*						oper by Chic.							
								Terre Haute, Alton & St. Louis	7,008,958	628,487		3,026,903	5,035,615	741,040	8,865,252	208.3							
INDIANA.																							
								Cincinnati and Chicago	2,080,433	*		1,196,679	1,006,125			108.0							
								Cincinnati, Peru and Chicago		*						29.0							
31 Aug. '57	109.0			73.0				Evansville and Crawfordsville	2,233,413	2,750	984,061	1,219,100	51,772	2,283,748	109.0								
1 Jan. '58	72.4				19	21	278	Indiana Central	1,666,280	244,081	25,641	611,050	1,166,000	47,850	2,111,059	100.0							
31 Dec. '58	89.8	20.2			23	19	313	Indianapolis and Cincinnati	2,497,952	540,043	25,689	1,689,900	1,362,284	140,689	3,458,108	11							

An asterisk (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A dash (-) signifies "nil." Running dots (....) signify "not ascertained." Land-Grant Railroads are in *italics*.

Years ending.	Railroad.			Road in progress or projected.	Equipment.			Companies.	Abstract of Balance Sheet.					Earnings.				Price of shares.			
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.		Engines.	Passenger.	Freight, etc.		Property and Assets.			Liabilities.			Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.		Earnings.		Dividends.
									Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.					Gross.	Net.	
	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	p. c.	p. c.	
MAINE.																					
31 Dec. '58	32.0	---	---	6.0	4	25	Androscooggin	643,271	*	*	145,787	511,500	---	---	32.0	22,001	\$0,957	17,263	---	---	
31 May '59	55.0	---	---	9	10	128	Androscooggin and Kennebec	2,210,947	*	27,925	457,900	1,748,457	101,209	2,307,566	137.0	73,190	281,929	89,766	---	---	
30 Jun. '59	140.0	---	25.0	41	17	349	Atlantic and St. Lawrence	6,066,375	857,560	---	2,494,900	3,472,000	9,572	5,978,472	149.0	429,791	545,741	150,226	---	---	
31 Dec. '58	12.6	---	---	4	2	45	Bangor, Oldtown and Milford	175,232	---	---	135,000	---	---	---	12.5	25,437	33,069	16,539	---	---	
31 Dec. '58	63.0	9.0	---	12	11	109	Kennebec and Portland	2,871,264	*	---	1,107,526	1,763,738	---	---	72.5	169,240	145,974	70,749	---	---	
31 Dec. '58	---	---	---	23.0	---	---	Penobscot	308,413	---	---	180,000	143,785	---	---	---	---	---	---	---	---	
31 May '59	54.7	---	---	4	10	93	Penobscot and Kennebec	1,611,413	104,019	73,014	555,228	1,206,800	128,576	1,890,604	54.7	oper. by	An & C.	67,524	---	---	
31 May '59	51.3	---	---	11	13	118	Portland, Saco and Portsmouth	1,494,792	---	5,208	1,500,000	---	---	1,500,000	51.3	141,664	208,239	104,029	0	91	
31 May '59	37.0	---	---	---	---	---	Somerset and Kennebec	783,763	*	---	169,200	556,600	---	---	37.0	---	55,403	28,404	---	---	
31 May '59	18.5	---	---	33.5	---	---	York and Cumberland	1,090,000	---	---	370,000	450,000	270,000	1,090,000	18.5	---	---	---	---	---	
MARYLAND.																					
30 Sep. '58	279.6	7.2	---	228	87	3,489	Baltimore and Ohio	20,019,286	3,538,360	2,951,982	13,111,500	10,663,645	412,483	29,400,161	286.8	3,626,805	3,856,485	1,325,280	07	---	
30 Sep. '58	30.0	---	---	7	35	107	Washington Branch	1,650,000	---	---	1,650,000	---	---	1,824,806	39.0	167,427	469,423	266,995	6	100	
31 Dec. '58	188.0	4.0	---	42	38	1,455	Northern Central	6,843,457	733,924	220,965	2,960,000	5,895,800	655,507	8,681,557	154.5	606,482	810,904	364,649	6	17	
MASSACHUSETTS.																					
30 Nov. '58	21.2	---	---	6	4	80	Berkshire	600,000	*	---	600,000	---	---	600,000	oper. rat. by	Honiat.	42,000	7	---	---	
30 Nov. '58	20.8	1.8	43.6	20	26	544	Boston and Lowell	2,239,253	183,345	---	1,830,700	440,000	21,965	2,619,210	28.6	274,655	407,399	166,109	07	---	
31 May '59	74.3	7.4	50.6	30	39	640	Boston and Maine	3,847,004	368,357	105,937	4,076,570	---	---	---	51.7	---	818,681	399,657	7 1/2	97	
31 Dec. '57	74.5	---	---	21	---	---	Boston and New York Central	3,622,203	69,941	---	2,241,000	374,550	1,299,039	3,923,519	74.5	---	88,483	7,052	---	---	
30 Nov. '58	43.5	12.0	22.8	22	27	200	Boston and Providence	3,333,807	191,175	---	3,160,000	195,220	---	---	55.5	292,049	527,764	259,176	6	102	
30 Nov. '58	44.7	24.0	59.2	31	64	697	Boston and Worcester	4,251,682	437,416	100,000	4,500,000	600,000	60,774	5,578,160	68.7	498,326	923,223	332,270	6	100	
30 Nov. '58	46.1	1.1	2.7	7	10	109	Cape Cod Branch	907,761	123,864	---	681,689	144,600	114,417	47.2	78,282	106,846	49,483	---	---		
30 Nov. '58	50.0	2.4	8.9	12	13	330	Connecticut River	1,614,364	187,558	20,000	1,591,100	223,000	28,000	76.4	158,815	238,390	90,877	2	69		
31 May '59	44.2	36.4	19.4	28	46	320	Eastern	4,134,475	450,523	262,102	2,853,400	2,105,500	172,216	5,128,719	100.5	373,641	663,135	319,526	4	4	
30 Nov. '58	19.9	1.3	2.8	3	---	---	Essex	742,592	4,416	---	299,107	277,961	197,423	774,492	oper. rat. by	Eastern	12,295	---	---	---	
30 Nov. '58	50.9	16.8	70.1	29	28	643	Fitchburg	3,189,851	350,149	---	3,540,000	---	---	3,863,710	67.7	803,392	672,967	278,856	6	18	
30 Nov. '58	14.0	---	---	3	3	45	Fitchburg and Worcester	293,658	40,226	---	210,000	64,200	65,735	26.0	35,657	35,476	12,849	6	---		
30 Nov. '58	9.0	---	---	---	---	---	Grand Junction (Boston)	---	---	---	---	---	---	---	9.0	---	---	---	---	---	
30 Nov. '58	24.9	---	---	2	3	28	Hampshire and Hampden	598,299	---	---	292,651	200,000	105,649	oper. rat. by	H. & N. H.	33,294	---	---	---	---	
30 Nov. '58	12.4	---	---	2	3	28	Lowell and Lawrence	332,883	30,275	---	200,000	100,000	---	---	12.4	22,455	42,784	15,540	3	---	
30 Nov. '58	14.1	---	---	12	11	301	Nashua and Lowell	558,919	95,684	---	600,000	---	---	---	14.6	123,396	180,085	71,505	8	105	
30 Nov. '58	20.0	1.4	---	7	18	144	New Bedford and Taunton	493,049	61,906	---	500,000	---	---	---	21.5	52,220	137,914	28,968	---	---	
30 Nov. '58	26.9	---	---	6	9	43	Newburyport	570,086	59,096	---	220,240	198,520	221,335	36.0	70,236	44,974	9,257	---	---		
30 Nov. '58	8.6	---	---	24.4	---	---	N. York and Boston Air Line	416,133	---	---	223,176	673,210	4,643	3,748,970	8.6	18,093	16,606	1,647	---	---	
30 Nov. '58	79.5	7.8	25.1	25	46	359	Old Colony and Fall River	3,028,445	334,505	---	3,015,100	161,500	30,935	oper. rat. by	Western	551,399	257,000	6	104		
30 Nov. '58	18.6	---	---	1	2	1	Pittsfield and North Adams	432,430	11,247	---	450,000	---	---	450,000	oper. rat. by	Western	27,000	6	---	---	
30 Nov. '58	43.4	---	---	14	18	138	Providence and Worcester	1,534,911	254,565	---	1,550,000	300,000	46,500	1,897,369	43.4	199,895	270,402	110,344	6	97	
30 Nov. '58	16.9	---	---	3	3	374	Salem and Lowell	366,957	62,543	---	243,306	226,900	---	---	16.9	29,822	50,586	---	---	---	
30 Nov. '58	21.9	---	---	---	---	---	Stockbridge and Pittsfield	444,600	4,100	---	448,700	---	---	450,000	oper. rat. by	Honiat.	31,409	7	---	---	
30 Nov. '58	7.1	---	---	35.5	---	---	Troy and Greenfield	329,741	---	---	328,428	169,000	9,854	---	---	---	---	---	---	---	
30 Nov. '58	8.0	---	---	12	8	184	Vermont and Massachusetts	3,999,257	207,343	---	2,514,225	1,032,675	6,500	oper. rat. by	Western	225,079	105,057	---	---	---	
30 Nov. '58	176.4	---	---	72	47	1,149	Western (incl. Ath. & W. S. etc.)	9,785,569	1,095,713	15,120	5,150,000	6,032,570	243,800	18,528,786	210.6	944,651	1,700,293	809,263	8	110	
30 Nov. '58	45.7	---	---	10	8	145	Worcester and Nashua	1,279,936	140,961	---	1,141,000	200,000	31,210	1,416,556	45.7	162,803	185,127	83,849	5 1/2	60	
MICHIGAN.																					
1 Jan. '59	17.3	---	---	2.7	2	1	Bay de Noyet and Marquette	---	---	---	---	---	---	---	---	---	---	---	---	---	---
30 Sep. '59	57.0	---	---	---	---	---	Chic. Detroit & Can. G. T. Junc.	built and	equipm	ed by G. r. Trk R.	R. Co. of	Canada	---	---	---	---	---	---	---	---	---
1 Jan. '59	188.0	---	---	---	---	---	Detroit and Milwaukee	8,270,623	647,596	---	2,329,155	4,707,500	---	9,008,369	188.0	---	365,038	144,270	---	---	
Grand Rapids and Indiana.																					
Grand Rapids and Indiana.																					
31 May '59	284.0	---	---	183.0	98	123	Michigan Central	12,847,238	*	1,149,069	6,057,840	8,284,063	119,089	14,548,411	329.0	---	2,417,915	886,697	38	---	
1 Mar. '59	246.0	293.0	---	89.8	91	135	Mich. St'n & N'n'n Indiana	14,517,892	1,807,906	1,312,534	8,975,400	9,343,000	816,460	19,695,407	539.0	---	2,019,425	777,273	6	---	
Port Huron & Milwaukee.																					
MINNESOTA.																					
---	---	---	---	620.0	---	---	Minnesota and Pacific	---	---	---	---	600,000	---	---	---	---	---	---	---	---	---
---	---	---	---	175.0	---	---	Southern Minnesota	---	---	---	---	375,000	---	---	---	---	---	---	---	---	---
---	---	---	---	112.5	---	---	Minneapolis and Cedar Rapids	---	---	---	---	600,000	---	191,130	---	---	---	---	---	---	---
---	---	---	---	300.0	---	---	Minnesota Transit	---	---	---	---	600,000	---	---	---	---	---	---	---	---	---
---	---	---	---	60.0	---	---	Root River Valley	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MISSISSIPPI.																					
1 May '59	146.5	---	---	41.7	11	6	Mississippi Central	3,395,965	*	---	1,641,947	1,346,383	383,129	3,717,489	146.5	---	239,585	117,371	---	---	
1 Oct. '59	71.4	---	---	21.8	7	4	Mississippi and Tennessee	1,254,894	159,018	---	798,285	456,949	275,000	1,974,444	59.7	---	176,462	116,433	---	---	
31 Dec. '58	83.2	---	---	60.4	---	---	Southern Mississippi	2,750,000	---	---	1,000,000	1,400,000	---	---	83.2	---	250,047	121,659	---	---	
MISSOURI.																					
30 Nov. '58	12.0	---	---	65.8	1	---	Cairo and Paducah	281,445	9,200	---	50,493	327,000	50,892	128,386	12.0	---	---	---	---	---	---
1 July '58	171.0	---	---	36.0	---	---	Hannibal and St. Joseph	8,164,559	330,422	---	1,664,773	6,800,500	37,500	8,533,228	171.0	---	---	---	---	---	---
31 Oct. '58	168.3	---	---	63.0	---	---	North Missouri	6,306,527	235,994	---	2,620,000	3,250,000	48,006	6,016,106	168.0	---	---	---	---	---	---
Platte County																					
28 Feb. '59	163.0	19.0	---	119.0	26	26	Pacific	8,621,659	614,782	---	3,330,657	8,203,000	754,837	12,283,494	182.0	---	676,310	301,503	---	---	
31 Oct. '58	19.0	---	---	264.0	---	---	South Western Branch	1,226,010	---	---	66,974	1,400,000	---	---	---	---	---	---	---	---	---
31 Oct. '58	86.5	---	---	---	---	---	St. Louis and Iron Mountain	4,916,189	283,869	---	1,999,300	5,276,000	171,103	5,446,403	86.5	---	152,371	---	---	---	---
NEW HAMPSHIRE.																					
31 Mar. '59	23.1	---	---	3.2	---	---	Ashuelot.	506,000	---	---	246,015	150,000	109,982	506,000	oper. rat. by	Con	n. River	30,000	---	---	---
31 Mar. '59	93.5	---	---	6.6	14	10	292	Boston, Concord and Montreal	2,580,134	283,450	8,219	1,800,000	1,050,000	105,853	98.6	853,000	227,720	86,538	---	---	
30 Nov. '58	53.6	---	---	8.2	18	11	289	Cheshire	2,758,565	322,366	---	2,085,925	784,900	121,500	3,052,757	53.6	248,469	297,332	108,517	---	---
30 Nov. '58	28.5	---	---	3.7	8.5	6	3	Cocheco	769,433	81,025	---	299,140	421,120	46,399	806,659	28.5	32,618	44,709	17,063	---	---
31 Mar. '59	34.5	---	---	44.0																	

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

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Years ending	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.							Earnings.					Price of shares.		
	Main Line.	Lateral and Branch Lines.	2nd Trunk and Siding.	Road in progress or projected.	Engines.	Cars.			Property and Assets.			Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.				
						Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Share Capital paid in.	Bonds and Mortgage Debt.	Floating Debt.	Gross.				Net.				
	M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	P. c.	P. c.			
NEW YORK.																							
30 Sep. '58				140.0				Albany and Susquehanna	227,356			275,793		8,697									
30 Sep. '58	32.9		3.3		5	12	53	Albany, Vermont and Canada	1,557,502	136,038		439,005	1,575,099	50,000		32.9	93,894	84,119	11,215				
30 Sep. '58	38.3		34.0					Albany and West Stockbridge	2,239,934			1,000,000	1,289,934			ope. r. by Western.			6				
30 Sep. '58	84.9	2.6		73.6	4	6	39	Black River and Utica	1,153,069	81,405		504,645	662,500	52,570		37.5	84,424	60,524	32,413				
30 Sep. '58	14.5		1.6					Bloomsburg and Corning	496,661			250,000	220,000			14.8	16,530	23,554	9,204	6			
30 Sep. '58	142.0	78.0	13.6		26	32	353	Buffalo, New York and Erie	2,975,325			650,000	2,490,593	164,938		220.0	355,480	420,754	128,122				
30 Sep. '58	68.3		18.0		28	34	312	Buffalo and State Line	2,460,251	312,736		1,913,000	1,049,000	172,787		87.8	356,145	514,116	359,609	6			
30 Sep. '58	24.6		38.1					Cayuga and Susquehanna	1,016,058	79,542		687,000	426,000	7,042		34.6	59,539	59,421	5,092				
30 Sep. '58	17.4		2.1					Chemung	400,000			380,000	70,000			ope. r. by N. Y. & E.			24,000	7			
30 Sep. '58	46.5		2.9		10	8	83	Elmira, Canandaigua & N. Falls				352,742	14,000	28,716	396,416	ope. r. by Re.							
30 Sep. '58				63.2				Erie and New York City	287,708			59,374	38,500	23,404		ope. r. by B.N. Y. & E.							
30 Sep. '58	17.3		0.5		5	3	50	Genesee Valley	91,839			175,000				17.3	49,519	58,297	10,840	6			
30 Sep. '58	144.0		106.5		57	107	537	Hudson and Boston (West'n)	148,000	27,609						150.0	700,224	1,628,412	594,639	411			
30 Sep. '58				73.8				Hudson River	10,146,617	1,152,372		3,758,466	8,842,000	455,003									
30 Sep. '58				182.0				L. Ontario, Auburn & N. York	74,293			75,771											
30 Sep. '58								L. Ontario and Hudson River	3,497,538	178,320		2,715,186	870,000	115,556		101.5	213,414	334,035	111,531	111			
31 Mar. '58	84.0	2.5			19	34	185	Long Island	2,211,659	534,611	1,000	1,852,715	639,497	144,566		3.66	1,194	6,528,412	3,041,120	7			
30 Sep. '58	297.8	253.1	313.8		213	258	2,669	New York Central	25,475,400	5,257,077	8,193,000	24,182,400	14,402,635	43,079	40,633,635	555.9	3,669,194	6,528,412	3,041,120	8			
30 Sep. '58	446.0	19.0	282.5		210	183	2,684	New York and Erie	29,908,749	4,148,885	973,083	11,000,000	28,371,511	1,707,575	39,079,066	496.0	3,000,269	5,151,616	1,086,575	81			
30 Sep. '58	130.8	2.1	30.9		83	89	430	New York and Harlem	7,293,339	684,777		5,717,100	5,151,287	147,640		152.9	627,747	975,853	358,792				
30 Sep. '58	118.0	3.8	17.7		25	8	417	Northern (Ogdensburg)	4,086,712	702,079			1,494,000			121.8	311,404	410,806	127,013				
30 Sep. '58	35.9				7	6	44	Oswego and Syracuse	660,919	109,462		396,240	197,000	16,415		35.9	68,845	115,990	61,347	8			
30 Sep. '58	75.4		2.0		6	4	33	Pottadom and Watertown	1,523,646	63,382		693,077	515,500	180,138		75.4	95,686	94,385	44,715				
30 Sep. '58	25.2		2.1		5	13	70	Rensselaer and Saratoga	743,977	156,578		610,000	140,000			40.2	89,390	208,223	33,946				
30 Sep. '58	18.4		1.3	32.6				Rochester and Genesee Valley	653,539			555,450	150,000	30,417		18.4	32,980	37,280	18,590				
30 Sep. '58	18.0		1.0		2	2	32	Sacketts Harbor and Ellisburg	371,556	17,714		167,485	273,400	56,810		18.0	17,620	12,025					
30 Sep. '58	21.0		1.6		2	3	30	Saratoga and Schenectady	450,684			300,000				ope. r. by Renss.			30,150	24			
30 Sep. '58	40.9	6.6	8.9		0	12	84	Saratoga and Whitehall	820,518	74,904		500,000	385,000	5,456		54.5	107,506	139,885	32,196				
30 Sep. '58				13.2				State Island	40,000			40,000											
30 Jun. '58	11.0							Brooklyn and Jamaica	369,856			234,500	85,000			ope. r. by Long Isl.			37,560	9			
30 Sep. '58	81.3		7.1		13	12	117	Syracuse, Binghamt. & N. Y.	2,857,607			1,200,139	1,560,000	50,418		61.3	145,240	177,627	74,359				
30 Sep. '58	27.2		8.2		7	4	65	Troy and Boston	1,296,302	125,887		568,297	797,500	231,083		27.2	61,614	125,042	63,289				
30 Sep. '58	6.0		0.1					Troy and Greenbush	258,656	36,073		275,000				ope. r. by Hud.				6			
30 Sep. '58	2.1		2.1					Troy Union	732,114			30,000	680,000			ope. r. by other Co's.							
31 Dec. '58	96.5		11.0		7	11	298	Watertown and Rome	2,159,295		28,000	1,498,500	600,000	85,071	2,278,611	96.8	215,605	397,712	187,000	6			
NORTH CAROLINA.																							
30 Sep. '58	95.2	2.0						Atlantic and North Carolina	1,850,000			1,600,000	400,000			95.2							
30 Sep. '58	223.0							North Carolina	4,235,000			4,000,000				223.0							
30 Sep. '58	97.0							Raleigh and Gaston	1,240,241			973,300	126,200			97.0							
30 Sep. '58	161.0		17.1		22	20	144	Wilmington and Manchester	2,586,238		201,500	1,127,511	1,060,000	111,586	2,892,969	171.0	206,917	108,541					
30 Sep. '58	161.9				24	32	144	Wilmington and Weldon	2,569,223		107,000	1,340,213	791,065	102,391	3,114,954	171.0	487,043	209,793		8			
15 Mar. '58				43.0				Western North Carolina	190,798		4,700	220,212		70,580	364,072		323,069	477,554	235,201				
OHIO.																							
31 Dec. '58	118.2				17	12	208	Atlantic and Great Western	613,231			566,939		77,294									
1 Aug. '58	137.0				41	39	508	Bellefontaine and Indiana	8,005,919		11,000	1,879,370	1,274,828	39,028	3,370,281	118.2							
31 Mar. '58	60.3				22	28	632	Central Ohio	5,578,518	806,633	106,183	1,927,906	3,869,300	1,252,440	6,594,557	141.0							
30 Sep. '58	37.0				62	1		Cinc., Hamilton and Dayton	2,043,206	604,892	26,500	2,165,800	1,411,000	32,618	3,650,710	60.3							
1 May. '58	181.8				31.0	16	10	332	Cinc. and Indianapolis Junc.	6,250,841		2,441,176	3,032,000	228,978		131.8	304,168	190,745	19,180				
31 Dec. '58	135.4	5.8			42	31	439	Cleveland, Columbus and Cinc.	4,087,571	684,055	67,422	4,746,100	38,000	8,242	5,843,275	141.2							
31 Dec. '58	67.0				18.0			Cleveland and Maioning	1,990,953			569,000	1,202,300	161,200	1,943,500	67.0							
31 Dec. '58	95.4	1.2	37.9		31	39	453	Clev., Painesville & Ashtabula	3,338,114	620,532	523,000	3,000,000	1,367,000	119,812	4,558,932	96.6	402,935	1,251,537	596,048	15			
30 Nov. '58	101.0	102.5			42			Cleveland and Pittsburg	9,320,288			3,942,368	4,918,825	563,321	9,661,102	203.5	645,418	772,093	332,093	4			
30 Apr. '58	109.2	79.4			32	52	430	Cleveland and Toledo	6,729,056	458,104	258,424	3,343,512	3,842,720	358,605	7,858,918	188.6							
31 Dec. '58	61.4				53.0	6	99	Clev., Zanesville and Cincin.	1,574,693			369,673	575,250	632,436		61.5	75,120	68,128	19,763				
31 Dec. '58	72.0				81.0	6	103	Columbus and Indianapolis	2,555,000			750,000	1,600,000	205,000		72.0	144,000	84,000	17,780				
30 Nov. '58	54.5	10.4						Columbus and Xenia	1,378,250	392,900	112,734	1,490,000	290,700	50,500	1,965,639		ope. r. w. Lit. Miami.						
31 Dec. '58	72.0							Dayton and Michigan	3,746,000			1,620,000	2,126,000			72.0	144,000	124,559	66,779				
31 Aug. '58	36.6				6	3	87	Dayton and Western	930,262	104,912		289,692	700,000	90,482	1,080,174	36.6							
31 Aug. '58	16.0				47.0	3	2	Dayton, Xenia and Belpre	860,406			437,538	422,658			16.0	40,064	64,000	33,000				
31 Dec. '58	45.0				6	5	72	Eaton and Hamilton	1,101,744	79,022	62,630	469,782	728,853	152,694	1,858,367	45.0	105,304	151,868	44,615				
30 Sep. '58	36.0				84.0			Freemont and Indiana															

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

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Years ending	Railroad.				Equipment.			Companies.	Abstract of Balance Sheet.										Earnings.				Dividends.	Price of share.
	Main Line.	Lateral and Branch Lines.	2nd Track and Sidelings.	Road in progress or projected.	Cars				Property and Assets.			Liabilities.				Balance Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings.					
					Engines.	Passenger.	Freight, etc.		Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Gross.				Net.					
	M.	M.	M.	M.	No.	No.	No.		\$	\$	\$	\$	\$	\$	\$	\$	M.	M.	\$	\$	P. c.	P. c.		
PENNSYLVANIA, (Continued.)																								
31 Dec. '68	28.0							Philadelphia and Trenton	1,000,000			1,000,000			1,000,000	28.0	oper. by	Cam. & Amboy						
30 Nov. '68	98.0	6.0			31	60	487	Phila., Wilmington and Balt.	7,235,522	762,225	76,081	5,600,000	2,547,379	198,961	8,782,966	194.0		1,096,847	344,152			7		
31 Oct. '67	48.0							Pittsburg and Connellsville	2,285,606			1,031,173	1,100,000	513,403	2,644,756	48.0		45,586	4,318					
31 Dec. '66	10.3							Pittsburg and Erie								10.3								
31 Dec. '65	467.0				94	96	1,130	Pittsburg, Ft. Wayne & Chicago	14,631,110		91,100	6,260,555	9,029,765	1,657,594	17,046,252	467.0	1,894,029	1,567,232	601,658					
30 Sep. '67	31.0							Pittsburg and Steubenville	1,947,462			1,221,277	280,000											
1 Jan. '69	25.0							Schuylkill Valley								25.0								
1 Jan. '69	40.2							Sunbury and Erie	6,517,841	37,933		3,903,843	527,000	309,591	8,876,132	40.3								
31 Mar. '69	29.7							Tioga	1,093,263															
31 Mar. '69	78.0							Williamsport and Elmira	3,650,682	380,847		1,500,000	2,361,973	161,272	4,148,920			101,970	96,308			1		
RHODE ISLAND.																								
31 Aug. '68	50.0		2.0		0	13	84	N. Y., Providence and Boston	2,158,000			1,508,000	306,500		2,158,000	50.0	147,231	208,439	96,671			5		
30 Nov. '68	13.6		0.6				5	Providence, Warren & Bristol	434,698	1,588		287,917	109,937	36,129		13.6	23,514	23,005	1,278					
SOUTH CAROLINA.																								
31 Dec. '68	13.2			182.4	2		26	Blue Ridge	2,126,530			1,916,515	217,577		2,134,092	13.2								
31 Dec. '68	54.9			47.4	4	3	21	Charlotte and Savannah	801,615	34,372	250,000	706,365	195,266	197,905	1,099,536	51.9								
31 Dec. '68	109.6				13	9	176	Charlotte and South Carolina	1,719,045			1,201,000	384,000			109.6		283,203	151,536			6		
31 Dec. '68	40.3							Craw and Darlington	600,000			400,000	200,000			40.3								
1 Jan. '69	143.2							Greenville and Columbia	2,439,769	324,161		1,429,008	1,145,000	345,546	2,919,554	143.2		341,190	125,971					
31 Aug. '68	22.5							Kings Mountain	196,230			200,000			200,000	22.5								
31 July '68	32.0							Laurens	543,403			400,000	106,218		575,729	32.0		27,598	8,527					
28 Feb. '69	102.0							North-Eastern	2,011,652			985,743	960,410	103,172	2,067,325	102.0		220,014	96,146					
31 Dec. '68	136.6	106.0			62	59	790	South Carolina	5,617,384	1,103,130	374,060	4,179,475	2,770,463	193,086	7,701,837	242.0		1,501,006	820,511			7		
31 July '68	25.1			41.9				Spartanburg and Union								25.1								
TENNESSEE.																								
31 Dec. '68	30.0							Cleveland and Chattanooga	867,210															
30 Jun. '68	110.8							Edgfield and Kentucky																
30 Jun. '68	130.3				10	13	95	East Tennessee and Georgia	3,376,943	117,512		1,289,155	1,910,688	278,319	3,501,197	130.3		264,969	156,196					
30 Jun. '68	271.0	28.0						East Tennessee and Virginia	2,529,415			629,800	1,968,950	406,659	3,041,940	271.0		191,196	96,231					
30 Jun. '68	82.0							Memphis and Charleston	5,276,573	699,776	109,066	2,258,115	2,594,000	837,992	6,354,752	82.0		1,330,812	776,006					
30 Jun. '68	48.1							Memphis and Ohio	3,200,000															
30 Apr. '69	48.1							Memphis, Clarksv. & Louiv.	195,364			309,562	624,500	118,659	1,062,721	48.1			43,436					
30 Nov. '68	84.2							Mississippi Central and Tenn.	1,023,470			140,997	406,000		565,459	34.2	run by	Nash. & Chatta.	279,267			3		
30 Nov. '68	151.0	8.0			38	20	323	McMinnville and Manchester	565,459		160,000	2,262,406	1,674,000	85,944	4,121,557	151.0		641,552						
30 Jun. '68	43.6							Nashville and Chattanooga	3,733,472															
30 Jun. '68	15.0							Nashville and Northwestern	1,000,000															
30 Jun. '68	15.0							Tennessee and Alabama	935,697			309,754	626,889	83,037		43.6	operated by	Nash. & Chatta.	55,776	29,406				
30 Jun. '68	32.0							Winchester and Alabama																
30 Jun. '68	58.0							TEXAS, (all aided by State).																
30 Jun. '68	43.0							Buffalo Bayou, Braz. & Col'do								32.0								
30 Jun. '68	60.0							Galvest, Houst. & Henderson								58.0								
30 Jun. '68	25.0							Houston and Brazoria								43.0								
1 May '69	29.0							Houston and Texas Central	1,132,747			1,270,123	335,000	128,205	1,691,443	29.0		76,958						
30 Jun. '68	29.0							San Antonio & Mexican Gulf								25.0								
30 Jun. '68	29.0							Southern Pacific								29.0								
VERMONT.																								
31 Aug. '68	90.7				18.6	7	7	181	Connect. & Passumpsic Rivers	2,345,724	185,421		1,200,000	800,000		90.7	95,256	171,025	67,853					
31 Aug. '68	119.9				26	18	605	Rutland and Burlington	3,999,708	566,275	92,859	2,233,376	3,145,001	1,018,764	6,392,141	119.9	365,762	354,288	81,561					
31 Aug. '68	62.0				10	6	201	Rutland and Washington	1,771,833			950,000			1,780,683	62.0	154,997	174,429	1,586					
31 Aug. '68	122.0				42	28	886	Vermont Central	8,402,055			5,000,000	8,553,000	1,423,299	10,276,299	122.0	569,323	995,507	295,614					
31 Aug. '68	47.0							Vermont and Canada	1,380,695			1,350,000			1,380,695	47.0	oper. by	Vi. Central				40		
31 Aug. '68	23.7							Vermont Valley	1,212,274	89,612		516,684	793,200		1,308,864	23.7	47,324	43,998	10,498					
31 Aug. '68	54.0	10.6						Western Vermont	1,053,500			332,000	700,000		1,053,500	54.0	oper. by	Nash. & Troy	55,565					
VIRGINIA.																								
31 Aug. '69	41.3							Alex., Loudoun & Hampshire	1,492,194	42,000		1,403,018	30,188	58,181	1,534,194									
30 Sep. '68	75.8							Manassas Gap	3,262,990	209,901		3,033,500	418,000	292,956	3,939,729	75.8		125,599	65,554					
31 Mar. '69	79.2							Norfolk and Petersburg	1,696,907	64,027	10,500	1,346,876	456,893		1,803,769	79.2								
30 Sep. '68	103.5							Northwestern Virginia	5,322,150			408,605	5,719,229			103.5	345,477	248,004	loss					
30 Sep. '68	112.5	9.1	4.5		12	10	101	Orange and Alexandria	4,339,375			1,599,329	1,480,500	371,590	5,134,475	97.6	150,538	258,875	151,872					
30 Sep. '68	123.0				19	13	278	Petersburg and Lynchburg	3,040,636	374,996		1,365,300	1,851,500	292,842	4,745,256	123.0		410,166	201,344					
31 Dec. '68	59.2	21.3			14	17	131	Petersburg and Roanoke	988,791	192,940		883,200	127,427	84,344	1,318,057	59.2		810,988	186,085					
30 Sep. '68	140.5	1.8			23	18	370	Richmond and Danville	3,588,653			1,951,017	1,26,407	25,153	4,424,671	142.3	263,893	491,674	207,192					
31 Mar. '68	75.1							Richm., Frederick & Potomac	1,985,579		52,800	1,033,600	680,115	116,550	2,158,232	75.1		269,126	145,666					
30 Apr. '69	22.2				10	16	192	Richmond and Petersburg	1,087,949															

AMERICAN RAILROAD BOND LIST.

* signifies that the road is in the hands of receivers. (†) that the company is in default in its interest. "S. F." Sinking Fund. "var." that the bonds fall due at different periods.

Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
Alabama and Florida:					Chicago and Milwaukee:					Eaton and Hamilton:				
Mortgage	\$300,000	7	1867		1st Mortgage (convertible)	\$512,000				1st Mortgage	\$757,734	†	var.	
Convert. (guar. by Dlr.)	150,000	7	1863		Income	62,000				Erie and North-East:				
Land Mortgage	23,500	7	1869		Real Estate 2d Mortgage	188,864		1868		Exchanged for Buff. and St. L.	149,000			
Alabama and Miss. Rivers:					Chicago and Rock Island:					Evansville and Crawfordsville:				
State (Ala.) Loan	123,171				1st Mortgage	1,397,000	7	1870	94					
Mortgage	109,500				Chic. St. Paul and Fond du Lac:					Florida:				
Alabama and Tenn. Rivers:					1st Mortgage (on 1st Division)	3,000,000	7			Internal Improvement (State)	1,655,000	7	1891	
1st Mortgage convertible	526,000	7	1872		2d Mortgage (1st Land Grant)	3,000,000	7			Free Land, 2d Mortgage	1,500,000	8	1891	
2d Mortgage	225,705	8	1864		Real Estate	350,000	18			Florida and Alabama:				
Albany, Vt. and Canada:					Cincinnati, Hamilton and Dayton:					Internal Improvement (State)		7	1791	
1st Mortgage	500,000	7	1867		1st Mortgage	461,000		1867	92	Free Land, 2d Mortgage		8	1791	
Albany and West Stockbridge:					2d Mortgage	950,000		1880	83	Internal Improvement (State)	300,000	7	1791	
Albany City (S. F.)	1,000,000	6	'66-'76		*Cincinnati, Wilm. and Zanesville:					Free Land, 2d Mortgage	200,000	8	1791	
Androscoogin and Kennebec:					1st Mortgage	1,300,000				Florida, Atlantic and Gulf Centr.:				
1st Mortgage (Coupon) '60-'64	1,000,000	6	'62-'64		2d Mortgage	574,000				Internal Improvement (State)	300,000	7	1791	
Stock, convert. (Coupon)	710,000	6	'63-'66		3d Mortgage	158,000				Free Land, 2d Mortgage	200,000	8	1791	
Atlantic and St. Lawrence:					Income	250,500				Fox River Valley:				
Dollar Bonds (Coupon)	988,000	6	1866		Tunnel Right	1,000,000				1st Mortgage	400,000	†		
Sterling Bonds (Coupon)	484,000	6	1878		Cleveland and Mahoning:					2d Mortgage	180,000			
City of Portland Loan (Conv.)	1,500,000	6	'68-'70		1st Mortgage	694,500				Galena and Chicago Union:				
Baltimore and Ohio:					2d Mortgage	469,000				Litchfield	52,015	7	1859	
Maryland Sterling	3,000,000	5			3d Mortgage	38,800				1st Mortgage (S. F.)	1,993,000	7	'62-'68	93
Mortgage Coupons	2,500,000	6	1885		Clev., Pulleville and Ashtabula:					2d Mortgage (S. F.)	1,738,000	7	1875	86
"	700,000	6	1880	84	1st Mortgage	564,000	7	1861	99	Galveston, Houston and Henderson:				
"	1,128,500	6	1875	86	2d Mortgage	805,000	7	1861						
"	1,000,000	6	1868		Special (Sunbury and Erie)	500,000								
Balt. City Loan	4,886,511	6			Cleveland and Pittsburgh:					*Great Western, Ill.:				
Bellefontaine and Indiana:					1st Mortgage (Main Line)	800,000	7	1860	67	1st Mortgage (W. Div. 100 m.)	1,000,000	10		
1st Mortgage convertible	791,000	7	1866		2d Mort. (M. L.) or 1st Extension	1,188,000	7	1873	57	1st M. (E.D. 84 m.), 2d M. (W.D.)	1,350,000	7		
2d Mortgage	140,000	7	1870		3d Mort. (M. L.) or 2d Extension	1,165,000	7	1875		Old Sang. and Morg. Railroad	41,000			
Real Estate (1861, '63, '68)	129,000	7	var.		4th Mort. (M. L.) or 3d Extension	1,154,000				2d Mortgage	323,000			
Income (S. F.)	199,500	7	1859		Income	118,000				Chattell (Equipment) Mortgage	374,426			
Belvidere Delaware:					Dividend Bonds and Scrip	491,825				Greenville and Columbia:				
1st Mort. (guar. C. and A.)	1,000,000	6	1877		Cleveland and Toledo:					1st Mortgage, Coupon	1,145,000			
2d Mortgage	445,500	6			1st Mortgage	377,000	7	1867		Hannibal and St. Joseph:				
Cand. and Amb. R.R. Co.	244,000	6			2d Mortgage	305,000	7	1872		Missouri State Loan	3,000,000	6		
Black River and Utica:					3d Mortgage	324,000	7	1862		Land	3,509,500	7		
1st Mortgage	370,000	7	1869		Tol., Nor. and Clev. 1st Mort.	522,000	7	1863	70	Income (convertible)	310,000	7		
Boston, Concord and Montreal:					Tol., Nor. and Clev. 2d Mort.	299,900	7	1863		Main	11,000	7		
1st Mortgage	200,000	6	1870		Junction Income	61,500	7	1862		Harriburg and Lancaster:				
2d Mortgage	300,000	7	1870		C. and T. Income	192,950	7	1863		New Dollar Bonds	459,872	6	1883	93
3d Mortgage Coupons	150,000	6	1870		C. and T. Income (convertible)	409,900	7	1864		Hartford and New Haven:				
4th Mortgage Coupons	200,000	7			C. and T. Income (convertible)	373,000	7	1864		1st Mortgage	1,000,000	6	1873	98
Sinking Fund	200,000	6			C. and T. Dividend (convert.)	199,735	7	1865		Hartford, Providence and Fishkill:				
Boston and Lowell:					C. and T. Income (convertible)	129,000	7	1870						
Mortgage	440,000	6	1873		C. and T. (S. F.) Mortgage	640,000	7	1865						
Boston and Worcester:					Junction (Lloyd's)	5,000	7	1862						
Mortgage (plain)	100,000	6	1860		*Cleveland, Zanesville and Cin.:									
Mortgage (convertible)	500,000	6	1860											
Buffalo and State Line:					*Columbus, Piqua and Indiana:									
1st Mortgage	500,000	7	1866	90						Houston and Texas Central:				
Income (1/2 in '59, 1/2 in '62)	200,000	7	var.		Columbus and Xenia:					State (1st Lien) Loan	210,000			
Unsecured	200,000	7	1864		1st Mortgage	18,000		1859		Mortgage	125,000	7	1866	
Erie and North-East	149,000	7			Dividend (due 1860, '61, '62, '66)	272,700		var.		Hudson River:				
Burlington and Missouri:					Connecticut River:					1st Mortgage	4,000,000	7	1869	104
1st Mort. on 1st Division	500,000				Connecticut (due 1860, '60, '62, '63)	210,000	6	var.		2d Mortgage	2,000,000	7	1860	98
Burlington Loan	75,000				Connecticut and Passump. Rivers:					3d Mortgage	3,000,000	7	1867	
Calo and Fulton (Mo.):					1st Mortgage	800,000				Illinois Central:				
State (Mo.) Loan	650,000	6	'78-'79		Cumberland Valley:					Optional Right Scrip	65,000	7	1863	54
Camden and Amboy:					1st Mortgage	116,500				Construction	12,585,000	7	1875	54
Mortgage	367,000	6	1864		2d Mortgage	97,000				Construction	4,115,000	6	1875	95
Mort. (chgd from Sterlig)	888,000	6	1864		Dauphin and Susquehanna:					Free Land	3,000,000	7	1860	
Mortgage	800,000	6	1849							Indiana Central:				
Mortgage	1,700,000	6	1875		Dayton and Michigan:					1st Mortgage (convertible)	600,000	7	1866	
Sterling (\$210,000)	1,008,000	5	1864		1st Mortgage					2d Mortgage	284,500	10		
Sterling (\$225,000)	1,080,000	6	1864		2d Mortgage					Income	281,500	10		
New Loan (iss'd \$337,000)	2,500,000	6	1887		Dauphin and Susquehanna:					Indianapolis and Cincinnati:				
Unsecured	800,000	6	1863							1st Mortgage	500,000	7	1866	
*Catawissa, Williamsport and Erie:					Dayton and Western:					2d Mortgage	400,000	7		
1st Mortgage	1,500,000	7	1865	32	1st Mortgage	300,000				Real Estate Mortgage	200,000	7	1858	
2d Mortgage	399,036	7	1868		2d Mortgage					Dividend	86,284		var.	
Chattell Mortgage	880,000	10	1871		Delaware:					Income and Domestic	176,000			
Cayuga and Susquehanna:					1st Mortgage	500,000				Indianap., Pittab. and Cleveland:				
1st Mortgage	300,000	7	1865		Guaranteed	65,000				1st Mortgage	654,000			
Unsecured	89,000	7	1862		State Loan	170,000				2d Mortgage	167,000			
Central of Georgia:					Delaware, Lackawanna and W'n:					Income	164,000			
Mort. (due 1859 to 1863)	158,767	7	var.		1st Mortgage	900,000		1871		Domestic	34,200			
Central of New Jersey:					2d Mortgage (E. Extension)	1,500,000		1875	89	Jeffersonville:				
1st Mortgage	1,500,000	7	var.		2d Mortgage	2,000,000		1881		1st Mortgage	289,000			
2d Mortgage	1,500,000	7	1875		Income (due 1862, '65 and '67)	1,263,170		var.		2d Mortgage	392,000			
Income	375,000	7	var.		Detroit and Milwaukee:					*Kennebec and Portland:				
*Central Ohio:					1st Mortgage (convertible)	2,500,000	7	1875		1st Mortgage (City and Town)	800,000	6	1870	
1st Mortgage	450,000	7	1861		2d Mortgage (convertible)	1,000,000	8	1866		2d Mortgage	230,000	6	1861	
1st Mortgage	800,000	7	1864		3d Mortgage (convertible)	750,000	10	1863		3d Mortgage	250,000	6	1862	
2d Mortgage	800,000	7	1865		4th Mortgage (G. W. R. R.)	500,000	8			*Kentucky Centr. (Cov. and Lex.):				
3d Mortgage (S. F.)	950,000		1855		Dubuque and Pacific:					1st Mortgage	160,000	6		
4th Mortgage (S. F.)	1,339,250		1876		New Construction	800,000	†			1st Mortgage	260,000	7		
Income (1863, '69 and '60)	1,283,200		var.		Dubuque Western:					2d Mortgage (convertible)	1,000,000	7		
Income (iss. to Muskingum Co.)	100,000		1862		1st Mortgage	344,000	†			Guaranteed by Covington	200,000	6		
Charleston and Savannah:					Eastern (Mass.):					Guaranteed by Cincinnati	100,000	6		
1st Mortgage (endorsed)	510,000	6			Income (due \$75,000 annually)	525,000	6	var.		Income	400,000	10		
2d Mortgage	1,000,000	7			2d Mortgage (convertible)	710,000	5	1862		Income	210,000	6		
Cheshire:					3d Mortgage (convertible)	445,000	6	1874		Kent'ry Centr. (Lex. and Danv.):				
Mort. (1860, '63, '75 and '77)	786,400	7	var.		1st M. (State) \$75,000 a y'r after '65	500,000	5	var.						
Chicago, Burlington & Quincy:					East Tennessee and Georgia:					Keokuk, Ft. D. Moines and Minn.:				
Consolidated 1st Mort.	1,660,000	8	1883		State, 1st Mortgage	970,000				City of Keokuk, 20 years	400,000	8		
Chic. and Aur. 1st Mort.	405,000	7	1867		Endorsed by State of Tennessee	160,000				City of Keokuk, (special tax)	150,000	10		
Ch. and Aur. 2d M. (S. F.)	303,000	7	1869		Mortgage (ordinary)	790,688				Lee County, 20 years	160,000	8		
Cent. Mil. Tr. 1st Mort.	400,000	7	1864		East Tennessee and Virginia:					Keokuk, Mt. Pleasant and Muscat.				
Cent. M. Tr. 2d M. (Conv.)	281,000	8	1868		State, 1st Lien	1,602,000				Lee County	150,000	8		
Chicago, Alton and St. Louis:					Endorsed by State of Tennessee	200,000				City of Keokuk	200,000	8		
1st Mortgage					1st Mortgage (after State)	100,000				Henry and Louisa Company's	50,000	8		
2d Mortgage					Redeemable in Stock	68,950				Lehigh Valley:				
3d Mortgage										1st Mortgage	1,500,000	6		

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Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.	Description.	Amount.	Interest.	Due.	Price.
La Crosse and Milwaukee:					Montgomery and West Point:					Orange and Alexandria:				
1st Mortgage (Eastern Div.).....	\$903,000	+			Alabama State Loan.....	\$122,622	var.			State Loan.....	\$400,000	---		
2d Mortgage (Eastern Div.).....	1,000,000	+			Mortgage (due 1866, '63 and '65).....	350,000	6	var.		1st Mortgage.....	612,500	6		
1st Land Grant (Western Div.).....	4,000,000	+			Muscongo:	450,000	8	1866		2d Mortgage.....	1,687,500	8		
2d Land Grant (Western Div.).....	353,800	+			1st Mortgage.....	249,000	7			Pacific (Mo.).....				
3d Mortgage (whole road).....	1,700,000	+			Nashville and Chattanooga:					State (Mo.) Loan.....	7,000,000	6		
Farm Mortgage.....	1,087,700	+			Mortgage (State endorsed).....	1,500,000	---			State Loan (S. W. Branch).....	2,800,000	6		
Unsecured Bonds.....	1,785,000	+			Chat. and Cleve. Subec. (endors.).....	150,000	---			Construction.....	4,500,000	6		
Lexington and Frankfort:					Not endorsed.....	24,000	---			Panama:				
Mortgage, due 1864, '69 and '74....	130,000	6			*New Albany and Salem:					1st Mortgage Sterling.....	1,750,000	---	1859	
Little Miami:					Crawfordsville.....	175,000	7			1st Mortgage Sterling.....	1,250,000	---	1865	100
Cincinnati Loan.....	100,000	---			1st Mortgage.....	500,000	10			2d Mortgage Sterling.....	1,000,000	---	1872	
1st Mortgage.....	138,000	6			1st Mortgage.....	2,235,000	6			Pennsylvania:				
2d Mortgage.....	7,000	6			New Haven and Hartford:					1st Mortgage (convertible).....	4,905,000	6	1888	
3d Mortgage.....	981,000	6			*N. Hav., N. Lond. and Stonington:					2d Mortgage.....	1,928,000	6	1875	
Long Island:					Mortgage.....	450,000	7			2d Mortgage Sterling.....	1,539,540	6	1875	
State Loan (S. F.).....	100,000	5	1876		Extension.....	100,000	10			For Canals, etc.....	7,400,000	6		
1st Mortgage.....	500,000	6	1870		New Haven and Northampton:					Pennsylvania Coal Company:				
Louisville and Frankfort:					1st Mortgage.....	500,000	---	1869		1st Mortgage.....	600,000	7		
Louisville Loan.....	174,000	---			Company's (various).....	711,000	var.			Penobscot and Kennebec:				
1st Mortgage.....	248,000	---			New London, William and Palmer:					Bangor City 1st Mortg. (Coupon).....	800,000	6	1874	
Louisville and Nashville:					1st Mortgage.....	500,000	71			2d Mortgage (Coupon).....	250,200	6	1876	
State [Tenn.] 1st Lien.....	300,000	6			2d Mortgage.....	300,000	61			3d Mortgage (Coupon).....	156,600	6	1871	
1st Mortgage.....	2,000,000	---			Income (convertible).....	152,000	61			Pensacola and Georgia:				
McMinnville and Manchester:					New London City.....	100,000	61			State Internal Improvement.....		7	35 y's	
State [Tenn.].....	372,000	6			N. Orlns, Jackson and Gt. North:					Free Land.....				
Mortgage.....	24,000	7			State (Miss.) Loan.....	155,000	---			Peoria and Oquawka:				
Mortgage.....	10,000	6			1st Mortgage.....	3,000,000	8	1886		Peru and Indianapolis:				
Madison and Indianapolis:					N. Orlns, Opelousa and Gt. West:					Petersburg:				
State [Ind.] Loan.....					Louisiana State Loan.....	621,000	---			Mortgage (due 1863 to 1872).....	103,000	7	var.	
Mortgage.....					New Orleans City Loan.....	1,500,000	---			Petersburg and Lynchburg (S. Side):				
*Marietta and Cincinnati:					1st Mortgage (S. F. and Land).....	2,000,000	7			State (Va.) Loan (S. F.).....	800,000	7		
1st Mortgage [convertible].....	2,496,000	7	1868		New York Central:					1st Mortgage (1869-70-75).....	365,000	6	var.	
2d Mortgage.....	2,000,000	---			Albany Loan-Alb. and Sch'dy.	127,000	5	1864	102	3d Mortgage (1862-70-72).....	378,000	6	var.	
3d Mortgage.....	1,500,000	---			State Loan-Sch'dy and Troy.....	100,000	6	1867		Special Mortgage (1865-68).....	175,000	6	var.	
Sterling Income.....	333,000	4			State Loan-Rochester and Syr.	77,382	54	1861		Last Mortgage (1861 to 1869).....	133,500	8	var.	
Domestic.....	928,617	'59-'62			State Loan-Buffalo and Roch.	55,300	54	1865		Phila. German'n and Norrist'n:				
Memphis and Charleston:					State Loan-Roch., L. and N. F.	298,000	7	1861		Consolidated Loan.....	274,800			
State [Tenn.] Loan.....	1,100,000	6			Stock Subscription.....	785,000	6	1883		Loan of 1842.....	100,000			
1st Mortgage.....	1,600,000	7	1880		Premium Consolidated Stock.....	8,000,000	6	1883		Philadelphia and Reading:				
Memphis, Clarkesv. and Louisa:					Real Estate.....	221,000	6	1883		Mortgage.....	705,000	5	1860	91
State [Tenn.] Loan.....	910,000	6			New Convertible.....	3,000,000	7	1864		Mortgage.....	1,572,800	6	1860	91
Memphis and Ohio:					*New York and Erie:					Mortgage (convertible).....	886,000	6	1860	91
State [Tenn.] Loan.....	1,340,000	6			1st Mortgage.....	3,000,000	7	1867	92	Mortgage (convertible).....	134,000	6	1860	
Michigan Central:					2d Mortgage.....	2,000,000	7	1859	90	Mortgage.....	3,200,600	6	1870	78
1st Mortgage Sterling.....	467,489	6			3d Mortgage (convertible).....	6,000,000	7	1871		Mortgage (convertible).....	3,586,500	6	1886	
1st Mortgage (convertible).....	500,000	8			4th Mortgage (convertible).....	3,715,000	7	1880	50	Lebanon Valley R. R. (convert.).....	1,600,000	7	1886	
Unconvertible.....	258,000	8			5th Mortgage.....	1,253,500	7	1883	79	Real Estate Mortgage.....	616,450	var.		
1st Mortgage (convert.) Dollar.....	3,831,000	8			Unsecured (convertible).....	3,423,000	7	1871	28	Phila., Wilmington and Baltimore:				
1st Mortgage (S. F.), convertible.....	3,087,000	8			Unsecured (convertible).....	3,001,000	7	1862	28	Mortgage Loan.....	688,929	6	1860	
Mich. Southern and N'n Indiana:					Sinking Fund.....	3,925,500	7	1875		Mortgage Loan.....	1,096,500	6	1884	
Michigan Southern.....	993,000	7	1857		New York and Harlem:					Improvement.....	119,000	6	1863	
Northern Indiana.....	985,000	7	1861		1st Mortgage.....	3,000,000	7	1873	92	Pittsburg and Connellsville:				
Erie and Kalamazoo.....	300,000	1	1862		2d Mortgage.....	1,000,000	7	1864	93	Pittsburg Loan.....	500,000			
Michigan Southern.....	259,000	1	1863		3d Mortgage.....	1,000,000	7	1867		Alleghany Co. Loan.....	750,000			
Northern Indiana.....	299,000	1	1863		New York and New Haven:					Connellsville Loan.....	100,000			
Jackson Branch.....	208,000	1	1865		1st Mortgage.....	311,000	7	1860		McKeepot Loan.....	100,000			
Goshen Air Line.....	1,335,000	1	1868		1st Mortgage.....	965,000	6	1868	91 1/2	Baltimore Loan.....	1,000,000			
Detroit and Toledo.....	336,000	1	1876		1st Mortgage.....	929,000	6	1875		Cumberland Loan.....	200,000			
General Mortgage (S. F.).....	2,458,000	1	1885		N. York, Providence and Boston:					*Pittsburg, Ft. Wayne and Chicago:				
2d Mortgage.....	2,176,000	1	1877		1st Mortgage.....	331,000	6			1st Mortgage (O. and P.).....	1,000,000		1866	
*Milwaukee and Beloit:					North Carolina:					2d Mortgage (O. and P.).....	750,000		1866	
1st Mortgage.....	630,000	8			State Loan.....	2,000,000	6			Income (O. and P.).....	199,000		1873	
Milwaukee and Chicago:					State Loan.....	1,000,000	6			Bridge (O. and P.).....	199,500			
1st Mortgage.....	400,000	8			North-Eastern (S. C.):					1st Mortgage (O. and L.).....	1,000,000		1872	
2d Mortgage.....	200,000	7			1st Mortgage.....	700,000				2d Mortgage (O. and L.).....	380,000		1878	
*Milwaukee and Horicon:					Real Estate.....	224,500				1st Mortgage (F. W. and Chic.).....	1,250,000		1873	
1st Mortgage.....	420,000	8			Northern Central:	35,910				Real Estate (F. W. and Chic.).....	495,000		1874	
2d Mortgage.....	600,000	8			Balt. and Susq. R. R. (Coupons).....	150,000	6	1866		Mortgage, Consolidated Comp'y.....	1,229,000		1887	
Farm Mortgage.....	150,000	10			Md. State Loan (B. and Susq.).....	150,000	6			Pittsburg and Steubenville:				
Milwaukee and Mississippi:					York and Cumberland 1st Mort.....	175,000	6	1870		Mortgage.....	800,000	+	1865	
1st Mortgage (convertible).....	74,000	10 1/2	1861		York and Cumberland 2d Mort.....	25,000	6	1871		Platte County:				
1st Mortgage (convertible).....	526,000	8	1862	42	York and C. guar. by Baltimore	500,000	6	1877		State (Mo.) Loan.....	300,000	6	1879	
1st Mortgage (convertible).....	650,000	8	1863		N. C. Contract.....	292,500	6	1875		Potomac and Watertown:				
1st Mortgage (convertible).....	1,250,000	8	1877		Construction.....	1,903,500	6	1885		1st Mortgage.....	500,000	71	64-74	
1st Mortgage (convertible).....	350,000	8	1866		North (Ogdensburg):					Quincy and Chicago:				
South-West Branch.....	600,000	10	1862		1st Mortgage.....	1,500,000	71	1859		1st Mortgage.....	1,200,000		1873	
2d Mortgage.....	500,000	7	1859		2d Mortgage.....	3,077,000	71	1861		Racine and Mississippi:				
Construction.....	500,000	8	1862		North Missouri:					1st Mortgage (Eastern Division).....	680,000	+		
3d Mortgage.....	500,000	8	1862		State Loan.....	2,000,000	6			1st Mortgage (Western Division).....	757,000	+		
Mississippi Central:					State Loan.....	2,000,000	6			Coupon.....				
1st Mortgage.....	1,007,363	7			State Loan.....	350,000	6			Rensselaer and Saratoga:				
Income.....	91,200	10			North Pennsylvania:					1st Mortgage.....		7	1863	
Tennessee State.....	45,000	6			Mortgage.....	2,500,000			87	Bloomington and Danville:				
Mississippi Central and Tenn.:					Chatel Mortgage.....	214,500	10			State (Va.) Loan.....	600,000			
State [Tenn.] Loan.....	529,000	6			Northern (N. H.):					Granted by State.....	200,000		1875	
Income.....	95,500	---			Mortgage (due 1860, '64 and '74).....	219,500	var.			Mortgage (Coupon).....	250,000		1869	
Mississippi and Missouri:					Norwich and Worcester:					Registered.....	150,000		1860	
1st Mortgage (convertible).....	1,000,000	7			Massa. State Loan.....	400,000	6	1877		Richmond, Fred. and Potomac:				
2d Mortgage (S. F.).....	400,000	8			Mortgage.....	205,800	6	1860		Sterling (£87,000).....	324,006		1860	
Oskaloosa Division.....	1,425,000	7			Mortgage.....	16,000	7	1860		Convertible.....	54,500		1875	
Land Grant.....	7,000,000	7			Dividend Scrip and Bonds.....	102,330	6	var.		Dividend Certificates.....	35,800		1857	
Mississippi and Tennessee:					Ohio and Mississippi (O. and Ind.):					Dividend Certificates.....	265,509		1860	
Tennessee State Loan.....	98,000	6	1885		1st Mortgage.....	2,193,500	+	1858		Richmond and Petersburg:				
Mississippi State Loan.....	202,799	6			2d Mortgage.....	316,996	+	1858		Coupon.....	150,000		1875	
1st Mortgage.....	171,000	7	1876		Construction.....	4,637,920	+	1858		*Rutland and Burlington:				
Mobile and Ohio:					Income.....	3,691,185	+	1868		1st Mortgage.....	1,800,000			
City (Mobile) Tax Loan.....	400,000	6			Ohio and Mississippi (Ill.):					2d Mortgage.....	913,500			
Tennessee State Loan.....	674,860	6								3d Mortgage.....	426,490			
Alabama State Loan.....	389,410	6								Sacramento Valley:				
Income.....	759,415	8	1861							1st Mortgage.....	400,000			
Income.....	354,723	8	1862							2d Mortgage.....	350,000			
Income.....	375,132	8	1865											
Income.....	18,700	8	1867											
Sterling.....	578,035	6	1883											
Mississippi State Loan.....	200,970	6												

AMERICAN RAILROAD BOND LIST.

For explanations see preceding pages.

Description.	Amount.	Interest.	Due.	Price.
Sandusky, Dayton and Cincinnati:				
Mortgage	182,000	10	1866	---
Mortgage	997,000	7	1866	---
Mortgage	1,000,000	7	1875	---
Dividend	224,000	6	'60-'62	---
Sandusky, Mansfield and Newark:				
1st Mortgage	1,200,000	7	---	---
Saratoga and Whitehall:				
1st Mortgage	250,000	7	1868	---
1st Mortgage (R. and W. Br.)	100,000	7	1866	---
Unsecured	45,000	7	1868	---
Seaboard and Roanoke:				
1st Mortgage	300,000	---	1860	---
3d Mortgage	75,000	---	1870	---
4th Mortgage	60,000	---	1866	---
South Carolina:				
State Loan	200,000	5	1868	---
Sterling	183,333	6	1863	---
Sterling	2,000,000	5	1866	---
Auditor's	246,500	7	---	---
Southern Mississippi:				
1st Mortgage	500,000	---	---	---
South-Western (Ga.):				
1st Mortgage	631,000	---	1875	---
*Springfield, Mt. Vern. and Pittsb.:				
1st Mortgage	500,000	---	---	---
2d Mortgage	450,000	---	---	---
*Steubenv. and Ind. (P. C. and C.):				
1st Mortgage	1,500,000	---	---	---
2d Mortgage	900,000	---	---	---
*St. Louis, Alton and Chicago:				
1st Mortgage	2,000,000	7	---	---
2d Mortgage	1,535,000	7	---	---
3d Mortgage (Income)	1,000,000	10	---	---
St. Louis and Iron Mountain:				
State (Mo.) Aid	2,501,000	---	---	---
St. Louis City Subscription	500,000	---	---	---
St. Louis County Subscription	1,000,000	---	---	---
Carondelet Subscription	50,000	---	---	---
Sunbury and Erie:				
Mortgage	1,000,000	7	---	---
Mortgage	7,000,000	5	---	---
Syracuse, Binghamton and N. Y.:				
Terre Haute, Alton and St. Louis:				
1st Mortgage (convertible)	1,000,000	7	'62-'72	55
2d Mortgage (convertible)	2,000,000	7	'68-'70	---
1st Mortgage (Bel. and Ill.)	517,000	7	1873	---
2d Mortgage (Bel. and Ill.)	494,000	7	1869	---
3d Mortgage (Bel. and Ill.)	503,000	10	1874	---
Tennessee and Alabama:				
State (Tenn.) Loan	814,000	---	---	---
Mortgage	46,000	---	---	---
Terre Haute and Richmond:				
1st Mortgage (convertible)	235,000	7	---	---
Toledo, Wabash and Western:				
1st M. (L. Er., Wab. and St. Louis)	2,500,000	7	1865	---
2d M. (L. Er., Wab. and St. Louis)	1,200,000	7	1869	---
3d M. (L. Er., Wab. and St. Louis)	1,200,000	7	1891	---
Real Estate (L. Er., W. and St. L.)	300,000	7	1861	---
1st Mortgage (Toledo and Ill.)	900,000	7	1865	---
2d Mortgage (Toledo and Ill.)	800,000	7	1865	---
3d Mortgage (Toledo and Ill.)	600,000	7	1865	---
*Vermont Central:				
1st Mortgage	---	---	---	17
2d Mortgage	---	---	---	---
Virginia Central:				
State (Va.) Subscription	1,969,595	---	---	---
Mort., guaranteed by State of Va.	100,000	---	1880	---
Mortgage	200,000	---	1872	---
Mortgage (coupons)	941,000	---	1884	---
Dividend, due 1865, '66 and '75	238,346	var.	---	---
Income (1859 to 1863)	161,359	var.	---	---
Virginia and Tennessee:				
State (Va.) Loan	1,000,000	6	1887	---
1st Mortgage	500,000	6	1872	---
Fractional Mortgage	25,500	6	1868	---
2d or Enlarged	1,000,000	6	1894	---
Salt Works Br. Mort. due '63-'61	208,000	6	var.	---
3d Mortgage (Income)	431,000	6	1865	---
Warren (N. J.):				
1st Mortgage	508,500	---	1875	---
Watertown and Rome:				
Mortgage (due by instalments)	688,500	7	var.	---
Western (Mass.):				
Cutlering (£399,900)	4,319,520	5	'68-'71	---
Albany City (Alb'y and W. S.)	1,000,000	6	'66-'76	---
*Western Vermont:				
1st Mortgage	700,000	---	1861	---
Williamsport and Elmira:				
1st Mortgage	1,000,000	7	---	---
2d Mortgage	700,000	7	---	---
Chattel Mortgage	495,000	7	---	---
Wilmington and Manchester:				
1st Mortgage	596,000	---	---	---
2d Mortgage	1,000,000	---	---	---
Income	177,000	---	---	---
Wilmington and Weldon:				
Mortgage, payable in England	442,555	---	---	---
Sterling, issued in 1858	144,500	---	---	---
Company's, endorsed by State	203,500	---	---	---
Winchester and Potomac:				
Mortgage	120,000	6	1867	---
York and Cumberland:				
1st Mortgage	398,000	7	---	---

Railroad Reports.

RAILROAD COMPANIES will oblige us by sending us copies of their Reports as soon as they are published.

American Railroad Journal.

Saturday, December 31, 1859.

Hudson River Railroad Bonds.

The Directors of the Hudson River Railroad have issued a circular in regard to the extension of the 2d mortgage bonds of this company, which will mature on the 16th of December, 1860. They state that the present funded debt of the company is as follows:

1st mort. 7's maturing 1869 and 1870.. \$4,000,000
 2d " 7's " Dec. 16, 1860.. 1,980,000
 3d " 7's " May 1, 1875.. 1,840,000
 Conv'ble 7's " May 1, 1867.. 1,002,000

Total funded debt.....\$8,822,000

They propose to extend the 2d mortgage bonds to Dec., 1884, by the issue of new bonds, transferable only on the company's books, and a sinking fund of \$30,000 annually (about 1½ per cent.) to be used in the purchase of the bonds at not exceeding 105.

Cumberland River Bridge at Nashville.

A magnificent structure has been recently erected over the Cumberland river at Nashville, jointly owned by the Louisville and Nashville and Edgefield and Kentucky Railroads, though built under the immediate direction and control of the latter.

Its extreme length is 700 feet, made up of four spans—two fixed, one on each side, and two draw spans in the middle.

Each fixed span is 200 feet in the clear between supports. Each draw span is 120 feet in the clear between piers—they are the largest railroads draws in the world; the one at Rock Island being second. This is 120 feet wide on one side and 116 feet wide on the other.

The total length of draw from one extremity to the other of the movable portion, is 200 feet; and its entire weight is computed at 285 tons. It can readily be turned into position by one man in four minutes, and by two or three men in two and a half minutes.

The bridge superstructure is of the kind known as the *McCallum's Truss*, and was erected by Gray, Whiton & Co., Contractors. The Master Builder, to whom the extraordinary accuracy of the framing is due, was Mr. N. K. Waring. The masonry supporting the bridge was erected by Maxwell, Saulpaw & Co., Contractors, and consists of two abutments, two main piers, one centre pier, and two rest piers.

The centre pier on which the immense draw turns, is 30 feet in diameter at the top, 34½ feet at the bottom, 68½ feet high, and contains 2,295½ perches of masonry.

The eastern main pier is 75½ feet high, and contains 1,208¾ perches of masonry. The western main pier is 70½ feet high, containing 1,093¾ perches of masonry. The foundations of all the piers are laid smoothly upon the solid rock, in water about twelve feet deep at mean low water. The extreme rise of water in the river at the point where the bridge stands, is 57 feet. The total quantity of material in the bridge is 6,800½ perches of masonry; 454,000 feet of timber, and 160,000 pounds of iron.

A heavy framework of wood and iron is erected

between the rest piers, designed to prevent boats from being thrown violently against the centre pier in passing through the draw. In this framework 387,288 feet of timber and 49,117 pounds of iron are used.

The Chief Engineer of the road, constructing the bridge, is A. Anderson, Esq., well and favorably known throughout the Southwest, for his excellent qualities, both as an engineer and a gentleman.

Michigan Central Railroad.

Below we give an abstract of a circular statement recently issued by this company:

INCOME ACCOUNT.

Balance of this account, June 1, 1859..\$108,975 97
 Receipts of road for six months, ending Nov. 30, 1859..... 999,898 38

Total.....\$1,107,874 35

By operating account, for six months, ending Nov. 30, 1859.....\$476,288 67
 By interest account, for six months, ending Nov. 30, 1859..... 337,963 05
 By paym't to Trustees of sinking fund. 75,000 00
 By balance to new account..... 218,622 63

Total.....\$1,107,874 35

The balance to the credit of this account has increased since the annual report of June 1, 1859, \$109,646 66, and now amounts to \$218,622 63, an amount exceeding 3½ per cent. upon the capital stock. If to the gain above-named \$109,646 66 is added the amount paid in October to the Trustees of the sinking funds, \$75,000, it will be found that during the past six months the earnings of the road, after paying operating expenditures and interest, will amount to \$184,616 66.

The gross receipts for six months, ending Nov. 30, 1858, were.....\$1,114,620 01
 The gross receipts for six months, ending Nov. 30, 1859, were..... 998,898 38

Showing a decrease in receipts of..\$115,721 63

Operating and interest expenditures, six months of last year..\$956,756 26

Operating and interest expenditures, six months of this year..... 814,251 72

Showing a reduction of expenses of. 141,504 54

And a net gain over last year of....\$25,782 91

About one year since, a second Sinking Fund was established as security (in addition to the first mortgage) for the payment of bonds which it was proposed to issue in exchange for the bonds of the company maturing in 1860. Under this arrangement, bonds have been exchanged to the amount of \$68,000. There remains due of the 1860 bonds—On April 1, 1860.....\$695,000
 On October 1, 1860..... 512,000

Total.....\$1,207,000

Accompanying this report will be found the reports of the Trustees of the two sinking funds of the company, by which it appears that there is now held by them to the credit of the first sinking fund, \$137,000 in bonds of the first sinking fund issue at par, less \$24 19 due John M. Forbes in cash; and to the credit of the second sinking fund \$17,000, in bonds of the first sinking at par; and \$255 09 of cash balance—in all, \$154,000 in bonds at par, and a cash balance of \$230 90, which has already accumulated to the credit and advantage of the stockholders, in reality reducing the bonded debt of the company to that extent.

Railroads in Iowa.

The Keokuk, Ft. Des Moines and Minnesota, and the Keokuk, Mt. Pleasant and Muscatine Railroads, are united. The last rail was laid, and the last spike driven, last evening. We have now a continuous track of iron rails from Fort Madison

to Bentonport, through this city, the whole distance being 65 miles. This union will prove a matter of convenience and profit in many ways.—*Kookuk City Gate.*

Railroad to Fort Smith.

The company of the Fort Smith branch of the Cairo and Fulton Railroad, through their directors, propose to consolidate with that of the Memphis and Little Rock Railroad, so as to make a continuous road from Memphis to Fort Smith. The last Legislature provided that the Fort Smith and Memphis Companies might consolidate under the title of the Central Pacific Railroad Company; and there is a little doubt of the fact that the proposed consolidation will be of benefit to both of the companies, and to the country. The terms of consolidation, proposed by the directors of the Fort Smith branch, is, that the company shall have the 600,000 acres of land, and use them as a basis of credit, to raise money with which to complete the railroad from Memphis to Little Rock, with the condition understood, that the road, when finished to Little Rock, and all of its means shall be pledged to raise the means of completing the line from Little Rock to Fort Smith. The valley of the Arkansas river, both in and outside of the State, and the country lying west, need an outlet by railroad, and a connection with the system of railroads terminating at Memphis, which can be made only by connecting with the Memphis road at this place.—*Little Rock (Ark.) State Gazette.*

Baltimore and Ohio Railroad.

We have received the 33d annual report of this company for the fiscal year ending September 30, 1859. The revenue derived from operations of the Main Stem during that time were:—

From tonnage \$2,928,411 16
" passengers 690,207 29

\$3,618,618 45

And the expenditure, (as given in detail below) were 1,684,997 84

The excess of revenue over working expenses being \$1,933,620 61
—or 53.44 per cent. of the gross.

Compared with the previous year, the working expenses show a decrease of \$846,201 45
The gross earnings a decrease of 237,867 84

And the net revenue an increase of .. \$608,334 11
—being upwards of 6 per cent. on the capital stock.

The following table, copied from the report, will show wherein this great saving was effected:

MAIN STEM.

Comparative Statement of Working Expenses for the fiscal years 1858 and 1859.

	1858.	1859.	Decrease.
General Expenses	\$34,685 45	\$28,481 65	\$6,203 80
Losses by accidents, etc.	21,357 89	1,604 71	19,753 18
Expenses of transportation	602,222 43	533,487 03	68,735 40
Repairs of railway	829,142 02	346,206 83	482,935 19
" water stations	11,677 90	7,249 99	4,427 91
" depots	43,061 83	15,547 08	27,514 75
" bridges	24,991 29	15,658 38	9,332 91
" telegraph	3,413 87	2,277 70	1,136 17
" sta., machinery	38,310 84	24,543 84	13,767 00
" locomotives	372,849 02	281,468 18	91,380 84
" dump cars	1,877 15	1,959 16	82 01
" passenger cars	62,213 08	49,308 50	12,904 58
" burden cars	194,088 44	179,798 64	14,289 80
" snow plows	2 79	2 79	0 00
Watching cuts	32,873 30	30,765 59	2,107 71
" tunnels	2,296 35	1,433 15	863 20
" bridges	7,441 80	6,168 95	1,272 85
Pumping water	10,357 18	9,917 33	439 85
Cleaning engines & cars	62,469 54	39,661 95	22,807 59
Contingent expenses of machinery department	2,850 70	3,149 25	298 55
Fuel	97,684 03	73,517 36	24,166 67
Preparing fuel and filling tenders	35,333 98	20,802 54	14,531 44
	\$2,531,199 29	\$1,684,997 84	\$846,201 45
*Increase			380 63
Decrease of working expenses			\$846,201 45

—or 19.07 per cent., as compared with the previous year.

This marked improvement in the relation of expenditures to revenue, has resulted from economy of management. A careful and thorough system of supervision of the disbursements of the company, embracing especially the details of the entire service, has led to many important reforms. Valuable effects must continue to flow from these improvements in administration so successfully inaugurated, if the system be vigorously maintained.

By comparing the financial condition of the Company, presented at the corresponding date of 1858, it will appear that the following payments have been made, viz:

For full payment of the first mortgage loan for one million dollars \$83,668 00
For liquidation of the entire floating debt, consisting of bills payable, previously issued, and maturing within the year 284,653 79
For increase of the sinking funds, (including investment in mortgage iron bond of 1859, of \$118,333 33) 208,272 29
For additional advances, under the agreement, after crediting all revenue received, to the N. W. Va. R. R. Co., for payment of interest, (including \$90,000 on the bonds of that company, guaranteed by the city of Baltimore,) and for expenditures in improving the condition of the road, etc. 321,530 55

Making \$898,124 63

And the subjoined amounts have been invested in the respective items of capital, viz:—

Cost of road, (chiefly completion of arching tunnels,) \$42,909 48
Rolling power, (payment to Ross Winans, for locomotives, under contract assumed from N. W. Va. R. R. Co.) 37,891 00
Real estate, (purchase of hotel property at Martinsburg, and land at Moundsville) 7,969 80

88,769 78

On the 18th of May last, the semi-annual cash dividend of 3 per cent. on the capital stock was paid, viz:.. 303,848 00

Exhibiting a total of \$1,290,242 41

In consequence of the gradually improving condition of the North-western Virginia Road, and the increased economy in working, the advances to that company have been reduced, as compared with the preceding year, \$49,581 20.

During the twelve months \$113,188 27, constituting the remainder of the loan of the city of Baltimore, has been received. It will be noted that the sinking fund for the redemption of this debt, all of which is invested in stock of the city, already amounts to \$671,614 76—an increase for the year of \$51,938 95. The aggregate of the sinking funds for the redemption of mortgage debts and ground rent on Camden Station is \$1,145,556 47.

The balance of cash in the treasury on the 30th of September, is \$226,583 12, after depositing \$165,000 for payment of interest on the city loan, and the bonds of this company, which matures on this date. This sum presents an increase of cash on hand, compared with the close of the last fiscal year, of \$154,897 71.

The Bills Receivable, and sums due from Post Office Department for mail service, are \$184,678 88, showing an increase, under similar comparison, of \$124,055 15.

The uncollected revenue amounts to \$264,981 32, whilst at the corresponding period of the preceding year, it was \$304,752 94.

After charging discount on bonds of the city of Baltimore, sold during the twelve months, \$1,199 53; interest and ground rents, \$751,543 94, tax on passengers, paid to the State of Virginia, \$11,593 90, and crediting the dividends and rents received from the Washington branch, the increments of the sinking funds, and house rents paid into the Treasury, the net gain is shown, for the fiscal year, of \$1,343,389 84, being upwards of 13¼ per cent. on the capital stock.

An interesting feature in this statement arises from the improved financial condition of the company, enabling it to purchase its supplies for cash, and to avoid the necessity of borrowing money. Consequently, the sum paid for interest is reduced \$62,637 22, as compared with that for the previous year.

Deducting the dividend of \$303,848 00 paid on May 18th last, the profit and loss account exhibits a surplus of \$6,092,316 91, being an increase for the year of \$1,040,041 84.

WASHINGTON BRANCH.

The revenue of the WASHINGTON BRANCH during the year was:—

From passengers \$335,256 57
" tonnage 106,962 96

\$442,219 53

And the expenses were:

Conducting transportation \$79,914 93
Fuel 11,813 03
Repairs of road 21,989 26
 " engines 9,669 41
 " cars 32,812 64
 " bridge & build., 1,314 66
General expenses 9,493 88
Miscellaneous 6,671 39

173,679 25

Excess of revenue \$268,540 28
—or 60.72 per cent. of the gross.

Compared with the previous year, the working expenses show a reduction of \$28,774 39
The gross revenue a decrease of 27,203 39

The comparative net gain being... \$1,571 00

The ratio of expenses to revenue in 1858, was 43¼ per cent.; and for the past year, 39.28 per cent.

The sums paid to the State during the year on account of capitation tax, have been, viz:

For amount withheld for 1858 \$8,833 04
For tax on passengers between Baltimore and Washington Junction, for the fiscal year 1859 8,600 66
For tax on passengers between Washington Junction and Washington 68,470 41

Making \$85,904 11

—being 32 per cent. of the net earnings.

A semi-annual dividend of 4½ per cent. was paid in November, and the same in April last. A similar dividend for the past six months has been declared, payable on the 25th inst.

NORTH WESTERN VIRGINIA.

The revenue derived from operations of the NORTH WESTERN VIRGINIA RAILROAD during the year was:

To total decrease of working expenses on the Main Stem and branches, is, \$929,958 05
The reduction of the sum paid for interest, arising from the improved financial condition of the company, resulting from the decrease of expenses, is..... 62,637 32

Making \$992,595 37

From the report of the Master of Machinery, it will be observed that all the engines regularly in the passenger and freight service, have been, in pursuance of policy of the company, altered to burn coal, with very economical and satisfactory results. The average cost of fuel on 18 passenger engines, which have been burning coal for the last six months, has been 2 8-10 cents per mile, whilst the same engines, when burning wood, cost for fuel from 8 to 9 cents per mile.

The principal contract for coal, delivered on the Company's cars at Piedmont, is made at 55 cents per ton of 2,240 lbs. The large comparative advantages of this company over its rival lines in this leading item of expenditure, can be readily appreciated.

The cost of fuel and its preparation was in 1858..... \$133,017 96
Do. for 1859 94,319 90

Exhibiting a reduction of. \$38,698 06

The repairs of passenger cars were in 1858..... \$52,213 05
Do. in 1859 49,308 50

The repairs of burden cars were in 1858..... \$194,088 44
Do. in 1859 179,798 64

These expenditures, it will be observed, are large, being but \$17,194 36 less than for the preceding year. As, however, the Master of Machinery reports this and some other machinery as not maintained, a fund has been reserved from the profits, in materials on hand, of \$47,022 29, for the renewal and improvement of machinery.

The effect of the perfect arching, and entire completion of the tunnels on the Main Stem, ensuring regularity and safety, and avoiding the use of extra motive power, has been most happy upon the business, and contributed largely to the successful working of the road. The extraordinary exemption from accidents, due largely to the reduced speed of trains, and the careful system in the service is noteworthy. These combined causes act very favorably in lessening the wear and cost of maintenance of machinery.

The Board congratulate the stockholders upon the conservative course pursued in suspending dividends during 1858, and using the earnings for the payment of the sums necessarily advanced for the North-western Virginia Railroad Company, and for maintenance in full integrity of the sinking fund. The wisdom of this action is demonstrated by the present prosperous condition of the company. The return to regular payment of semi-annual dividends, has been judiciously accomplished, and can hereafter be confidently relied upon.

With the incubus of floating debt removed, and abundant ability to meet conveniently all its engagements, including the large appropriations for increase of sinking funds, by which provision is made for payment at or about maturity, of its entire funded debt, a most satisfactory system of finance is presented.

The number of engines owned by the company, is 235. The total mileage of the trains was 3,648, 814 miles. The cost of maintaining the engines, per mile run, was 8.8 cents. The cost of fuel was \$114,622, or 3.14 cents per mile run. This sum embraced the cost of the fuel, and the preparation of and placing the same on the tenders.

The total cost of maintaining the entire Rolling Stock of the company, consisting of 235 engines,

124 passenger and baggage cars, and 3,272 burden cars; the cost of fuel used, of pumping water, cleaning engines, etc., etc., was \$840,148, or 23 cents per mile run.

The following is a statement of the Liabilities and Assets of the Baltimore and Ohio Railroad Company, on the 30th September, 1859:

LIABILITIES.	
Stock held by Individuals.....	\$5,426,200 00
Do. City of Wheeling.....	500,000 00
Do. City of Baltimore.....	3,500,000 00
Do. State of Maryland.....	685,600 00
Scrip not funded.....	4,185,600 00
State 5 per cent. Sterling bonds.....	7,102 00
Loan redeemable in 1867.....	3,000,000 00
Mortgage bonds given for Iron.....	1,000,000 00
Loan redeemable in 1875.....	453,333 32
" " 1880.....	1,128,500 00
" " 1885.....	700,000 00
City loan.....	2,500,000 00
Open accounts.....	5,000,000 00
Unclaimed dues.....	81,189 95
Washington Branch road.....	19,942 35
Profit and loss.....	184,192 34
	6,092,316 91
	\$30,278,376 88

ASSETS.	
Cost of road.....	\$18,513,854 41
Second track.....	1,548,340 96
Rolling power.....	3,576,251 03
Real estate.....	1,252,968 59
	\$24,801,414 99

Bonds of Central Ohio Railroad.....	400,000 00
Central Ohio Railroad Company ..	41,371 48
Western Telegraph Company	2,191 27
Stock of Pittsburg and Connelssville Railroad.....	35,000 00
North-western Virginia R. R. Co.....	\$1,318,343 87
Bills receivable of North-west'n R. R.....	476,982 42
	1,795,326 29

Wellersburg and West Newton Plank road.....	6,050 00
Stock of Washington Branch road.....	1,016,800 00

Sinking Fund—For redemption of the \$5,000,000 loan.....	\$671,614 77
Do. Mortgage Debts.....	413,221 73
Do. Ground rents Camden Station.....	60,719 93
	1,145,556 42

Bills receivable.....	\$44,277 56
Certificates of Post Office Department.....	58,980 26
Post Office Department for mail service.....	31,421 06
	134,678 88

Cash in the hands of Officers for disbursements.....	2,054 75
Outstanding dues.....	60,556 22
Uncollected revenues.....	264,981 32

Materials on hand in Machinery Department.....	\$122,491 06
Less fund reserved for renewal and improvements for machinery.....	47,022 29
	75,468 77

Road Department—Old iron rails.....	\$92,000 00
New iron rails.....	79,303 37
	171,343 37

Treasurer—Balance in Treasury ..	226,583 12
	\$30,278,376 88

The officers are:

President—J. W. GARRETT.

Treasurer—J. I. ATKINSON.

Master of Transportation—WM. P. SMITH.

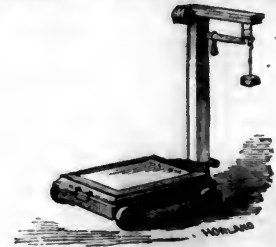
Master of Road—JOHN L. WILSON.

Master of Machinery—HENRY TYSON.

York and Cumberland Railroad of Maine.

The following gentlemen have been elected directors for the ensuing year, viz: R. I. Robinson, J. W. Lane, J. P. Rich, Ammi R. Mitchell, Hiram H. Dow, Arthur McArthur and George R. Davis.

FAIRBANKS'



STANDARD SCALES,

Adapted to every branch of business where a correct and durable Scale is required.

SCALES FOR RAILROADS,

SCALES FOR COAL DEALERS & MINERS,

SCALES FOR HAY AND CATTLE DEALERS,

WAREHOUSE AND TRANSPORTATION SCALES,

PORTABLE AND DORMANT SCALES FOR STORES,

Scales for Grain and Flour Dealers,

Counter Scales, every variety.

BANKERS' AND JEWELLERS' BALANCES,

SCALES FOR FAMILY AND FARM USE,

WEIGH-MASTERS' BEAMS,

POST OFFICE SCALES, ETC., ETC.,

All of which are WARRANTED in every particular.

Call and examine, or send for an illustrated circular.

FAIRBANKS & CO.,

189 Broadway, New York.

New FIRST CLASS FREIGHT ENGINE.

Cylinder 16x24. Wheels 5 feet. Fire-box 4 ft. 1 1/2 in. long, and 5 ft. 6 in. deep. 138 flues 12 ft. by 2 inches. Boiler 48 inches. Tender 2,000 gallons. For sale low by WILLIAMS & PAGE, 3m52 44 Water st., Boston.

RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at Jonestown, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA { NORTH PENNA. R. R. BUILDING. OFFICE, No. 407 Walnut st.

RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or on ship at ports in the United States.

M. K. JESUP & COMPANY, 44 Exchange Place.

New York, 1st June, 1859.

RAILROAD IRON

AND COMMON BARS.

THE undersigned, sole Agents to Messrs. GUESS & CO., the proprietors of the Downhills Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAKIN, 70 Broad st.

RAILROAD IRON.

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of RAILROAD IRON at any port in the United States or Canada, or at a shipping port in Wales.

WAINWRIGHT & TAPPAN, Boston, June, 1851. 29 Central Wharf.

Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets. CASWELL & PERKINS, Brokers, 69 Wall st.

New York, July 9, 1859.

THE FARNLEY IRON CO.,

Near LEEDS, Yorkshire,
MANUFACTURERS OF
LOCOMOTIVE TIRES,
TIRE BARS,
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

TIRES,

Manufactured at these celebrated Works,
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the FARNLEY IRON is precisely the same as that of LOW MOOR and BOWLING, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP & COMPY,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

RAILROAD IRON.

THE UNDERSIGNED are prepared to contract for the sale of

RAILROAD IRON

on advantageous terms, delivered at ports of England, Wales, or the United States.

MEAD & BELL,
17 William Street, N. Y.

LACKAWANNA
IRON AND COAL COMPANY,
SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 35, 40, 45, 50, 60, 63, and 75 lbs.

Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. Y.

Address **J. H. SCRANTON, President,**
Scranton, Pa.
or **DAVID S. DODGE, Treasurer,**
46 Exchange Place,
NEW YORK

RAILROAD IRON.
THE KENSSELAER IRON COMPANY,
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

OLD RAILS

received in exchange for new, or for re-manufacturing.
JOHN A. GRISWOLD, Agent,
TROY, N. Y.

New York Agency:
BUSSING, CROCKER & DODGE,
32 Cliff St.

CAST STEEL,
Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.
CAR SPRING STEEL.
Far superior to the ordinary kind.
FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.

ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,
45 Cliff St., New York.

IRON BOILER FLUES.

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length, 1 to 20 feet as required.

Wrought Iron Welded Tubes,
From ½ to 5 inches bore, with Screw and Socket Connections.
T's L's Stops Valves Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY
MORRIS, TASKER & CO.,
PASCAL IRON WORKS.
Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,
PHILADELPHIA.

STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR. STEPHEN P. M. TASKER.

RAILROAD IRON.

ENGLISH and AMERICAN Railroad Iron for delivery in New York and other markets in the United States and England. For sale by

S. W. HOPKINS, Broker,
72 Beaver St., New York.

MORRIS & JONES & CO.,
IRON MERCHANTS,
MARKET AND SIXTEENTH STREETS,
PHILADELPHIA.

IRON AND STEEL
IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,
BOILER RIVETS, RAILROAD IRON,
CUT NAILS AND SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.
August 16, 1854.

RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,
9 South William St.
New York, Aug. 1, 1853.

ROUND OAK IRON WORKS,
STAFFORDSHIRE.

LORD WARD, Proprietor.
MANUFACTURE RAILS, BOILER PLATES,
SHEETS, HOOPS AND BARS of every variety.
Address **RICHARD SMITH, Esq., Dudley.**

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BALTIMORE, over Farmers' & Mer. Bank.
NORRIS & BROTHER, Agents.

EDMUND GIBSON,

AGENT OF RICHARD NORRIS & SON,
LOCOMOTIVE WORKS,
PHILADELPHIA.

ALSO, GENERAL

RAILWAY COMMISSION AGENT.

Railroad Iron, Car Wheels, Axles, Iron, Brass Castings, Spikes, Chairs, and Locomotive Work in general, solicited.

ALSO,

WILLIAMS' PATENT RAILROAD LAMP.
ALL ORDERS PROMPTLY FILLED.

No. 90 CEDAR ST., NEW YORK.

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J. H. DOBBS.

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AND NEGOTIATORS OF SECURITIES,
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WE ARE PREPARED TO FURNISH, ON THE SHORTEST NOTICE,
ALL ARTICLES REQUIRED IN THE
Construction, Equipment & Operating of Railways
AGENTS FOR THE
JERSEY CITY LOCOMOTIVE WORKS.

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METAL BROKER,
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INGOT COPPER, PIG LEAD, BLOCK TIN, SPELTER,
Sheet Zinc, Antimony, Tin Plates, Roofing Plates, Pig,
Bar, Hoop, Sheet and Boiler Iron.

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Hon. DANIEL F. TIFANY, Mayor, New York.
WM. A. COBB, Est., Pres't Fulton Fire Insurance Co., N. York.
Messrs. T. B. CORDINGTON & Co., New York.
" P. & J. P. HAWES & Co., Boston.
" FARRAR, FOLLETT & Co.,
" E. J. KETTING & BROTHER, Philadelphia.
" NATHAN TROTTER & Co.,
" E. L. PARKER & Co., Baltimore.
" E. PRATT & BROTHER,
" THOMPSON & OUELLETS, "

WM. W. GODDARD,
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Braziers & Sheet Copper,
YELLOW SHEATHING METAL, BOLTS AND NAILS,
COPPER BOTTOMS,
Locomotive Strips, Tubing Bolts and Bars,
COPPER AND BRASS RIVETS AND BURS,
Large Plates and extra-sized Sheets, rolled to order at short notice,
TINNED COPPER OF ALL DIMENSIONS,
INGOT AND PIG COPPER.

RAILROAD IRON.

CONTRACTS for RAILS, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

THEODORE DEHON,
10 Wall St., near Broadway, N. Y.
500 tons T Rails on hand, 54 to 57 lbs. per lineal yard.

RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in Staffordshire and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH PORT.

C. CONGREVE & SON,
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STEEL, FILES, ETC.
R. GROVES & SONS,
SHEFFIELD, ENGLAND,

MANUFACTURERS of warranted Cast Steel, superior quality, for Tools, Machinery, and Engineering purposes. Single and Double Shear, Blister, German Spring and Sheet Steel of every description—also, Cast Steel Files, of high reputation, especially adapted for the use of Machinists, and Saws and Edge Tools of all kinds.

A stock of the above goods constantly on hand.

CORPORATE MARK
USE
CHAS. CONGREVE & SON, Agents,
13 Cliff street, N. Y.

RAILROAD IRON.

THE subscriber is prepared to enter into **CONTRACTS FOR RAILS** delivered at an English port or at a port in the United States.

JAMES TINKER,
54 Exchange Place,
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in **NEW YORK** and **NEW ORLEANS**.

THE GUTTA PERCHA MANUFACTURING COMPANY.

165 BROADWAY, NEW YORK,
(Factory 25th street 10th Avenue.)

MANUFACTURERS
OF EVERY DESCRIPTION OF
Gutta Percha Goods,
Army, Navy, Engineers and Emigrant Equipments,
CLOTHING,
HOSE, PACKING, BELTING,
LOCOMOTIVE BUCKETS,
ENAMELED CLOTHS, ETC.

These goods are free from offensive smell, are pliable and elastic, of fine finish, and unlike India Rubber, will not become decomposed or injured by oils or acids, or affected by the hottest climates.

GEO. N. DAVIS, Treasurer.

WINDOW, PICTURE AND CAR GLASS.

F. HOPKINS & BROTHER,
IMPORTERS,
193 Pearl St., NEW YORK.

GUTTA PERCHA CEMENT ROOFING.

THE Cheapest and most DURABLE ROOFING IN USE.
Sent to any part of the country with directions for application.

SPECIMENS and references can be seen, and any desired information obtained on application, by letter or in person, at our office, 510 BROADWAY, N. Y. (Opposite the St. Nicholas Hotel).
JOHNS & CROSLY.

THE LAWRENCEVILLE MANUFACTURING CEMENT COMPANY,
OFFICE 96 WALL ST.,
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THIS Company manufactures **ROSENDALE HYDRAULIC CEMENT** of a superior and uniform quality, and are constantly receiving it fresh from their Works at Rosendale. Particular attention paid to grinding fine, and packing in superior casks. We warrant it to set under water, and attain a hardness excelled by no Cement manufactured. It has met the approval of Government, and we are at present supplying the fortification now in course of erection, together with Water Works and Public Buildings. For sale upon favorable terms by addressing:

WM. N. BEACH, President.
CHAS. E. LAWRENCE, Sec'y.

CEMENT, PLASTER, ETC.
THE HUDSON RIVER CEMENT CO.

HAVE commenced manufacturing for the season, and can now furnish a very superior article of fresh Rosendale Cement, Calceined Plaster, Farmers' Plaster and Marble Dust. Address

HUDSON RIVER CEMENT COMPANY,
12 Jersey City, N. J.

HOFFMAN'S ROSENDALE CEMENT,
OFFICE, 93 WALL ST., NEW YORK.

THE LAWRENCE CEMENT COMPANY are prepared to receive and execute orders for their Cement, to any extent that may be required. They would particularly call the attention of purchasers to the distinguishing brand of their manufacture, viz.: **HOFFMAN'S ROSENDALE CEMENT.** This seems to be necessary, as they have established a reputation for the superior quality of their Cement, and there are various other brands offered, as "Rosendale" Cement. It has the unqualified approbation of the most eminent Architects and Engineers, being used in almost every department of the Works under Government. It is put up in the most careful manner, each barrel being well lined with paper, and will be delivered on ship board, in this city, on the most favorable terms. Particular attention given to shipping orders, and Freight obtained on the best terms.

N. W. WOODWARD, Secretary.

Rosendale Hydraulic Cement.

THE NEWARK AND ROSENDALE CEMENT COMPANY are now receiving fresh from the Mills their approved **ROSENDALE CEMENT**, warranted pure and free from quick lime, and which has given such general satisfaction in the various government and other public works in which it has been used. Purchasers and shippers should be careful to get the genuine **ROSENDALE CEMENT**, branded "NEWARK AND ROSENDALE," "H. WILDE." This Cement does not swell and burst the hoops when stored in warm climates. It is packed in tight kiln dried barrels, and is specially adapted for safe shipping on long voyages. Terms reasonable, which may be known by addressing:

JOHN H. STEPHENS, President, Newark, N. J., or HENRY WILDE, Secretary, 90 Wall st., N. Y.

DELAFIELD & BAXTER'S, ROSENDALE CEMENT.

WE are prepared to enter into arrangements for supplying our CEMENT for public works, or other purposes. We warrant it equal in every respect to any manufactured in this country. It attains a great degree of hardness, sets immediately under water, and is a superior article for masonry coming in contact with water, or requiring great strength. For sale in tight barrels, well packed, on application at their office, by **DELAFIELD & BAXTER, 104 Wall st.** The above CEMENT is used in most of the fortifications building by government.

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Railroad Stocks, Bonds, etc., bought and sold, on Commission. Regular sales at public auction at the Merchants' Exchange.

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OFFICE, No. 36 PINE ST., NEW YORK.
REGULAR AUCTION SALES
At 36 Pine St. EVERY DAY.
STOCKS and BONDS bought and sold at private sale
Sale every day at 1 o'clock. See Catalogue.

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MINING AGENT & STOCK BROKER,
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BUYS and sells MINING SHARES, MINES and MINERAL LANDS on commission, will examine Mines and Mineral Lands in any part of the United States, and report on their value, etc., etc.
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Particular attention given to Lake Superior business.

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AUCTION SALES of STOCKS and BONDS every **THURSDAY**, at 12½ o'clock, at the Merchants' Exchange, RAILROAD BANK, INSURANCE and other SECURITIES bought and sold at the BRICKERS' Board, at Private Sale, or at Auction. All dividends payable in New York collected, and prompt remittances made.

NONE BUT bona fide QUOTATIONS FURNISHED THE PRESS. THE MARKET VALUE OF SECURITIES WILL NOT BE SUPPRESSED OR ALTERED, AND DECEPTIVE OR IRRESPONSIBLE CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES.—Messrs. Wm. and Jno. O'Brien, Thos. Denny & Co., Horace Greeley & Co., Cragin & Co., Todd & Co., J. & C. Berrian, Geo. F. Nesbitt & Co., Eugene Pankett Esq., (President Excelsior Ins. Co.), John G. Storm, Esq., President Lenox Ins. Co., L. G. Irving, Esq., (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Grierson, M. D., Rev. Edwin F. Hatfield, D. D., Rev. Theo. H. Cuyler, John Camerden, Esq., Benj. F. Manierre Esq., New York; Oils Allen, Esq., Albany N. Y.; Messrs Gorham & Co., Providence, R. I.

ALBERT H. NICOLAY,
STOCK AUCTIONEER,
BROKER AND BANKER,
No. 52 WILLIAM STREET,
Near WALL STREET, NEW YORK.

REGULAR AUCTION SALES OF
STOCKS and BONDS,
NOTES and other SECURITIES,
EVERY MONDAY AND THURSDAY,
(Which have been the regular established days of sale for many years.)

Or EVERY DAY (whenever required)
AT 12½ O'CLOCK P. M.
At the STOCK SALES ROOM, No. 52 WILLIAM ST.,
Or at the MERCHANTS' EXCHANGE as desired.
STOCKS and BONDS BOUGHT AND SOLD AT Private Sale and at the Brokers' Board on Commission. Interests allowed on Deposits and Dividends collected.
SALES also made of

REAL ESTATE
At PUBLIC OR PRIVATE SALE WHEN DESIRED.
A large variety of CITY, BANK AND INSURANCE STOCK constantly on hand at PRIVATE SALE.

A. H. DYETT,
STOCK AND BOND BROKER,
No. 43 EXCHANGE PLACE,
NEW YORK.

THOMAS GEORGE WALKER. DAVID TWEEDIE.
WALKER & TWEEDIE,
42 PINE STREET,
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Business Paper and Bills of Exchange negotiated.
BONDS, STOCKS and other Securities bought and sold.

W. P. STEELE & CO., BANKERS,
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STOCKS and BONDS Bought and Sold on Commission.
Mercantile Paper and Loans negotiated.
Advances made on all approved Securities.
COLLECTIONS MADE throughout the United States and Canada.

DUNCAN, SHERMAN & CO., BANKERS,
Corner PINE and NASSAU Sts.,
NEW YORK.

CIRCULAR NOTES AND LETTERS OF CREDIT, FOR TRAVELERS,
AVAILABLE IN ALL THE PRINCIPAL CITIES OF THE WORLD.
ALSO, MERCANTILE CREDITS,
For use in EUROPE, CHINA, etc.

H MEIGS, Jr. & SMITH, BANKERS and BROKERS,
39 WILLIAM STREET,
(FIRST BUILDING BELOW WALL STREET.)
STOCKS and BONDS Bought and Sold on Commission.
MERCANTILE PAPER and LOANS Negotiated.
INTEREST ALLOWED ON DEPOSITS.
HENRY MEIGS, Jr. WM. ALEX. SMITH.
New York, May 11, 1858.

DINGEE & HOLDEN,
AUCTIONEERS AND REAL ESTATE BROKERS,
No. 9 NASSAU STREET,
Under Messrs. DUNCAN, SHERMAN & Co.
SOLOMON DINGEE, CHARLES E. HOLDEN, NEW YORK.
Stocks, Bonds, Mortgages, & Commercial Paper Bought & Sold.

REFERENCES.
Citizens' Bank, N. Y. Hon. E. D. Campbell, Lt. Gov. Wis.
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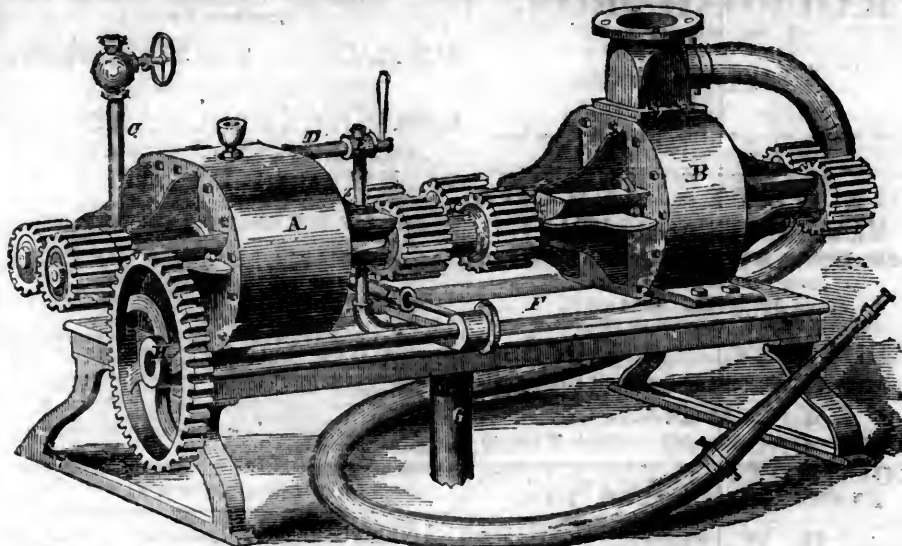
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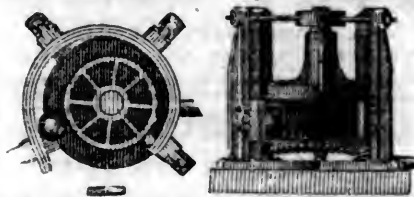
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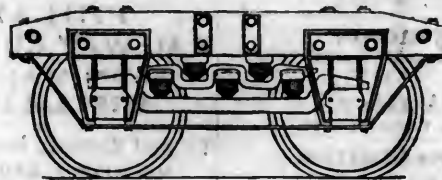
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